A Review

# Indian Securities Market

Volume XIII 2010

This publication reviews the developments in the securities market in India

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NATIONAL STOCK EXCHANGE OF INDIA LIMITED

# Indian Securities Market
## A Review



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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 |
| ASE | Ahmedabad Stock Exchange |
| 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 |
| C&D | Corporatisation and Demutualisation |
| 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 |

| | |
|---|---|
| FII | Foreign Institutional Investment |
| FIIs | Foreign Institutional Investors |
| FIMMDA | Fixed Income Money Markets and Derivatives Association |
| FIs | Financial Institutions |
| FMCG | Fast Moving Consumer Goods |
| FMPs | Fixed Maturity Plans |
| FoFs | Fund of Funds |
| FPOs | Further Public Offerings |
| 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 |
| SAT | Securities Appelate Tribunal |
| 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 last decade (2000-2010) has been the most eventful period for the Indian securities market during which it took major strides to carve a niche for itself in the global securities markets. The major developments which hastened this incredible journey can broadly be observed under three categories, viz. improved market microstructure, introduction of new products and progressive changes in the regulatory framework.

This chapter is split into two sections. Section 1 focuses on the broader developments in the securities markets during 2000-2010. Section 2 discusses the structure and the developments of the Indian securities markets during 2009-10.

## Section-1: Issues and Developments in the past decade (2000-2010)

### Improved Market Microstructure

To reduce transaction time and bolster liquidity, various reforms were undertaken during this decade (2000-2010), such as introduction of automated trading system, reduction in the settlement cycle, dematerialization etc. Further, the stock exchanges were allowed to provide a separate trading window for block deals in November 2005 to facilitate execution of large trades without impacting the market. With the advent of new technology, greater sophistication was brought to the Indian securities markets by introducing world class facilities like Direct Market Access (DMA), algorithmic trading, smart order routing system and co-location service.

The facility of DMA was introduced for institutional investors in the year 2008 which provided them direct access to the exchange trading system through the broker's infrastructure without manual intervention by the broker. Currently, around 25-30% of FII trades are routed through DMA and it is expected to increase to 40-45% by end-2011[1]. DMA ensured direct control over orders by institutional investors, faster order placement and execution, more arbitrage opportunities, improved liquidity, greater transparency and lower impact cost for large order. Algorithmic trading refers to orders that are automatically placed in the market by software programmes, built on certain mathematical models. Smart Order Routing enables the broker's trading engines to systematically choose the execution destination from out of trading platforms of different stock exchanges based on factors such as price, costs, speed, likelihood of execution and settlement, size, nature or any other consideration relevant to the execution of the order. Finally, global exchanges introduced co-location services to support high frequency trading using Algorithmic trading and DMA. The details of the co-location facility at NSE have been discussed later in the chapter.

On the clearing and settlement front, in July 2001, the Indian securities market made a paradigm shift from the century old account period settlement to a T+5 rolling settlement. Keeping abreast with the dynamics of the securities market and to integrate with the world markets, in April 2002, the Indian capital markets joined the league of developed markets in the world by the introduction of the T+3 rolling settlement cycle and further to T+2 in April 2003. Dematerialisation which was introduced in 1998 achieved 100% demat trading at NSE in June 2002.

[1] Estimates of Celent

In the primary markets, SEBI made IPO grading compulsory for companies coming out with the IPOs of equity shares in May 2007. An IPO Grade provides an additional input to investors in arriving at an investment decision based on independent and objective analysis. In addition, SEBI introduced the process of Application Supported by Blocked Amount (ASBA) which ensured that the application money does not move out of the account of applicant but is only blocked and debited to the extent of allotment. ASBA helped to overcome the earlier refund related concerns upon allotment and enabled investors to earn interest on the blocked amount.

Besides these improvements in market microstructure, introduction of a variety of new products provided the much needed dynamism and impetus to the growth of the Indian securities market.

## Introduction of New Products

In the last decade, various new products were introduced in different market segments of the securities markets. Among them, the equity derivative products met with tremendous success, making India stand out in the global securities markets arena. India began trading derivatives with underlying such as indices and individual stocks and later extended to other asset classes like interest rate and currency. Currency futures on USD–INR were introduced for trading and subsequently the Indian rupee was allowed to trade against other currencies such as euro, pound sterling and the Japanese yen. To enhance retail participation and market liquidity in equity derivative segment, mini derivative contracts on Nifty and Sensex were introduced in 2008 having a minimum contract size of ₹ 1 lakh. SEBI also allowed trading on option contracts on Nifty and Sensex with tenure of up to five years to provide liquidity at the longer end of the market. In addition to derivatives products, a host of other products such as mutual funds, index funds, index and gold based ETFs and ETFs on international indices[2] were introduced on the Indian stock exchanges during the last decade. Appropriate and timely changes were made to the regulatory framework to facilitate the introduction of these new products and their success in due course.

## Regulatory Framework

The regulatory framework has been strengthened. The corporation and demutualization of stock exchanges was mandated through amendments in SCRA 1956 in the year 2004[3]. In the same year, amendment to SCRA was also made to provide for clearing and settlement by a clearing corporation. It provided that an exchange with the approval of SEBI could transfer the duties and functions of a clearing house to a recognized clearing corporation.

In addition to the introduction of new products, an endeavour was made to strengthen the existing products which had not gained momentum. Notable among them were the corporate bonds and interest rate futures. Simplification of corporate bond issuance norms and introduction of repos in corporate bonds were some of the measures taken to resurrect this market segments.

Indian exchanges are entering into cross border agreements with overseas exchanges for introducing their products on their trading platform. By providing an opportunity to the investors to diversify their portfolios internationally, this could add another dimension to the Indian securities markets. For example: in March 2010, NSE and Chicago Mercantile Exchange (CME) had announced cross-listing arrangements. Under the cross-listing arrangements, the S&P CNX Nifty Index (Nifty 50), the leading Indian benchmark index representing 22 sectors of the Indian economy, has been made available to CME for the creation and listing of U.S. dollar denominated Nifty futures contracts for trading on CME. Keeping in view the increased integration of global markets, the market regulator also allowed Indian stock exchanges to extend their trade timings from 9:55 a.m.-3:30 p.m. to 9:00 a.m.-5:00 p.m.

The securities market is endeavouring to make equity finance available for small and medium enterprises. In May 2010, SEBI has permitted setting up of a stock exchange or trading platform for SMEs by stock exchanges having nationwide trading terminals.

In addition to this, various initiatives have been taken by SEBI to strengthen the corporate governance among the listed companies. Clause 49 has been amended from time to time to improve disclosures, strengthen the responsibilities

[2] Exchange Traded Fund on the International index – Hangseng was launched in 2008.
[3] NSE, MCX-SX and OTCEI were corporatised from the beginning.

of audit committees and include provision for whistle blower policy and restrict the term of independent directors etc. Clause 35 of the Listing Agreement has also been amended to provide for disclosure of details of shares held by promoters and promoter group entities in listed companies which are pledged or otherwise encumbered. This was done with a view to ensure that while deciding to invest in the company, the investors may factor in information about the pledged or otherwise encumbered shares held by promoter/promoter group in the company, as the extent of pledge/ encumbrance may have a significant impact on the price of the shares. In a major move aimed at bringing in more accountability and enhancing investor participation, the government has made it mandatory for all listed companies, other than listed public sector enterprises (PSEs), to raise public shareholding to 25%; listed PSEs must maintain public shareholding of at least 10%. Any listed company which falls short of these prescribed limits on the commencement of the Securities Contracts (Regulation) (Amendment) Rules, 2010, shall increase its public shareholding to the stipulated level within a period of three years. Companies coming out with initial public offers to get listed, must adhere to the above public shareholding limits at the time of their listing. This move would reduce price manipulation by creating large and diversified public shareholdings.

In a recent initiative on the regulatory front, a Financial Stability and Development Council (FSDC) has been created to strengthen and institutionalize the mechanism for maintaining financial stability and monitoring macro prudential supervision of the economy.

## Assessment of Performance of Indian Securities Market during 2000-2010

The initiatives discussed above have not only transformed the landscape of the securities market, but also contributed to its growth. This can be seen in the snapshot of the decadal performance of securities market shown in Chart 1-1. It can be seen that during the decade, there has been a significant rise in the market capitalization ratio, turnover ratio and traded value ratio. The turnover in the cash market has nearly doubled over the decade while the market capitalization has become eight times the levels that existed in 2000. The turnover in the Indian derivatives market has increased from US $ 0.086 trillion in 2000-01 to US $ 3.92 trillion in 2009-10 and has surpassed the cash market turnover in India. The resource mobilization in the primary market has increased dramatically, rising six fold between 2000 and 2010. Similarly, the resource mobilization through euro issues has increased significantly over the years. Table-1-1 shows the performance in the capital market in terms of certain key indicators.

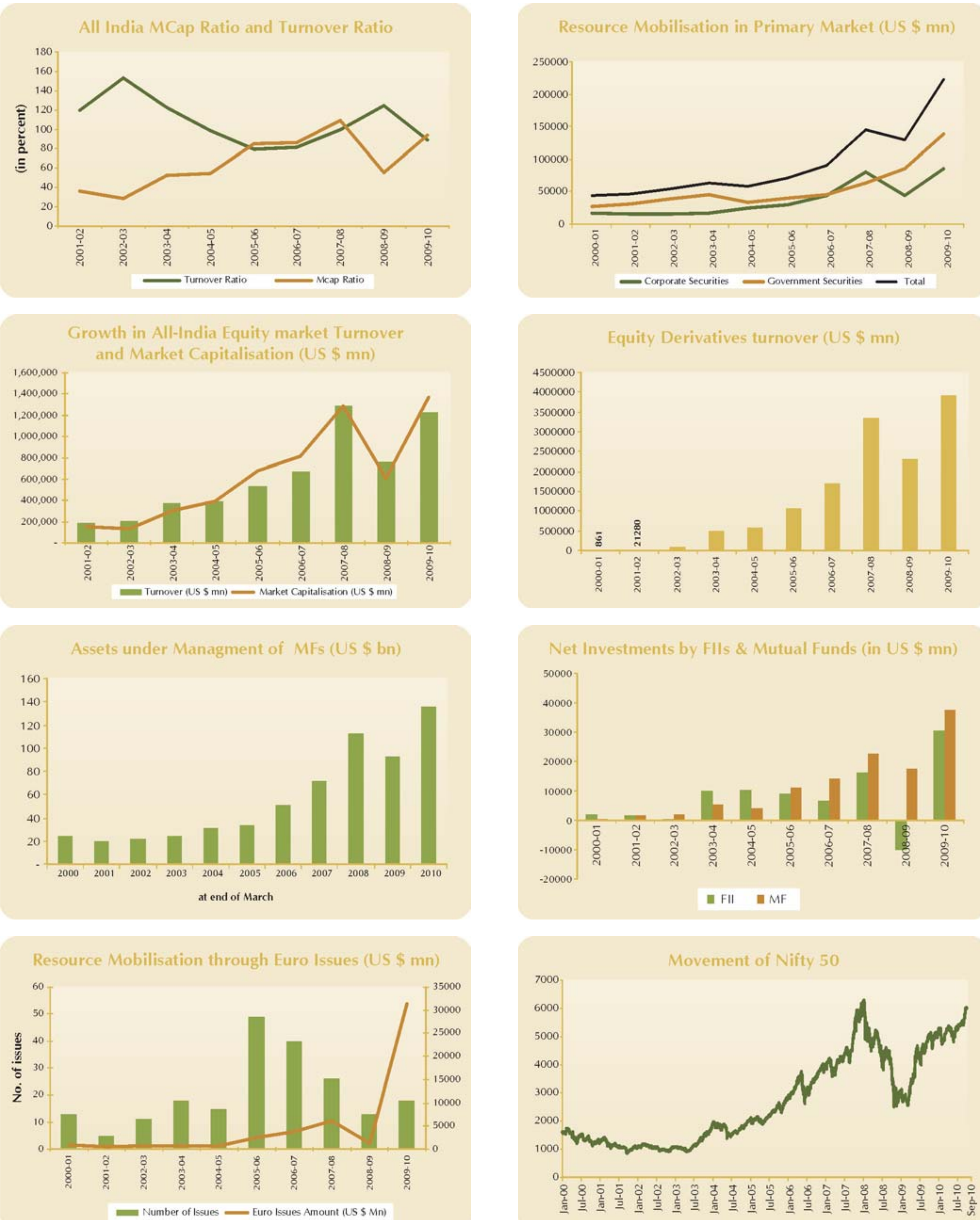
**Table 1-1: Key performance indicators of securities market (2000-2010)**

| Parameters | Compound Annual Growth Rate (2000-01 to 2009-10) |
|---|---|
| Resource Mobilisation in Primary Markets | 17.15% |
| Resource mobilization through Euro Issues | 43.89% |
| All-India Market Capitalisation | 23.15% |
| All-India Equity Market Turnover* | 19.94% |
| All-India Equity derivatives turnover | 132.19% |
| Assets under Management of Mutual Funds | 18.99% |
| Net Investments by Foreign Institutional Investors | 30.53% |
| Net Investments by Mutual Funds | 54.07% |
| Returns on Nifty 50 | 13.13% |

** CAGR calculated from 2001-02 to 2009-10*

The performance of the Indian capital market has been impressive with high returns and a high level of investment from both domestic and foreign investors. On the other hand, India's debt market, particularly the corporate bond market is still underdeveloped. Of late, efforts have been made to bring regulatory changes to develop the corporate bond market. However, sustained effort and long-term commitment are needed to realize the true potential of this segment. The growth of India's derivatives market has been significant but needs to develop further in terms of products and investor base.

### Chart 1-1: Snapshot of Performance of Indian Securities Market during 2000-2010



## Section-2: Structure and Developments of the Indian Securities Markets during 2009-10

### Key strengths of the Indian securities markets

The securities markets in India have made enormous progress in developing sophisticated instruments and modern market mechanisms. The key strengths of the Indian capital market include a fully automated trading system on all stock exchanges, a wide range of products, an integrated platform for trading in both cash and derivatives, and a nationwide network of trading through over 4,618[4] corporate brokers.

A significant feature of the Indian securities market is the quality of regulation. The market regulator, Securities and Exchange Board of India (SEBI) is an independent and effective regulator. It has put in place sound regulations in respect of intermediaries, trading mechanism, settlement cycles, risk management, derivative trading and takeover of companies. There is a well designed disclosure based regulatory system. Information technology is extensively used in the securities market. The stock exchanges in India have the most advanced and scientific risk management systems. The growing number of market participants, the growth in volume of securities transactions, the reduction in transaction costs, the significant improvements in efficiency, transparency and safety, and the level of compliance with international standards have earned for the Indian securities market a new respect in the world.

### 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 undertakings. 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 anyone can subscribe 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 operates 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. The exchanges in India follow a systematic settlement period. All the trades taking place over a trading day (day = T) are settled together after a certain time (T + 2 day). The trades executed on exchanges are cleared and settled by a clearing corporation. The clearing corporation acts as a counterparty and guarantees settlement. 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. Currently only two exchanges *viz.*, National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange (BSE) provide trading in the equity futures & options in India.

### Market Participants

In every economic system, some units, individuals or institutions, are surplus units who are called savers, while others are deficit units, called spenders. Households are surplus units and corporate and Government are deficit units. Through the platform of securities markets, the savings units place their surplus funds in financial claims or securities at the disposal of the spending community and in turn get benefits like interest, dividend, capital appreciation, bonus etc. These investors and issuers of financial securities constitute two important elements of the securities markets. The third critical element of markets is the intermediaries who act as conduits between the investors and issuers. Regulatory

[4] As on September 30, 2010. Data is sourced from SEBI Bulletin, October 2010.

bodies, which regulate the functioning of the securities markets, constitute another significant element of securities markets. The process of mobilisation of resources is carried out under the supervision and overview of the regulators. The regulators develop fair market practices and 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. Table 1-2 presents an overview of market participants in the Indian securities market.

**Table 1-2: Market Participants in Securities Market**

| Market Participants | 2009 | 2010 | As on Sep 30, 2010 |
|---|---|---|---|
| Securities Appellate Tribunal (SAT) | 1 | 1 | 1 |
| Regulators* | 4 | 4 | 4 |
| Depositories | 2 | 2 | 2 |
| **Stock Exchanges** | | | |
| With Equities Trading | 20 | 20 | 20 |
| With Debt Market Segment | 2 | 2 | 2 |
| With Derivative Trading | 2 | 2 | 2 |
| With Currency Derivatives | 3 | 3 | 4 |
| Brokers (Cash Segment) | 9,628 | 9,772 | 10,018 |
| Corporate Brokers (Cash Segment) | 4,308 | 4,424 | 4,618 |
| Brokers (Equity Derivatives) | 1,587 | 1,705 | 1,902 |
| Brokers (Currency Derivatives) | 1,154 | 1,459 | 1,811 |
| Sub-brokers | 60,947 | 75,577 | 81,713 |
| FIIs | 1626 | 1713 | 1726 |
| Portfolio Managers | 232 | 243 | 250 |
| Custodians | 16 | 17 | 17 |
| Registrars to an issue & Share Transfer Agents | 71 | 74 | 68 |
| Primary Dealers | 18 | 20 | 20 |
| Merchant Bankers | 134 | 164 | 184 |
| Bankers to an Issue | 51 | 48 | 52 |
| Debenture Trustees | 30 | 30 | 27 |
| Underwriters | 19 | 5 | 6 |
| Venture Capital Funds | 132 | 158 | 168 |
| Foreign Venture Capital Investors | 129 | 143 | 150 |
| Mutual Funds | 44 | 47 | 48 |
| Collective Investment Schemes | 1 | 1 | 1 |

*Source: SEBI, RBI*
** DCA, DEA, RBI & SEBI.*
*Brokers of cash segment include brokers of Mangalore SE, HSE, Magadh and SKSE.*

**The four important elements of securities markets are the investors, the issuers, the intermediaries and regulators.**

## Investors

An investor is the backbone of the capital market of any economy as he is the one lending his surplus resources for funding the setting up or expansion of companies, in return for financial gain.

## Households' investment pattern

According to the preliminary estimates by CSO, net financial savings of the household sector in 2008-09 was 10.9% of GDP at current market prices which was lower than the estimates for 2007-08 at 11.5%. Decline in the household investments in shares and debentures were the main factors responsible for the lower household saving in 2008-09. However, the household savings in instruments like currency, deposits, contractual savings (pension and provident funds) and investment in government securities remained broadly stable during the year. The household sector accounted for 89.5% of the Gross Domestic Savings in Fixed Income investment instruments during 2008-09, as against 78.2% in 2007-08 (Table 1-3). The investment of households in securities was -1.9% compared with 10.1% in 2007-08. Chart 1-2 shows Indian household investment in different investment avenues since 1990-91 till 2008-09. It can be observed that the household investments in government securities and mutual funds fell in the negative territory while investments in shares and debentures of private corporates, banking and PSU Bonds was at 4.4% at par with investments last year.

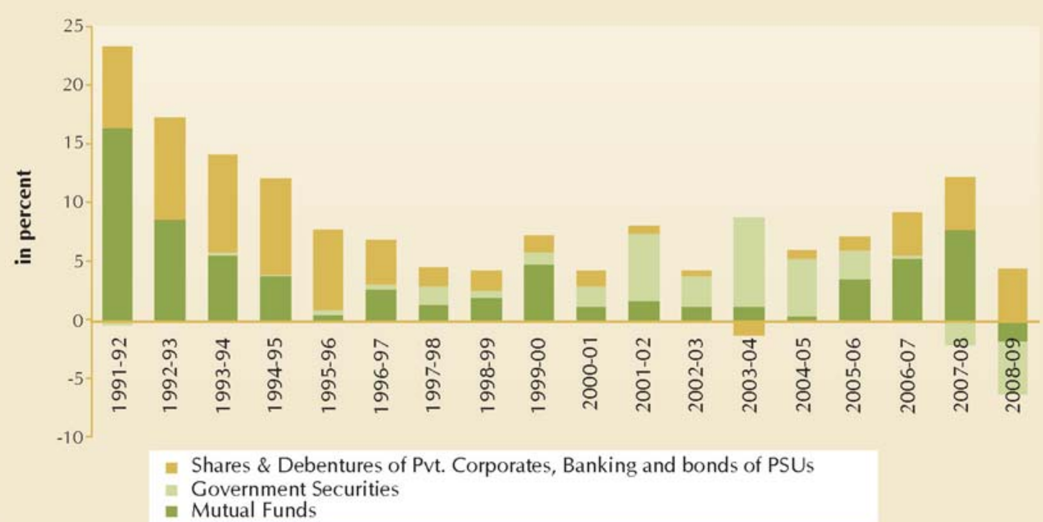
**Table 1-3: Savings of Household Sector in Financial Assets**

(In percent)

| Financial Assets | 2007-08P | 2008-09 |
|---|---|---|
| **Currency** | **11.4** | **12.5** |
| **Fixed income investments** | **78.2** | **89.5** |
| Deposits | 52.2 | 58.5 |
| Insurance/Provident & Pension Funds | 27.9 | 29.6 |
| Small Savings | -1.9 | 1.4 |
| **Securities Market** | **10.1** | **-1.9** |
| Mutual Funds | 7.7 | -1.8 |
| Government Securities | -2.1 | -4.5 |
| Other Securities | 4.5 | 4.4 |
| **Total** | **100 .0** | **100.0** |

*Source: RBI Annual Report 2008-09*
*P: Provisional Figures*
*# Preliminary Estimates*
*Note: Here other securities include shares and debentures of private corporate business, banking and bonds of PSUs Mutual funds include units of UTI*

**Chart 1-2: Saving of the Household Sector in Financial Assets**



## Issuers

### Primary markets

An aggregate of ₹ 10,075,102 million (US $ 223,197 million) were raised by the government and corporate sector during 2009-10 as against ₹6,588,920 million (US $ 129,321 million) in 2008-09, an increase of 52.91%. Private placement accounted for 93.07% of the domestic total resource mobilisation by the Corporate Sector. Resource mobilisation through euro issues escalated significantly by 233.48% to ₹159,670 million (US $ 3,537 million) in 2009-10. Details can be seen in Chapter 2, table 2-1.

## Intermediaries

The term "market intermediary" refers to those who are in the business of managing individual portfolios, executing orders, dealing in or distributing securities and providing information relevant to the trading of securities. The market mediators play an important role in the stock exchanges; they put together the demands of the buyers with the offers of the security sellers. A large variety and number of intermediaries provide intermediation services in the Indian securities markets. The market intermediary has a close relationship with the investor with whose protection the regulator is primarily tasked. As a consequence a large portion of the regulation of a securities industry is directed towards the market intermediary. Regulations address entry criteria, capital and prudential requirements, ongoing supervision and discipline of entrants, and the consequences of default and failure. One of the issue concerning brokers is the need to encourage them to corporatize. Currently, 46.10%[5] of the brokers are corporates. Corporatisation of their business would help them compete with global players in capital markets at home and abroad. Corporatisation brings better standards of governance and better transparency hence increasing the confidence level of customers.

## Regulators

The absence of conditions of perfect competition in the securities market makes the role of regulator extremely important. The regulator ensures that the market participants behave in a desired manner so that securities markets continue to be a major source of finance for corporate and government and the interest of investors are protected.

The responsibility for regulating the securities market is shared by Department of Economic Affairs (DEA), Ministry of Corporate Affairs (MCA), Reserve Bank of India (RBI) and SEBI. The orders of SEBI under the securities laws are appealable before a Securities Appellate Tribunal (SAT).

Most of the powers under the SCRA are exercisable by DEA while a few others by SEBI. The powers of the DEA under the SCRA are also concurrently exercised by SEBI. The powers in respect 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 by RBI. The SEBI Act and the Depositories Act are mostly administered by SEBI. The rules under the securities laws are framed by government and regulations by SEBI. All these 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 companies and 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.

## Regulatory Framework

At present, the five main Acts governing the securities markets are (a) the SEBI Act, 1992; (b) the Companies Act, 1956, which sets the code of conduct for the corporate sector in relation to issuance, allotment and transfer of securities, and disclosures to be made in public issues; (c) the Securities Contracts (Regulation) Act, 1956, which provides for regulation of transactions in securities through control over stock exchanges (d) the Depositories Act, 1996 which provides for electronic maintenance and transfer of ownership of demat shares and (e) Prevention of Money Laundering Act, 2002.

[5] As of September 30, 2010. Data is sourced from SEBI Bulletin, October 2010.

## Legislations

**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 issuance of capital and transfer of securities, in addition to all intermediaries and persons associated with securities market. It can conduct enquiries, audits and inspection of all concerned and adjudicate offences under the Act. It has powers to register and regulate all market intermediaries and also to penalise them in case of violations of the provisions of the Act, Rules and Regulations made thereunder. SEBI has full autonomy and authority to regulate and develop an orderly securities market.

**Securities Contracts (Regulation) Act, 1956:** It provides for direct and indirect control of virtually all aspects of securities trading and the running of stock exchanges and aims to prevent undesirable transactions in securities. It gives Central Government regulatory jurisdiction over (a) stock exchanges through a process of recognition and continued supervision, (b) contracts in securities, and (c) listing of securities on stock exchanges. As a condition of recognition, a stock exchange complies with conditions prescribed by Central Government. Organised trading activity in securities takes place on a specified recognised stock exchange. The stock exchanges determine their own listing regulations which have to conform to the minimum listing criteria set out in the Rules.

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

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

**Prevention of Money Laundering Act, 2002:** The primary objective of the Act is to prevent money-laundering and to provide for confiscation of property derived from or involved in money-laundering. The term money-laundering is defined as whoever acquires, owns, possess or transfers any proceeds of crime; or knowingly enters into any transaction which is related to proceeds of crime either directly or indirectly or conceals or aids in the concealment of the proceeds or gains of crime within India or outside India commits the offence of money-laundering. Besides providing punishment for the offence of money-laundering, the Act also provides other measures for prevention of Money Laundering. The Act also casts an obligation on the intermediaries, banking companies etc to furnish information, of such prescribed transactions to the Financial Intelligence Unit- India, to appoint a principal officer, to maintain certain records etc.

## Rules and Regulations

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

## Financial Stability & Development Council (FSDC)

With a view to strengthen and institutionalize the mechanism for maintaining financial stability and development, the Government set up an apex-level body—the FSDC. The Chairman of the Council is the Finance Minister of India and its members include heads of the financial-sector regulatory institutions. Without prejudicing the autonomy of regulators, this Council will monitor macro prudential supervision of the economy, including the functioning of large financial conglomerates, and address inter-regulatory coordination issues. It will also focus on financial literacy and financial inclusion. The Council will have one Sub-Committee headed by the Governor, RBI.

The Secretariat of the said Council will be in the Department of Economic Affairs, Ministry of Finance. The notification constituting the FSDC was issued on December 30, 2010 and its first meeting was held on December 31, 2010.

## Financial Sector Legislative Reforms Commission (FSLRC)

The Government in the budget 2010-11 announced the setting up of the FSLRC with a view to rewrite and clean up financial-sector laws to bring them in tune with the requirements of the sector. The remit of the Commission will be to review, simplify, and rewrite legislation focusing on broad principles. It will evolve a common set of principles for governance of financial-sector regulatory institutions. The Commission will also examine the case for greater convergence of regulation and will streamline the regulatory architecture of financial markets.

In addition to setting up new regulatory commission, the regulators have been proactively introducing various discussion papers, committee reports on some pressing issues in the Indian securities market. In the year 2010, an important report was the Bimal Jalan Committee Report (see Box 1-1).

**Box 1-1: Bimal Jalan Committee Report**

The Securities and Exchange Board of India constituted a Committee under the Chairmanship of Dr. Bimal Jalan (Former Governor, Reserve Bank of India) to examine issues arising from the ownership and governance of Market Infrastructure Institutions (MIIs). The Bimal Jalan committee set up by SEBI submitted its report on 'Review of ownership and governance of market infrastructure institutions' to SEBI on November 22, 2010. The committee has made recommendations on the issues related to MIIs (i.e. stock exchanges, clearing corporations and depositories). Some of these issues are pertaining to ownership and governance norms, measures of conflict resolution, listing of MIIs, net worth requirements, distribution of profits of MIIs, related businesses that can be entered into by MIIs and replacement of Manner of Increasing and Maintaining Public Shareholding in Recognised Stock Exchanges MIMPS Regulations.

**Some of the recommendations given by the Committee are as follows:**

- There is no need to permit a clearing corporation or depository to invest in other class of MIIs. Hence, clearing corporations and depositories may not be allowed to invest in other class of MIIs.
- At least 51% of the paid-up equity capital of the clearing corporation should be held by one or more recognized stock exchanges.
- Holding of stock exchanges in depositories may be restricted to a maximum of 24%.
- The MII being a public utility should endeavor to earn only reasonable profits at par with average earnings of the corporate sector in India. Therefore, it is recommended that a cap may be fixed on the maximum return that can be earned by MII on its net worth and can be distributed / allocated to the shareholders of MII out of the total returns earned by MII. Any return/profits above such maximum attributable amount would be transferred to IPF or SGF as the case may be and the same would not form part of shareholders funds net worth for the purposes of determining returns and book value of the shares.
- Net worth requirement for a Clearing Corporation may be fixed at ₹ 300 crores.
- Appointment of compliance officer shall be mandatory for stock exchanges and clearing corporations.
- The present net worth requirement of ₹100 crores for depositories may b e retained. However, all other investments in related, unrelated / other business shall be excluded while computing the net worth.

**Having discussed the various elements of securities market above, the following section presents an overview of 'Secondary Market' segment of the Indian Securities Market.**

## Secondary Market

Exchanges in the country offer screen based trading system. There were 9,772 trading members registered with SEBI as at end March 2010. The market capitalization has grown over the period indicating more companies using the trading platform of the stock exchange. The All-India market capitalization was around ₹ 61,704,205 million (US $ 1,366,952 million) at the end of March 2010. The market capitalization ratio is defined as market capitalisation of stocks divided by GDP. It is used as a measure to denote the importance of equity markets relative to the GDP. It is of economic significance since market is positively correlated with the ability to mobilize capital and diversify risk. The All- India market capitalisation ratio increased to 94.20% in 2009-10 from 55.40% in 2008-09 (Table 1-4). At end of March 2010, NSE Market Capitalisation ratio fell to 76.28% during 2009-10 while BSE Market Capitalisation ratio was 78.26%.

### Cash Market

During 2009-10, the trading volumes on the equity segment of Exchanges increased significantly by 43.26% y-o-y to ₹ 55,184,700 million (US $ 1,222,523 million) from ₹38,520,970 million (US $ 756,054 million) in 2008-09. (Table 1-4) The turnover during April 2010 – September 2010 in the equity markets was ₹ 23,547,240 crore US $ 522,807 million.

### Government Securities

The aggregate trading volumes in central and state government dated securities on SGL was ₹ 9,018,385 crore in 2009-10 as compared with ₹ 6,645,488 crore in 2008-09. (Table 1-4)

### Derivatives Market

The number of instruments available in derivatives market has gone up over the years. To begin with, SEBI had only approved trading in index futures contracts based on Nifty 50 Index and BSE-30 (Sensex) Index. This was followed by approval for trading in options based on these indices and options on individual securities. In 2008, the currency futures on USD-INR were introduced for trading and in year 2010, currency options on USD-INR were allowed for trading.

The total exchange traded equity derivatives in Indian stock markets witnessed a turnover of ₹ 176,638,990 million (US $ 39,21,825 million) during 2009-10 as against ₹ 110,227,501 million (US $ 3,335,698million) during the preceding fiscal year. (Table 1-4)

Trading in currency futures increased from ₹ 1,622,724 million (US $ 31,849 million) in 2008-09 to ₹ 17,826,080 million (US $ 394,907 million) in 2009-10.

### Index Movement

The Nifty 50 index movement has been responding to changes in the government's economic policies, the increase in FII inflows etc. During the year 2009-10, however, the Nifty 50 Index witnessed volatility[6] of 1.88%. The point to point return of Nifty was 36.19% as of March 2010.

### Institutional Investments

During the last decade, foreign institutional investment flows grew multifold and by the year 2009-10, the net investments by FIIs rose to ₹ 1,42,658 million (US $ 30,253 million) while the net investments by mutual funds rose to ₹ 1,700,760 million (US $ 37,677 million).

[6] Volatility is calculated as standard deviation of the Natural Log of returns the index for the respective period

Table 1-4: Secondary Market - Selected Indicators

| At the End of Financial Year | Capital Market Segment of Stock Exchanges | | | | | | | | | Non-Repo Government Sec Turnover | | | | Equity Derivatives | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. of Brokers | Nifty 50 | Sensex | Market Capitalisation (₹ mn) | Market Capitalisation (US $ mn) | Market Capitalisation Ratio (%) | Turnover (₹ mn) | Turnover( US $ mn) | Turnover Ratio (%) | On WDM Segment of NSE (₹ mn) | On SGL (₹ mn) | On WDM Segment of NSE (US $ mn) | On SGL (US $ mn) | Turnover (₹ mn) | Turnover (US $ mn) |
| 2001-02 | 9,687 | 1129.55 | 3469.35 | 7,492,480 | 153,534 | 36.36 | 8,958,290 | 183,569 | 119.56 | 9,269,955 | 12,119,658 | 189,958 | 248,354 | 1,038,480 | 21,280 |
| 2002-03 | 9,519 | 978.20 | 3048.72 | 6,319,212 | 133,036 | 28.49 | 9,689,230 | 203,981 | 153.33 | 10,305,497 | 13,923,834 | 216,958 | 293,133 | 4,423,333 | 93,123 |
| 2003-04 | 9,368 | 1771.90 | 5590.60 | 13,187,953 | 303,940 | 52.25 | 16,205,100 | 373,573 | 122.91 | 12,741,190 | 17,013,632 | 293,643 | 392,110 | 21,422,690 | 493,724 |
| 2004-05 | 9,128 | 2035.65 | 6492.82 | 17,021,360 | 388,212 | 54.41 | 16,669,023 | 381,005 | 98.14 | 8,493,250 | 12,608,667 | 194,131 | 288,198 | 25,641,269 | 586,086 |
| 2005-06 | 9,335 | 3402.55 | 11280.00 | 30,221,900 | 677,469 | 85.58 | 23,901,180 | 535,777 | 79.09 | 4,508,016 | 7,080,147 | 101,054 | 158,712 | 48,242,590 | 1,081,430 |
| 2006-07 | 9,443 | 3821.55 | 13,072.10 | 35,488,081 | 814,134 | 86.02 | 29,030,742 | 665,628 | 81.76 | 2,053,237 | 3,982,988 | 47,103 | 91,374 | 74,152,780 | 1,701,142 |
| 2007-08 | 9,487 | 4734.50 | 15644.44 | 51,497,010 | 1,288,392 | 109.26 | 51,308,320 | 1,283,667 | 99.63 | 2,604,088 | 5,003,047 | 65,151 | 125,170 | 133,327,869 | 3,335,698 |
| 2008-09 | 9,628 | 3020.95 | 9708.50 | 30,929,738 | 607,061 | 55.40 | 38,525,980 | 756,054 | 124.54 | 2,911,124 | 6,645,488 | 57,137 | 130,432 | 110,227,501 | 2,302,643 |
| **2009-10** | **9,772** | **5249.10** | **17527.80** | **61,704,205** | **1,366,952** | **94.20** | **55,184,700** | **1,222,523** | **89.43** | **4,217,022** | **9,018,385** | **93,421** | **199,787** | **176,638,990** | **3,921,825** |
| **April-Sep 2010** | **10,018** | **6030.00** | **20069.10** | **71,323,583** | **1,583,561** | **108.89** | **23,547,240** | **522,807** | **33.01** | **2,297,596** | **4,359,763** | **51,012** | **96,798** | **124,517,600** | **2,764,600** |

*Source: CSO, SEBI, CMIE Prowess and NSE*

**Table 1-5: Sectorwise Shareholding Pattern at the end of September 2010 for companies listed at NSE**

(in percent)

| Sectors | PROMOTERS | | PUBLIC | | | | | | | | Shares held by Custodians and against which Depository Receipts have been issued |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | INSTITUTIONAL | | | | | NON-INSTITUTIONAL | | | |
| | Indian Promoters | Foreign Promoters | Financial Insitutions/ Banks/Central Government/State Government/Insurance Companies | Foreign Institutional Investors | Mutual Funds | Venture Capital Funds including Foreign Venture Capital Funds | Any Other | Bodies Corporate | Individuals | Any other | |
| Banks | 43.73 | 0.96 | 9.00 | 19.24 | 3.62 | 0.00 | 0.20 | 5.08 | 13.37 | 1.34 | 3.47 |
| Engineering | 34.61 | 1.51 | 9.82 | 9.24 | 8.85 | 0.00 | 0.46 | 8.70 | 18.93 | 6.75 | 1.13 |
| Finance | 38.10 | 1.17 | 7.47 | 22.63 | 2.48 | 0.10 | 2.07 | 6.00 | 14.12 | 5.02 | 0.82 |
| FMCG | 19.77 | 9.58 | 13.49 | 15.73 | 7.93 | 0.07 | 0.01 | 5.29 | 12.11 | 15.61 | 0.40 |
| Information Technology | 41.79 | 5.78 | 2.83 | 10.47 | 1.91 | 0.15 | 0.14 | 7.36 | 18.91 | 5.18 | 5.48 |
| Infrastructure | 72.20 | 2.20 | 3.93 | 8.75 | 1.82 | 0.41 | 0.00 | 3.26 | 5.64 | 1.75 | 0.04 |
| Manufacturing | 42.98 | 9.57 | 5.77 | 8.99 | 2.89 | 0.01 | 0.27 | 7.28 | 15.20 | 2.53 | 4.52 |
| Media & Entertainment | 49.50 | 3.43 | 1.36 | 7.82 | 4.09 | 0.00 | 0.00 | 11.08 | 13.77 | 2.49 | 6.46 |
| Petrochemicals | 54.00 | 7.27 | 4.64 | 6.35 | 2.27 | 0.00 | 0.09 | 6.21 | 10.45 | 3.36 | 5.36 |
| Pharmaceuticals | 40.56 | 9.76 | 4.69 | 9.16 | 3.80 | 0.23 | 0.45 | 7.01 | 19.37 | 2.94 | 2.02 |
| Services | 46.48 | 13.75 | 5.66 | 8.82 | 3.38 | 0.47 | 0.00 | 7.01 | 10.53 | 3.82 | 0.08 |
| Telecommunication | 52.90 | 7.72 | 5.26 | 8.73 | 1.63 | 0.00 | 0.00 | 4.01 | 9.21 | 9.66 | 0.89 |
| Miscellaneous | 49.86 | 3.98 | 1.84 | 10.35 | 2.25 | 0.09 | 0.02 | 8.40 | 15.33 | 6.97 | 0.91 |
| Number of Shares | 137,255,013,027 | 17,000,404,429 | 15,178,175,483 | 28,380,058,503 | 7,863,054,282 | 398,584,441 | 589,634,046 | 15,950,019,405 | 32,697,151,419 | 10,868,054,516 | 7,010,041,637 |
| % to Total Number of Shares | 50.24 | 6.22 | 5.56 | 10.39 | 2.88 | 0.15 | 0.22 | 5.84 | 11.97 | 3.98 | 2.57 |

*Source: NSE*

### Shareholding Pattern

In the interest of transparency, the issuers are required to disclose shareholding pattern on a quarterly basis. Table 1-5 presents the sectorwise shareholding pattern of the companies listed at NSE at end of September 2010. It is observed that on an average the promoters held 56.46% of the total shares while public holding was 40.97%. Individuals held 11.97% and the institutional holding (FIIs, MFs, VCFs-Indian and Foreign) accounted for 13.63%.

In 2009, SEBI made it mandatory for promoters of listed companies to disclose the number of shares they had pledged. Table 1-6 shows that 9.17% of the total shares held by promoters are pledged as of September 2010.

**Table 1-6: Sectorwise Pledged shares of Promoters for Companies listed at NSE (as of September 2010)**

| Company Classification | Indian Promoters | Foreign Promoters | Total Promoters Holding | Shares Pledged | %age of pledged shares |
|---|---|---|---|---|---|
| Banks | 6,534,465,631 | 143,446,889 | 6,677,912,520 | 6,128,070 | 0.09 |
| Engineering | 663,834,221 | 29,030,834 | 692,865,055 | 19,791,352 | 2.86 |
| Finance | 4,764,526,960 | 146,817,774 | 4,911,344,734 | 80,839,896 | 1.65 |
| FMCG | 3,280,592,265 | 1,590,378,638 | 4,870,970,903 | 301,915,532 | 6.20 |
| Information Technology | 6,285,653,158 | 869,871,803 | 7,155,524,961 | 431,013,284 | 6.02 |
| Infrastructure | 48,382,461,742 | 1,471,622,586 | 49,854,084,328 | 6,036,387,267 | 12.11 |
| Manufacturing | 33,369,432,271 | 7,426,899,334 | 40,796,331,605 | 3,964,937,996 | 9.72 |
| Media & Entertainment | 2,834,254,557 | 196,254,541 | 3,030,509,098 | 759,349,238 | 25.06 |
| Petrochemicals | 12,197,875,542 | 1,641,350,810 | 13,839,226,352 | 586,834,779 | 4.24 |
| Pharmaceuticals | 3,169,074,018 | 762,325,152 | 3,931,399,170 | 210,195,372 | 5.35 |
| Services | 4,440,419,497 | 1,313,674,096 | 5,754,093,593 | 741,308,179 | 12.88 |
| Telecommunication | 7,625,438,913 | 1,112,826,881 | 8,738,265,794 | 566,950,494 | 6.49 |
| Miscellaneous | 3,706,984,252 | 295,905,091 | 4,002,889,343 | 433,051,215 | 10.82 |
| **Total** | | | 154,255,417,456 | 14,138,702,674 | 9.17 |

*Source:NSE*

## Initiatives and developments by SEBI in Indian Securities Market in the year 2010

| | |
|---|---|
| January 2010 | SEBI allowed stock exchanges to introduce currency futures on additional currency pairs –– GBP-INR EUR-INR and JPY-INR. |
| February 2010 | SEBI set up committee for review of ownership and governance of market infrastructure institutions |
| April 2010 | Reduction in time between issue closure and listing |
| May 2010 | Introduction of Index options with tenure up to 5 years |
| May 2010 | Permitting to set up a Stock exchange/ a trading platform by a recognized stock exchange having nationwide trading terminals for SME |
| July 2010 | Introduction of call auction in Pre-open session. |
| July 2010 | Allowing Physical Settlement of Stock Derivatives |

| | |
|---|---|
| July 2010 | Market Access through Authorised Persons |
| July 2010 | Reporting of OTC transactions in Certificates of Deposit (CDs) and Commercial Papers (CPs) |
| August 2010 | Introduction of Smart Order Routing |
| August 2010 | SEBI allows securities trading using wireless technology |
| October 2010 | European Style Stock Options |
| October 2010 | Currency Options on USD-INR were allowed for trading at NSE. |
| November 2010 | Facilitating transactions in mutual fund schemes through the Stock Exchange infrastructure. |

## India and International Comparison

The securities markets in India and abroad witnessed recovery during 2009. This was reflected in the rising market capitalisation of stock exchanges of emerging and developing countries. The market capitalisation of the emerging markets increased to 28.3% of world total market capitalisation in 2009, up from 25.9% in 2008. The market value of emerging markets increased by 48.8% in 2009[7]. United States which accounted for 30.9% of the world total market capitalisation in 2009 registered a rise of 28.4% in its market capitalisation. However, neither the emerging countries nor the developed economies were able to surpass the levels of growth witnessed in market capitalisation and turnover during the year 2007. This is clearly exhibited in Table 1-7.

The stock markets worldwide have grown in size as well as depth over the years. As can be observed from (Table 1-7), the market capitalization of all listed companies in developed and emerging economies taken together on all markets stood at US $ 48.71 trillion in 2009 up from US $ 34.88 trillion in 2008. In terms of market capitalisation, nearly all the countries showed an increase in the year 2009 as compared with the year 2008. However, in terms of turnover, all the countries compared to the year 2009, the share of US in worldwide market capitalization remained at 30.9% at the end of 2009 as it was at the end of 2007. The stock market capitalisation for some developed and emerging countries is shown in chart 1-3.

Chart 1-3: Stock Market Capitalisation (percent of GDP)


7 S&P Global Stock Market Factbook 2010.

**Table 1-7: International Comparison of Global Stock Markets**

| International Comparison | Market Capitalisation (US $ mn) | | | Turnover (US $ mn) | | | Turnover Ratio (in %) | | | Market Capitalisation Ratio (in %) | | | No. of listed Companies | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Markets** | **2007** | **2008** | **2009** | **2007** | **2008** | **2009** | **2007** | **2008** | **2009** | **2007** | **2008** | **2009** | **2007** | **2008** | **2009** |
| **Developed Market** | **46,300,864** | **26,533,854** | **34,907,166** | **82,455,174** | **67,795,950** | **64,458,380** | | | | | | | **26,251** | **26,375** | **24,635** |
| Australia | 1,298,429 | 675,619 | 1,258,456 | 1,322,822 | 1,017,705 | 761,820 | 110.50 | 103.10 | 78.80 | 151.54 | 65.00 | 82.37 | 1,913 | 1,924 | 1,882 |
| France | 2,771,217 | 1,492,327 | 1,972,040 | 3,418,890 | 3,265,494 | 1,365,807 | 131.50 | 152.40 | 78.80 | 106.83 | 52.28 | 51.55 | 707 | 966 | 941 |
| Germany | 2,105,506 | 1,107,957 | 1,297,568 | 3,363,093 | 3,105,288 | 1,288,867 | 179.70 | 191.50 | 107.20 | 63.35 | 30.31 | 38.51 | 658 | 638 | 601 |
| Japan | 4,453,475 | 3,220,485 | 3,377,892 | 6,497,193 | 5,879,439 | 4,192,624 | 141.60 | 153.20 | 128.80 | 101.73 | 65.90 | 82.74 | 3,844 | 3,299 | 3,208 |
| Singapore | 353,489 | 180,021 | 310,766 | 384,227 | 270,909 | 252,266 | 122.00 | 101.30 | 102.80 | 199.98 | 93.11 | 138.43 | 472 | 455 | 459 |
| UK | 3,858,505 | 1,851,954 | 2,796,444 | 10,324,477 | 6,486,959 | 3,402,496 | 270.10 | 226.90 | 146.40 | 137.85 | 69.55 | 156.47 | 2,588 | 2,415 | 2,179 |
| USA | 19,947,284 | 11,737,646 | 15,077,286 | 42,613,206 | 36,467,431 | 46,735,935 | 216.50 | 232.30 | 348.60 | 142.37 | 81.69 | 327.83 | 5,130 | 5,603 | 4,401 |
| **Emerging Markets** | **18,262,550** | **9,227,306** | **13,806,558** | **16,361,131** | **12,720,872** | **15,959,679** | – | – | – | – | – | – | **25,071** | **22,763** | **23,926** |
| China | 6,226,305 | 2,793,613 | 5,007,646 | 7,791,702 | 5,470,529 | 8,956,188 | 180.10 | 121.30 | 229.60 | 177.61 | 61.63 | 179.67 | 1,530 | 1,604 | 1,700 |
| India | 1,819,101 | 645,478 | 1,179,235 | 1,107,550 | 1,049,748 | 1,088,889 | 84.00 | 85.20 | 119.30 | 147.56 | 53.16 | 83.11 | 4,887 | 4,921 | 4,955 |
| Russia | 1,503,011 | 397,183 | 861,424 | 754,537 | 562,230 | 682,540 | 58.90 | 75.00 | 108.50 | 115.61 | 23.82 | 55.46 | 328 | 314 | 279 |
| Brazil | 1,370,377 | 589,384 | 1,167,335 | 584,951 | 727,793 | 649,187 | 56.20 | 74.30 | 73.90 | 100.32 | 35.97 | 41.30 | 442 | 432 | 377 |
| Indonesia | 211,693 | 98,761 | 178,191 | 112,851 | 110,678 | 115,310 | 64.40 | 71.30 | 83.30 | 48.98 | 19.35 | 21.34 | 383 | 396 | 398 |
| Korea | 1,123,633 | 494,631 | 836,462 | 1,947,015 | 1,465,999 | 1,581,487 | 201.60 | 181.20 | 237.60 | 107.09 | 53.11 | 189.97 | 1,767 | 1,798 | 1,778 |
| Malaysia | 325,663 | 187,066 | 255,952 | 150,002 | 85,214 | 72,970 | 53.50 | 33.20 | 32.90 | 175.11 | 84.58 | 38.08 | 1,036 | 977 | 953 |
| Mexico | 397,725 | 232,581 | 340,565 | 115,617 | 108,202 | 77,059 | 31.00 | 34.30 | 26.90 | 38.78 | 21.34 | 8.81 | 125 | 125 | 125 |
| **World Total** | **64,563,414** | **34,887,452** | **48,713,724** | **98,816,305** | **80,516,822** | **80,418,059** | **–** | **–** | **–** | **–** | **–** | **–** | **51,322** | **49,138** | **48,561** |
| USA as % of World | 30.90 | 33.64 | 30.95 | 43.12 | 45.29 | 58.12 | – | – | – | – | – | – | 10 | 11 | 9 |
| India as % of World | 2.82 | 1.85 | 2.42 | 1.12 | 1.30 | 1.35 | – | – | – | – | – | – | 10 | 10 | 10 |

*Source:S&P Global Stock Market Factbook, 2009 and World Development Indicators, World Bank*
*Note:*
*Market Capitalisation ratio is computed as a percentage of GDP.*

Following the implementation of reforms in the securities market in the past years, Indian stock markets have stood out in the world ranking. India has the distinction of having the largest number of listed companies followed by United States, Canada, Spain, Japan and United Kingdom. As per Standard and Poor's Fact Book 2010, India ranked 11$^{th}$ in terms of market capitalization and 11$^{th}$ in terms of turnover ratio as of December 2009. India posted a turnover ratio of 119.3% at end 2009.

According to the 'World Development Indicators 2010', there has been an increase in market capitalization as percentage of Gross Domestic Product (GDP) in some of the major country groups as is evident from **(Table 1-8).**

**Table 1-8: Select Stock Market Indicators**

| Markets | Market Capitalisation as % of GDP | | | Turnover Ratio (%) | | | Listed Domestic Companies | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2006 | 2007 | 2008 | 2007 | 2008 | 2009 | 2007 | 2008 | 2009 |
| **High Income** | **126.1** | **123.8** | **62.9** | **150.2** | **180.5** | **187.1** | **30,016** | **29,505** | **31,198** |
| **Middle Income** | **74.2** | **117** | **49.5** | **94.5** | **78.2** | **213.8** | **13,195** | **15,300** | **15,575** |
| **Low & Middle Income** | **73.3** | **113.9** | **48.9** | **94.3** | **77.8** | **213.8** | **20,106** | **16,834** | **16,120** |
| East Asia & Pacific | 85.1 | 165.1 | 58 | 163.5 | 112.0 | 229.5 | 4,080 | 3,868 | 3962 |
| Europe & Central Asia | 66.7 | 77.3 | 44.4 | 64.1 | 68.8 | 68.0 | 6,070 | 3,882 | 3610 |
| Latin America & Caribbean | 51.7 | 71.4 | 31.9 | 34.8 | 47.0 | 46.1 | 1,509 | 1,302 | 1471 |
| Middle East & N. Africa | 48.9 | 56.1 | 55.9 | 28.3 | 28.7 | 28.7 | 1,443 | 772 | 717 |
| South Asia | 77.2 | 133.4 | 47.0 | 101.3 | 89.3 | 88.9 | 6,089 | 6,098 | 6123 |
| Sub-Saharan Africa | 159.9 | 149.0 | 148.5 | 30.1 | 29.1 | 76.5 | 915 | 912 | 820 |
| **India** | **89.8** | **154.6** | **55.7** | **95.9** | **85.2** | **116.3** | **4,887** | **4,921** | **4,946** |
| **World** | **113.9** | **121.3** | **59.2** | **94.3** | **--*** | **--*** | **50,212** | **--*** | **-- *** |

*Source: World Development Indicators 2010, World Bank.*
** Aggregates not preserved because data for high-income economies are not available for 2008*

The increase, however, has not been uniform across countries. The turnover ratio in the year 2009 was 213.8% for Middle income and Low & Middle income countries and 187.1% for the high income countries. India's turnover ratio was 116.3% during 2009.

India's market capitalization to GDP ratio rose from levels close to low income countries to levels substantially higher than middle-income countries. Market capitalisation as percentage of GDP in India stood at 55.7% as at end 2008. The turnover ratio, which is a measure of liquidity, was 187.1% for high-income countries and 213.8% for low-income countries in 2009. In terms of total number of listed companies, high income countries together had 31,198 companies listed on their stock exchanges while there were 15,575 companies listed on stock exchanges of middle-income countries which was lower than the count of 16,120 companies listed on stock exchanges of low and middle income countries. The movement of various countrywise indices is shown in Chart 1-4 for the period January 2007 - September 2010. Nifty 50 was the best performer followed by Hangseng and Nasdaq. This shows that all the markets bounced back after the 2008 financial crisis.

Chart 1-4: gives the movement of different markets from January 2007- September 2010.


## Role of NSE in Indian Securities Market

National Stock Exchange of India (NSE) was given recognition as a stock exchange in April 1993. NSE was set up with the objectives of (a) establishing a nationwide trading facility for all types of securities, (b) ensuring equal access to all investors all over the country through an appropriate communication network, (c) providing a fair, efficient and transparent securities market using electronic trading system, (d) enabling shorter settlement cycles and book entry settlements and (e) meeting the international benchmarks and standards. Within a short span of time, above objectives have been realized and the Exchange has played a leading role in transforming the Indian Capital Market to its present form.

NSE has set up infrastructure that serves as a role model for the securities industry in terms of trading systems, clearing and settlement practices and procedures. The standards set by NSE in terms of market practices, products, technology and service standards have become industry benchmarks and are being replicated by other market participants. It provides screen-based automated trading system with a high degree of transparency and equal access to investors irrespective of geographical location. The high level of information dissemination through on-line system has helped in integrating retail investors on a nation-wide basis.

NSE has been playing the role of a catalytic agent in reforming the market in terms of microstructure and market practices. Right from its inception, the exchange has adopted the purest form of demutualised set up whereby the ownership, management and trading rights are in the hands of three different sets of people. This has completely eliminated any conflict of interest and helped NSE to aggressively pursue policies and practices within a public interest framework. It has helped in shifting the trading platform from the trading hall in the premises of the exchange to the computer terminals at the premises of the trading members located country-wide and subsequently to the personal computers in the homes of investors. Settlement risks have been eliminated with NSE's innovative endeavors in the area of clearing and settlement viz., reduction of settlement cycle, professionalisation of the trading members, fine-tuned risk management system, dematerialisation and electronic transfer of securities and establishment of clearing corporation. As a consequence, the market today uses the state-of-art information technology to provide an efficient and transparent trading, clearing and settlement mechanism.

NSE provides a trading platform for all types of securities-equity, debt and derivatives. On its recognition as a stock exchange under the Securities Contracts (Regulation) Act, 1956 in April 1993, it commenced operations in the Wholesale

Debt Market (WDM) segment in June 1994, in the Capital Market (CM) segment in November 1994, and in Equity Derivatives segment in June 2000. The Exchange started providing trading in retail debt of Government Securities in January 2003 and trading in currency futures in August 2008.

The ***Wholesale Debt Market*** segment provides the trading platform for trading of a wide range of debt securities. Its product, which is now disseminated jointly with FIMMDA, the FIMMDA NSE MIBID/MIBOR is used as a benchmark rate for majority of deals struck for Interest Rate Swaps, Forwards Rate Agreements, Floating Rate Debentures and Term Deposits in the country. Its 'Zero Coupon Yield Curve' as well as NSE-VaR for Fixed Income Securities have also become very popular for valuation of sovereign securities across all maturities irrespective of its liquidity and facilitated the pricing of corporate papers and GOI Bond Index.

NSEs ***Capital Market*** segment offers a fully automated screen based trading system, known as the National Exchange for Automated Trading (NEAT) system, which operates on a strict price/time priority. It enables members from across the country to trade simultaneously with enormous ease and efficiency.

NSEs ***Equity Derivatives*** segment provides trading of a wide range of derivatives like Index Futures, Index Options, Stock Options and Stock Futures.

NSEs **Currency Derivatives** segment provides trading on currency futures contracts on the USD-INR which commenced on August 29, 2008. In February 2010, trading on additional pairs such as GBP-INR, EUR-INR and JPY-INR was allowed while trading in USD-INR currency options were allowed for trading on October 29, 2010. The interest rate futures trade on the currency derivatives segment of NSE and they were allowed for trading segment on August 31, 2009

The NSE yet again registered as the market leader with 87.64% of total turnover (volumes in cash market, equity derivatives and currency derivatives) in 2009-10. NSE proved itself as the market leader contributing a share of 74.98% in the equity trading and nearly 100% share in the equity derivatives segment in the year 2009-10 (Table 1-9). Not only in Indian Markets, but also in the global Markets, NSE has created a niche for itself in terms of derivatives trading in various instruments (discussed in detail with statistics in chapter 6 of this publication).

**Table 1-9: Market Segments on NSE for 2009-10- Selected Indicators**

| Segments | No. of securities traded/ No. of contracts available for trading | Market Capitalisation as of March 2010 | | Trading Value for 2009-10 | | Market Share (%) |
|---|---|---|---|---|---|---|
| | | ₹ mn | US $ mn | ₹ mn | US$ mn | |
| CM | 1,971 | 60,091,732 | 1,331,230 | 41,380,234 | 916,709 | 74.98 |
| Equity F&O | 23,533 | - | - | 176,636,646 | 3,913,085 | 100.00 |
| Currency Futures | 48 | - | - | 17,826,080 | 394,907 | 47.83 |
| **Total** | **-** | **60,091,732** | **1,331,230** | **235,842,961** | **5,224,700** | **87.64** |

*Notes:*

1. *For CM segment, number of securities traded is provided*
2. *For Equity F&O and currency futures number of contracts available for trading as of March 2010 are shown.*
3. *No. of contracts available for trading in equity futures and options include 3 Nifty futures, 3 BankNifty futures, 3 CNX IT futures, 3 Mini Nifty futures, Nfty Midcap 50 futures, 570 stock futures, 628 Nifty Options, 140 Bank Nifty options, 114 CNX IT options, 98 Mini Nifty options, 86 Nifty Midcap 50 options and 21,882 stock options. The count is as of March 31, 2010*
4. *No. of contracts traded in currency futures include 12 Euro-INR, 12 GBP-INR, 12 JPY-INR and 12 USD-INR. The count is as of March 31, 2010.*

### Milestones achieved by NSE in 2010

| Month | Achievement |
|---|---|
| February 2010 | • Launch of Currency Futures on additional currency pairs EURO-INR, JPY-INR, GBP-INR<br>• Listing of Hangseng BeEs ETF-India's first ETF tracking an overseas stock market index |
| March 2010 | Product Cross listing agreement between NSE- CME Group & NSE - SGX |
| April 2010 | NSE awarded The Asian Banker Financial Derivative Exchange of the Year Award – 2010 and the Asian Banker Clearing House of the Year Award - 2010 |
| July 2010 | • Commencement of trading of S&P CNX Nifty Futures on CME<br>• Real Time dissemination of India VIX.*<br>• Letter of Intent signed with London Stock Exchange Group |
| September 2010 | • Introduction of Mobile tracker, for providing market data to anyone who registers their mobile number on the NSE website, nseindia.com.<br>• Commencement of mobile trading |
| October 2010 | • Introduction of call auction in Pre-open session<br>• Introduction of Currency Options on USD-INR<br>• Introduction of European Style Stock Options<br>• NSE started an investor awareness initiative on the Delhi Sealdah Rajdhani. |

* "VIX" is a trademark of Chicago Board Options Exchange, Incorporated ("CBOE") and Standard & Poor's has granted a License to NSE, with permission from CBOE, to use such mark in the name of the India VIX and for purposes relating to the India VIX.

## Technology and Application Systems in NSE

Technology has been the backbone of the Exchange. Providing the services to the investor community and the market participants using technology at the cheapest possible cost has been its main thrust. NSE chose to harness technology in creating a new market design. It believes that technology provides the necessary impetus for the organisation to retain its competitive edge and ensure timeliness and satisfaction in customer service. In recognition of the fact that technology will continue to redefine the shape of the securities industry, NSE stresses on innovation and sustained investment in technology to remain ahead of competition. NSE is the first exchange in the world to use satellite communication technology for trading. It uses satellite communication technology to energize participation from about 2,500 VSATs from nearly 200 cities spread all over the country.

Its trading system, called National Exchange for Automated Trading (NEAT), is a state of-the-art client server based application. At the server end, all trading information is stored in an in-memory database to achieve minimum response time and maximum system availability for users. It has uptime record of 99.9%. For all trades entered into NEAT system, there is uniform response time of less than 1.5 seconds. NSE has been continuously undertaking capacity enhancement measures so as to effectively meet the requirements of increased users and associated trading loads. NSE has also put in place NIBIS (NSEs Internet Based Information System) for on-line real-time dissemination of trading information over the Internet.

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 and the high-speed optical fibre link with its main site at Mumbai. This site at Chennai is a replica of the production environment at Mumbai. The transaction data is backed up on near real time basis from the main site to the disaster back-up site through the 2 STM-4 (1.24 GB) high-speed links to keep both the sites all the time synchronized with each other.

The various application systems that NSE uses for its trading as well clearing and settlement and other operations form the backbone of the Exchange. The application systems used for the day-to-day functioning of the Exchange can be divided into (a) Front end applications and (b) Back office applications.

In the front office, there are 6 applications:

| | |
|---|---|
| ***NEAT – CM*** | NEAT-CM system takes care of trading of securities in the Capital Market segment that includes equities, debentures/notes as well as retail Gilts. The NEAT–CM application has a split architecture wherein the split is on the securities and users. The application runs on two Stratus systems with Open Strata Link (OSL). The application has been benchmarked to support 15,000 users and handle more than 3 million trades daily. This application also provides data feed for processing to some other systems like Index, OPMS through TCP/IP. This is a direct interface with the trading members of the CM segment of the Exchange for entering the orders into the main system. There is a two way communication between the NSE main system and the front end terminal of the trading member. |
| ***NEAT – WDM*** | NEAT-WDM system takes care of trading of securities in the Wholesale Debt Market (WDM) segment that includes Gilts, Corporate Bonds, CPs, T-Bills, etc. This is a direct interface with the trading members of the WDM segment of the Exchange for entering the orders/trades into the main system. There is a two way communication between the NSE main system and the front end terminal of the trading member. |
| ***NEAT – F&O*** | NEAT-F&O system takes care of trading of securities in the Futures and Options (F&O) segment that includes Futures on Index as well as individual stocks and Options on Index as well as individual stocks. This is a direct interface with the trading members of the F&O segment of the Exchange for entering the orders into the main system. There is a two way communication between the NSE main system and the front end terminal of the trading member. |
| ***NEAT – IPO*** | NEAT-IPO system is an interface to help the initial public offering of companies which are issuing the stocks to raise capital from the market. This is a direct interface with the trading members of the CM segment who are registered for undertaking order entry on behalf of their clients for IPOs. NSE uses the NEAT IPO system that allows bidding in several issues concurrently. There is a two way communication between the NSE main system and the front end terminal of the trading member. |
| ***NEAT – MF*** | *NEAT – MF* system is an interface with the trading members of the CM segment for order collection of designated Mutual Funds units |
| ***NEAT- CD*** | *NEAT – CD* system *is trading system for currency derivatives. Currently, currency futures are trading in the segment.* |

The exchange also provides a facility to its members to use their own front end software through the CTCL (computer to computer link) facility. The member can either develop his own software or use products developed by CTCL vendors.

In the back office, the following important application systems are operative:

| | |
|---|---|
| **Nationwide Clearing and Settlement System**<br><br>**(NCSS)** | NCSS is the clearing and settlement system of the NSCCL for the trades executed in the CM segment of the Exchange. The system has 3 important interfaces – OLTL (Online Trade loading) that takes each and every trade executed on real time basis and allocates the same to the clearing members, Depository Interface that connects the depositories for settlement of securities and Clearing Bank Interface that connects the 13 clearing banks for settlement of funds. It also interfaces with the clearing members for all required reports. Through collateral management system it keeps an account of all available collaterals on behalf of all trading/clearing members and integrates the same with the position monitoring of the trading/clearing members. The system also generates base capital adequacy reports. |
| **Future and Options Clearing and Settlement System (FOCASS)** | FOCASS is the clearing and settlement system of the NSCCL for the trades executed in the F&O segment of the Exchange. It interfaces with the clearing members for all required reports. Through collateral management system it keeps an account of all available collaterals on behalf of all trading/clearing members and integrates the same with the position monitoring of the trading/clearing members. The system also generates base capital adequacy reports. |

| | |
|---|---|
| **Currency Derivatives Clearing and Settlement System (CDCSS)** | CDCSS is the clearing and settlement system for trades executed in the currency derivative segment. Through collateral management system it keeps an account of all available collateral on behalf of all trading /clearing members and integrates the same with the position monitoring of the trading/clearing members. The System also generates base capital adequacy report. |
| **Surveillance system** | Surveillance system offers the users a facility to comprehensively monitor the trading activity and analyse the trade data online and offline. |
| **Online Position Monitoring System (OPMS)** | OPMS is the online position monitoring system that keeps track of all trades executed for a trading member vis-à-vis its capital adequacy. |
| **Parallel Risk Monitoring System (PRISM)** | PRISM is the parallel risk management system for F&O trades using Standard Portfolio Analysis (SPAN). It is a system for comprehensive monitoring and load balancing of an array of parallel processors that provides complete fault tolerance. It provides real time information on initial margin value, mark to market profit or loss, collateral amounts, contract-wise latest prices, contract-wise open interest and limits. The system also tracks online real time client level portfolio base upfront margining and monitoring. |
| **Parallel Risk Monitoring System – Currency Derivatives (PRISM-CD)** | PRISM-CD is the risk management system of the currency derivatives segment. It is similar in features to the PRISM of F&O Segment. |
| **Data warehousing** | Data warehousing is the central repository of all data in CM as well as F&O segment of the Exchange. |
| **Listing system** | Listing system captures the data from the companies which are listed in the Exchange for corporate governance and integrates the same to the trading system for necessary broadcasts for data dissemination process. |
| **Membership system** | Membership system that keeps track of all required details of the Trading Members of the Exchange. |
| **Investor Services (NICE)** | Investor can register their complaint against Trading Members (Broker) / Companies listed on the Exchange through the NSE INVESTOR CENTER (NICE) application |

The exchange operates and manages a nationwide network. This network of over 2400 VSATs and 3000+ Leased Lines has been migrated from X.25 to IP in early 2009. In the new IP network, members have an advantage of a more generic and latest IP protocol and an overall better design, in terms of bandwidth and resilience. Currently, the network has over 2400 VSATs, 3000+ Leased Lines and 9 POPs (Point of Presence) across the country.

## NOW

NSE is also offering internet based trading services to NSE members. This facility is branded as NOW or 'Neat on Web'. NOW provides an internet portal for NSE members and their authorized clients to transact orders and trades to the various market segments of NSE viz. CM, F&O and Currency. In addition to internet links, the members can also access NOW through their existing VSAT/Leased line. The various features provided by NOW are (a) comprehensive Administration features, flexible risk management system, high speed dealer terminals and online trading facility for investors.

## Co-location @ NSE

The term ''co-location/proximity hosting services'' means space, power, telecommunications, and other ancillary products and services made available to market participants for the purpose of enabling them to position their computer systems/servers in close proximity to the transaction execution facility's trade and execution systems. Exchanges internationally are introducing co-location services to support high frequency trading using ALGO and DMA. In keeping with the global trends and maintaining high service excellence, NSE started co-location facility at its BKC premises in Jan 2010. The state-of-the-art co-location facility at BKC provides one of the most modern datacenter facilities.

Exchange hosting provides the ultimate solution in terms of low-latency access options to markets. This new service underlines exchange's commitment to reducing latency at each stage of the trading cycle and facilitating the structural shifts in trading patterns that are driving growth on our markets. The service will allow customers to host their algorithmic engines next to our execution engine and aid further liquidity generation and market efficiency.

The first phase of the facility provides for a total of 50 full racks, while the second phase provides a further capacity of 50+ full racks and 28 half racks. The strategy of providing half racks in exchange collocation space, which is first in itself in the world, is to enable small size trading members to subscribe to the co-location facility. This is in tune with NSE's philosophy of providing equal opportunity to all classes of trading members.

### Features

- At par with global trends in exchange sphere
- High speed and low latency trading solution for our members
- In line with global benchmarks and practices in technology and pricing structure
- Designed & developed state-of-the-art tier 3+ datacenter
- Highly available, reliable, robust, redundant & secure network infrastructure
- Data-Centre Certification from Global Technology Leader (IBM)
- 24x7 Helpdesk with L1 support for stakeholders from day zero

# Primary Market

## Introduction

Primary market facilitates government as well corporates in raising capital to meet their requirements of capital expenditure and/or discharge of other obligation such as exit opportunity for venture capitalist/ PE firm. The most common primary mechanism for raising capital is an Initial Public Offer (IPO), under which shares are offered to common public as a precursor to the trading in secondary market of an exchange. The price at which the shares will be issued is decided with the help of book building mechanism and in case of oversubscription the shares are allotted on a pro-rata basis. When securities are exclusively offered to the existing shareholders of company, as opposed to the general public it is called 'Rights Issue'. Another mechanism whereby a listed company can issue equity shares, fully and partly convertible debentures which can be converted into equity shares later on, to a Qualified Institutional Buyer (QIB) is termed as Qualified Institutional Placement. Apart from raising capital in domestic market, companies can also issue securities in international market through ADR/GDR/ECB route and raise capital.

## Trends

The issuers mobilize resources through public issues and private placements. The resources, raised by them from domestic as well as international markets, are presented in (Table 2-1). The total resources mobilized through Corporate and Government securities during 2009-10 increased by 52.91% over the previous year.The resources mobilized amounted to ₹ 10,075,102 million (US $ 223,197 million) as against ₹ 6,588,920 million (US $ 129,321 million) in 2008-09. 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 5.

**Table 2-1: Resource Mobilisation by Government and Corporate Sector**

| Issues | (₹ mn.) | | ($ mn.) | |
|---|---|---|---|---|
| | 2008-09 | 2009-10 | 2008-09 | 2009-10 |
| **Corporate Securities** | **2,222,040** | **3,838,912** | **43,612** | **85,045** |
| Domestic Issues | 2,174,160 | 3,679,242 | 42,672 | 81,507 |
| Public Issues | 146,710 | 254,790 | 2,879 | 5,644 |
| Private Placement | 2,027,450 | 3,424,452 | 39,793 | 75,863 |
| Euro Issues | 47,880 | 159,670 | 940 | 3,537 |
| **Government Securities** | **4,366,880** | **6,236,190** | **85,709** | **138,152** |
| Central Government | 3,185,500 | 4,924,970 | 62,522 | 109,104 |
| State Governments | 1,181,380 | 1,311,220 | 23,187 | 29,048 |
| **Total** | **6,588,920** | **10,075,102** | **129,321** | **223,197** |

*Source: RBI*
*– : Nil/Negligible*

## Corporate Securities

The primary market for corporate securities witnessed a rapid upsurge in 2009-10. Resources raised through public issues witnessed a huge jump of 73.67% from ₹ 146,710 million (US $ 2,879 million) in 2008-09 to ₹ 254,790 million (US $ 5,644 million). It accounted for a mere 6.93% of the total resources mobilized domestically. Though the private placements also increased by 68.9% it accounted for 93.07% of the resources mobilized in the domestic market.

The resources raised by Indian corporates from the international capital market through the issuance of FCCBs, GDRs and ADRs also witnessed a significant increase of 233.48% during 2009-10 raising ₹ 159,670 million (US $ 3,537 million) as against ₹ 47,880 million (US $ 940 million) in the previous year.

## Policy Developments

### I. Amendments in the SEBI (Disclosure and Investor Protection) DIP guidelines notified in July 2009

- Listing of IPO on stock exchange with nationwide trading terminals: An unlisted company making an IPO needs to list the securities on at least one stock exchange having nationwide trading terminals. This would provide a liquid trading platform to investors in securities of the company.
- Anchor Investor in public issues: An issuer making a public issue of shares through book building may allocate on a discretionary basis up to 30% of the QIB portion of the issue to anchor investors (AIs), who is a QIB. The minimum size of application by AIs would be ₹ 10 crore. They would bring in a margin of 25% on application and the balance 75% within 2 days of the date of closure of the public issue. There would be a lock-in of 30 days on the shares allotted to these investors from the date of allotment. No person related to the promoter/promoter group/BRLMs can apply as anchor investor. This would bring more certainty to transactions.

### II. Amendments to the Equity Listing Agreement

With a view to enhance disclosures regarding shareholding pattern in a listed company and bring in more transparency and efficiency in the governance of a listed company, SEBI amended certain clauses in the Equity Listing Agreement in April 2009.

To mitigate the problem of large number of shares issued pursuant to the public issue which remain unclaimed, SEBI brought out a uniform procedure for dealing with unclaimed shares i.e shares which could not be allotted to the rightful shareholder due to insufficient/incorrect information or any other reason. Accordingly, the new Clause 5A was inserted, which, inter alia, provides - the unclaimed shares needs to be credited to a demat suspense account opened by the issuer with one of the depository participants, any corporate benefit in terms of securities, accruing on unclaimed shares such as bonus shares, split etc., also needs to be credited to such account. Details of shareholding of each individual allottee whose shares have been credited to such suspense account needs be properly maintained by the issuer. The allottee's account would be credited as and when he/she approaches the issuer, after undertaking the proper verification of identity of the allottee. The voting rights of these shares would remain frozen till the rightful owner claims the shares. Details (in aggregate) of shares in the suspense account including freeze on their voting rights, needs be disclosed in the Annual Report as long as there are shares in the suspense account.

Further, clause 16 and clause 19 in the listing agreement was amended to reduce the timelines for notice period for all corporate actions like dividend, bonus etc, for all scripts in demat or physical form, in F&O segment or not. The notice period for record date was reduced to 7 working days and for board meeting was reduced to 2 working days. A new clause (20 A) was inserted which takes care of the mandating listed companies to declare their dividend on per share basis only. This is expected to bring uniformity in the manner of declaring dividend amongst the listed companies.

SEBI also clarified that clause 35 of the listing agreement which gives a format for disclosures of shareholding pattern, is required to be given for each class of security separately. Further, clause 35 was amended to provide an additional format for disclosures of voting rights pattern in the company.

## III. Issues regarding applicability of SEBI Delisting Regulations clarified

SEBI notified the (Delisting of Equity Shares) Regulations, 2009 on June 10, 2009. Since the notification of this regulation, SEBI received queries from various market participants, listed companies etc regarding the 'transitional provisions' contained in regulation 31 of the Delisting Regulations, which outlines certain situations under which the provisions of the earlier Securities and Exchange Board of India (Delisting of Securities) Guidelines, 2003 (Delisting Guidelines) would still be applicable to a particular delisting transaction.

In this regard, it was clarified that in cases where a special resolution had already been passed under the Delisting Guidelines prior to commencement of the Delisting Regulations, the delisting process would be governed by the provisions of the Delisting Guidelines, provided the said resolution is acted upon within a period of three months from September 14, 2009 (i.e the date of the issuance of the circular on the above subject). Otherwise, the company would be required to pass a fresh special resolution in terms of Delisting Regulations and proceed for delisting in terms of Delisting Regulations. For this purpose, the words "acted upon" would mean that the implementation of activities including the opening of the book building process for determination of the exit price in terms of Clause 8.1 of the Delisting Guidelines, would be required to be done within three months from September 14, 2009 (i.e the date of the issuance of the circular on the above subject.)

## IV. Amendments to listing agreement and takeover regulation

SEBI, at its Board meeting held on 22nd September, 2009, decided to amend the listing agreement and takeover regulation. The Board took, inter-alia, the following decisions.

- **Amendments to Listing Agreement/ ICDR Regulations:-**

  Compliance with applicable Accounting Standards : A listed company undergoing corporate restructuring (merger, demerger or amalgamation) under a scheme of arrangement would be required to submit an auditors' certificate to the stock exchange to the effect that the accounting treatment followed in respect of financials contained in the scheme is in compliance with all the applicable accounting standards. This requirement would be prescribed through amendments to listing agreement. An unlisted company undergoing similar corporate restructuring and proposing to make an IPO would be required to make disclosures in the DRHP (Draft Red Herring Prospectus) in terms of AS 14. This is mandated through the SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2009.

  Facilities for issue of Indian Depository Receipts:- SEBI has decided to extend the facility of anchor investors to issue of IDRs on similar terms as applicable to public issues made by domestic companies. It also decided that at least 30% of issue size of the IDRs be reserved for allocation to retail individual investors, who may otherwise be crowded out.

- **Amendments to SEBI (Substantial Acquisition of Shares and Takeovers) Regulations (Takeover Regulations) :-**

  Applicability of open offer obligation in case of GDRs/ADRs etc In tune with market developments, the Board decided to amend the Takeover Regulations to provide that, where the ADR/ GDR holders are entitled to exercise voting rights on the shares underlying GDRs / ADRs by virtue of clauses in the depository agreement or otherwise, open offer obligations would be triggered upon crossing the threshold limits set out under Chapter III of the Regulations.

  Disclosure of sale/ purchase by acquirer under Regulation 7 (1A): Regulation 7 (1A) of the Takeover Regulations requires disclosures on (+ /-) 2% acquisition / divestment by the acquirers holding shares / voting rights between 15-55%. The Board decided to extend such disclosure requirements to acquirers holding shares / voting rights between 15-75%.

## V. Amendments in the Issue of Capital and Disclosure Requirements, Regulations, 2009 (ICDR)

SEBI, at its Board meeting held on 9th November, 2009, decided to amend the ICDR Regulations/ Listing Agreement, to inter-alia, require interim disclosure of Balance Sheet items by listed entities and permitting pure auctions for qualified institutional investors (QIBs) in follow-on public offerings to begin with. The amendments are as follows:

QIB Status to insurance funds set up by armed forces: The Board decided to accord QIB status to insurance funds set up by armed forces such as Army Group Insurance Fund.

Reservation to employees: The ICDR regulations permited reservation upto 10% of issue size to employees in public issues. However, there was no ceiling on number of shares that could be allotted. SEBI decided to put a ceiling of ₹ 1 lakh on the value of allotment that can be made to an employee under employee reservation category and to permit reservation upto 5% of the post issued capital instead of 10% of issue size. SEBI also decided to extend reservation to employees along with rights issue. The ICDR Regulations also provided for discount upto 10% of issue price to retail individual investors and shareholders but not to employees. It was also decided to allow discount of not more than 10 percent to employees also under the reserved category only in public issues for application size upto ₹ 1,00,000/-.

Voluntary adoption of IFRS by listed entities having subsidiaries: The Board observed that providing a voluntary option to all listed entities which consolidate their books of accounts to submit their financials as per IFRS would be in line with the objective of achieving convergence to IFRS by 2011 and would help in preparing corporate entities well in advance for compliance with IFRS requirements. SEBI, therefore, decided to provide an option to all listed entities with subsidiaries to submit their consolidated financial statements as per IFRS. However, such entities are required to continue to file their stand alone financials as per Indian GAAP in line with the Companies Act requirements.

Interim disclosure of Balance Sheet items by listed entities: Taking note that internationally most jurisdictions require disclosure of Balance Sheet items on an interim basis whereas in India companies disclose only interim financial results, SEBI decided to mandate half-yearly disclosure of Balance Sheet items with audited figures or un-audited figures with limited review.

Timelines for submission of financial results by listed entities: There were varying time limes for disclosure of unaudited/ audited/ limited review results. SEBI decided to make it mandatory to disclose only limited review or audited results within 45 days of the end of the quarter. It was also decided to reduce timeline for disclosure of audited annual results from 90 days to 60 days to those companies which opt to submit their annual audited results on a stand-alone basis in lieu of the last quarter un-audited financial results.

Requirements for Fast Track Issues: In order to enable well established and compliant listed companies to access Indian primary market in a time effective manner through follow-on public offerings and rights issues, SEBI introduced the concept of Fast Track Issues (FTIs) in November 2007. SEBI decided to relax certain requirements of FTIs such as reducing the average market capitalization of public shareholding of the issuer to five thousand crore rupees from ten thousand crore rupees, pegging the annualized trading turnover to free float for companies whose public shareholding is less than 15 percent of the issued capital. It was also decided that incase the clause relating to composition of Board of Directors has not been complied with in one or more quarters, it need not be deemed as non compliance, provided the company is in compliance in this regard at the time of filing the offer document with stock exchange/ ROC and adequate disclosures are made in the offer document in this respect.

Relaxation from restatement of financial statements: SEBI had recently rationalized financial disclosure requirements for rights issues on the ground that much of the information of a listed company is available in public domain. For rights issues, the issuer is required to give only the audited accounts of last financial year and audited or unaudited financials with limited review results for the stub period instead of 5 years restated financials required earlier. Extending the same logic, the SEBI decided that the requirement for disclosure of financials in FPOs of identical instruments quoted on a stock exchange may be brought on par with rights issues and to start with companies that are eligible to make an issue under fast track, subject to certain conditions.

Introduction of pure auction as an additional book building mechanism: It was decided to introduce an additional method of book building, to start with, for FPOs, in which the bidders would be free to bid at any price above the floor price and allotment would be on price priority basis and at differential prices. However, retail individual investors in such cases would be allotted shares at the floor price. The Board further decided that if the issuer desires to place a cap either in terms of number of shares or percentage to issued capital of the company in order that a single bidder does not garner all shares on offer and there is wider distribution, the same would be permitted.

## VI. Debt Listing Agreement for Debt Securities simplified

SEBI had, vide its circular dated May 11, 2009 put in place the Simplified Listing Agreement for Debt Securities. Pursuant to suggestions from various market participants received subsequently, SEBI had amended the said Listing Agreement vide its circular dated November 26, 2009.

The amendments are briefly summarized as under:

100% Asset Cover: To align the Listing Agreement with the provisions of the Companies Act, 1956, the amended Listing Agreement requires issuers to maintain 100% asset cover sufficient to discharge the principal amount at all times for the debt securities issued. Further, to provide more information to investors, the periodic disclosures to the stock exchange require disclosure of the extent and nature of security created and maintained.

Submission of certificate on maintenance of security**:** As against half-yearly certifications on security cover in respect of listed secured debt securities, the amended Listing Agreement provides for submission of such certificates regarding maintenance of 100% asset cover, and the time limit of submission in respect of the last half year has been aligned with the option provided for submission of annual audited results at a later date. In addition to Banks and NBFCs being exempt from submitting such certificates, issuers of Government guaranteed bonds are also exempted.

Statement on Use of Issue Proceeds: In order to enhance the quality of disclosures made to investors, issuers are required to furnish a statement of deviations in use of issue proceeds, if any, to the stock exchange on a half yearly basis. Also, the same is required to be published in the newspapers simultaneously with the half-yearly financial results.

Deposit of 1% of issue proceeds: So as to ensure that the interest of investors investing in public issues of debt securities is protected, the issuer is required to deposit an amount calculated at 1% of the amount of debt securities offered for subscription to the public. It is refundable or forfeitable in the manner stated in the Rules, Bye-laws and Regulations of the Exchange.

Submission/ publication of Financial Statements: The time-lines for disclosure of financial statements have been aligned with the proposed changes to the Equity Listing Agreement. Accordingly, issuers have to publish/ furnish to the Exchange, either audited half yearly financial statements or unaudited half yearly financial statements subject to a limited review within 45 days from the end of the half year. In case of the last half year, issuers may opt to submit their annual audited results in lieu of the unaudited financial results for the period, within 60 days from the end of the financial year.

## VII. Disclosure of details of the allottees in the Qualified Institutional Placements (QIP) made by issuer company

SEBI has issued a circular in exercise of powers conferred by sub-section (1) of Section 11 of the Securities and Exchange Board of India Act, 1992, to protect the interest of investors in securities and to promote the development of, and to regulate the securities market. According to the circular, the details of allottees and the corresponding pre and post QIP issue shareholding in the issuer company may be disclosed on the website of the stock exchanges.

All the stock exchanges have been asked to ensure that, the details of those allottes in QIP who have been allotted more than 5% of the securities offered in the QIP, viz names of the allottees and number of securities allotted to each of them, pre and post issue shareholding

pattern of the issuer in the format specified in clause 35 of the Equity Listing Agreement shall be made available on the website of stock exchanges along with the final placement document.

## VIII. Amendments to the Equity Listing Agreement

As part of a review of the extant policies of disclosure requirements for listed entities and also to bring more transparency and efficiency in the governance of listed entities SEBI has decided to specify certain listing conditions so to amend the Equity Listing Agreement.

- Amendments to Equity Listing Agreement Regulations:-

1) Requirement of auditors' certificate for accounting treatment under schemes of arrangement- Amendment to clause 24

   It has been observed that in some of the recent schemes of amalgamation / merger / reconstruction, etc. (schemes) of certain listed entities submitted to the Hon'ble High Court for approval, there are included details of the accounting treatment to be given to various items in the process of amalgamation/merger/reconstruction etc. If this accounting treatment is not in accordance with the accounting standards specified under section 211(3C) of the Companies Act, 1956, the resultant financial statements of the entity concerned will not be in conformity with the accounting standards.

   In view of the above, it has been decided that while submitting the scheme of amalgamation / merger / reconstruction, etc. (schemes) to the stock exchanges under clause 24(f) of the Equity Listing Agreement, the listed entities shall also submit to the concerned stock exchange, an auditors' certificate to the effect that the accounting treatment contained in such schemes is in compliance with all the applicable Accounting Standards.

2) Timelines for submission and publication of financial results by listed entities- Amendment to clause 41(I)(c),(d)(e) and 41(VI)(b)

   With a view to streamline the submission of financial results by listed entities by making it uniform and to reduce the timeline for submission of the same to the stock exchanges, it has been decided that listed entities shall disclose,on standalone or consolidated basis, their quarterly (audited or un-audited with limited review), financial results within 45 days of the end of every quarter.

   Also, audited annual results on stand-alone as well as consolidated basis, shall be disclosed within 60 days from the end of the financial year for those entities which opt to submit their annual audited results in lieu of the last quarter unaudited financial results with limited review.

   With regard to publication of consolidated financial results alone, the following, viz., (a) Turnover (b) Profit before tax and (c) Profit after tax on a stand-alone basis shall also be published.

3) Voluntary adoption of International Financial Reporting Standards (IFRS) by listed entities having subsidiaries - Insertion of Clause 41(I) (g)

   In order to familiarize listed entities with the IFRS requirements within the aforesaid timeline, it has been decided to provide an option for listed entities having subsidiaries to submit their consolidated financial results either in accordance with the accounting standards specified in section 211(3C) of the Companies Act, 1956, or in accordance with IFRS. Submission of stand-alone financial results to the stock exchanges shall continue to be in accordance with the Indian GAAP.

4) Interim disclosure of Balance Sheet items by listed entities- Insertion of clause 41(V) (h) and Annexure IX

   Presently, shareholders have access to the statement of assets and liabilities of the listed entity and its solvency position only on an annual basis. In the wake of the recent global financial crisis, the issue of solvency has come to the forefront from the shareholders' perspective. With a view to have more frequent disclosure of the asset-liability position of entities, it has been decided that listed entities shall disclose within forty-five days from the end of the half-year, as a note to their half-yearly financial results, a statement of assets and liabilities in the specified format.

5) Approval of appointment of 'CFO' by the Audit Committee- Insertion of Clause 49(II)(D)(12A)

   In order to ensure that the CFO has adequate accounting and financial management expertise to review and certify the financial statements as required under Clause 49 of the Listing Agreement, it has been decided that the appointment of the CFO is approved by the Audit Committee before finalization of the same by the management. The Audit Committee, while approving the appointment, shall assess the qualifications, experience & background etc. of the candidate.

## IX. RBI guidelines on Perpetual Non-Cumulative Preference Shares (PNCPS) as part of Tier I capital

The dividend missed in a year will not be paid in future years, even if adequate profit is available and the level of CRAR conforms to the regulatory minimum. When dividend is paid at a rate lesser than the prescribed rate, the unpaid amount will not be paid in future years, even if adequate profit is available and the level of CRAR conforms to the regulatory minimum.

## X. Government amends the Securities Contracts (Regulation) Rules 1956 - Listed firms must have 25% public holding

The Department of Economic Affairs, Ministry of Finance has amended the Securities Contracts (Regulation) Rules 1956 to increase the minimum non-promoter holdings in Indian companies from 10% to 25% on June 4th, 2010. These amendments include raising the minimum threshold level of public holding to 25% for all listed companies and atleast 10% of post issue capital of the public sector undertaking or if the market capitalisation is more than four thousand crore rupees. The existing listed companies having less than 25% public holding should reach the minimum level of 25% by an annual addition of atleast 5% to public holding. The amendments say that a company may increase its public shareholding by less than 5% in a year, if such increase brings its public shareholding to the level of 25% in that year.

The amendment was very much required as dispersed shareholding structure is essential for the sustenance of a continuous market for listed securities to provide liquidity to the investors and to discover fair prices. Further, the larger the number of shareholders, the less is the scope for price manipulation. All listed companies will henceforth be required to maintain a public shareholding of at least 25 per cent. If it falls below 25 per cent, the company will have to bring the public shareholding up to 25 per cent within a period of three years. A listed public sector company which has a public shareholding below 10% on the date of commencement of the Securities Contracts (Regulation) (Second Amendment) Rules, 2010 shall increase its public shareholding to at least 10% within a period of three years.

### XI. Issue and Pricing of Shares by Private Sector Banks

All banks in private sector were required to obtain approval of Reserve Bank of India (RBI) for issue of shares through Initial Public Offers (IPOs) and preferential issues. Further, while the banks were advised to follow certain prescriptions relating to pricing in respect of Initial Public Offers (IPOs), Bonus issues and preferential issues, SEBI requirements in respect of Bonus issues have also been indicated.

SEBI had introduced a Qualified Institutional Placements (QIPs) route in May 2006, which would enable listed companies to raise funds from the domestic market. Consequently, many of the private sector banks have been availing this route for raising capital. It is considered necessary to clearly spell out the approval mechanism in respect of Qualified Institutional Placements (QIPs). Accordingly, the guidelines in respect of issue and pricing of shares by private sector banks have been revised to incorporate the Qualified Institutional Placements mode of raising capital.

The revised guidelines are as follows:

a) All banks should obtain RBI approval for IPOs. After listing on the stock exchanges, banks are free to price their subsequent issues. Issue price should be based on merchant banker's recommendation. There need be no reference to the CCI formula for deciding on the pricing of such issues. RBI approval would not be required for rights issues by both listed and unlisted banks.

b) Private sector banks, both listed and unlisted, need not seek RBI's approval for bonus issues. The issues would, however, be subject to SEBI's requirements on issue of bonus shares, viz. bonus issues (a) should be made from free reserves built out of genuine profits or share premium, (b) should not dilute the value or rights of partly or fully convertible debentures, (c) should not be in lieu of dividend and (d) should not be made unless all partly paid-up shares are fully paid-up. Further, bonus issues may be issued without linkage to rights issues.

c) All preferential issues would require prior approval of RBI. Pricing of preferential issues by listed banks may be as per SEBI formula, while for unlisted banks the fair value may be determined by a chartered accountant or a merchant banker.

d) Private Sector Banks need to approach RBI for prior 'in principle' approval in case of Qualified Institutional Placements. Banks need to approach RBI along with details of the issue once the bank's Board approves the proposal of raising capital through this route. Further, allotment to the investors would be subject to compliance with SEBI guidelines on QIPs and RBI guidelines dated February 3, 2004 on acknowledgement of allotment / transfer of shares. Once the allotment process is complete, the banks would also be required to furnish complete details of the issue to RBI for seeking post facto approval. This would be irrespective of whether any acquisition results in shareholding of 5% or more of the paid up capital of the bank.

e) In case of pricing of issues where RBI approval is not required, pricing of issues should be as per SEBI guidelines; in cases where prior approval of RBI is required, pricing should take into account both SEBI and RBI guidelines.

## XII. Conditions of listing for issuers seeking listing on SME Exchange

In recognition of the need for making finance available to small and medium enterprises, SEBI has decided to encourage promotion of dedicated exchanges and/or dedicated platforms of the exchanges for listing and trading of securities issued by Small and Medium Enterprises ("SME"). "Model Equity Listing Agreement – for SME Exchange" shall be executed for listing of specified securities issued or migrated on SME exchange, in terms of Chapter XA of the SEBI (ICDR) Regulations.

Certain relaxations are provided to the issuers whose securities are listed on SME exchange in comparison to the listing requirements in Main Board, which inter-alia include the following:

a) Periodical financial results may be submitted on "half yearly basis", instead of "quarterly basis" and SMEs need not publish their financial results, as required in the Main Board and can make it available on their website.

## XIII. Issuance of Non-Convertible Debentures (Reserve Bank) Directions, 2010

The Reserve Bank of India, having considered it necessary in public interest and to regulate the financial system of the country to its advantage, has come out with the directions called the Issuance of Non-Convertible Debentures (Reserve Bank) Directions, 2010 and they shall come into force with effect from August 02, 2010. For the purposes of these Directions, Non-Convertible Debenture (NCD) means a debt instrument issued by a corporate (including NBFCs) with original or initial maturity up to one year and issued by way of private placement.

A corporate shall be eligible to issue NCDs if it fulfills the following criteria, namely,

1) the corporate has a tangible net worth of not less than ₹4 crore, as per the latest audited balance sheet;

2) the corporate has been sanctioned working capital limit or term loan by bank/s or all-India financial institution/s; and

3) the borrowal account of the corporate is classified as a Standard Asset by the financing bank/s or institution/s.

An eligible corporate intending to issue NCDs shall obtain credit rating for issuance of the NCDs from one of the rating agencies. The minimum credit rating shall be P-2 of CRISIL or such equivalent rating by other agencies and the Corporate shall ensure at the time of issuance of NCDs that the rating so obtained is current and has not fallen due for review. The tenor of the NCDs shall not exceed the validity period of the credit rating of the instrument. NCDs shall not be issued for maturities of less than 90 days from the date of issue. The exercise date of option (put/call), if any, shall not fall within the period of 90 days from the date of issue.

NCDs may be issued at face value carrying a coupon rate or at a discount to face value as zero coupon instruments as determined by the corporate. The aggregate amount of NCDs issued by a corporate shall be within such limit as may be approved by the Board of Directors of the corporate or the quantum indicated by the Credit Rating Agency for the rating granted, whichever is lower. NCDs may be issued in denominations with a minimum of ₹5 lakh (face value) and in multiples of ₹1 lakh.The total amount of NCDs proposed to be issued shall be completed within a period of two weeks from the date on which the corporate opens the issue for subscription.

## XIV. Filing Offer Documents under SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2009

It has been decided by SEBI that with immediate effect draft offer documents in respect of issues of size upto ₹ 100 crore shall be filed with the concerned regional office of the Board under the jurisdiction of which the registered office of the issuer company falls. Merchant Bankers are further advised to file five copies of the draft offer documents / offer documents with the regional office of the Board indicated above.

## XV. ASBA facility in public issues extended to QIBs

SEBI has decided to extend the ASBA facility to QIBs in public issues opening on or after May 1, 2010. In this regard, Stock Exchanges, Merchant Bankers, Registrar to an Issue and Bankers to an issue acting as Self Certified Syndicate Banks have been advised to ensure that appropriate arrangements are made to accept ASBA forms from QIBs also in addition to the existing categories of investors.

## XVI. Reduction in time between issue closure and listing

Presently, it takes on an average around 22 days to list the securities after an issue closes. This exposes investors as well as issuers to market risk as well as leading to infrastructural stress and costs. In consultation with market intermediaries, SEBI has reduced the time between issue closure and listing to 12 working days. This revised procedure is applicable to all public issues opening on or after May 3, 2010.

In the new process, the syndicate members shall capture all data relevant for purposes of finalizing basis of allotment while uploading bid data in the electronic bidding system of the stock exchanges. In order that the data so captured is accurate, syndicate members may be permitted an additional day to amend some of the data fields entered by them in the electronic bidding system. In case of apparent data entry error by either syndicate member or collecting bank in entering the application number in their respective schedules other things remaining unchanged, the application may be considered as valid and such exceptions may be recorded in minutes of the meeting submitted to stock exchange(s). In the event of mistake in capturing the application number by either the syndicate member or collecting bank leading to rejection of application, the registrar may identify based on the bid form, the entity responsible for the error. Valid records in electronic file will be those for which money is received.

| Sr No. | Details of Activities | Due Date (Working Day) |
|---|---|---|
| 1. | Syndicate members upload bid details in the electronic bidding system of stock exchange(s).<br>Syndicate members need to ensure that required documents are attached with the application form. | Issue opening date to issue closing date (where T is issue closing date) |
| 2. | Issue closes. | T |
| 3. | Stock exchange(s) to allow syndicate members to undertake modification of selected fields in the bid details already uploaded.<br>Registrar to get the electronic bid details from the stock exchanges at the end of the day. | T + 1 |
| 4. | Issuer, merchant banker and registrar to submit relevant documents to the stock exchange(s) except listing application, allotment details and demat credit and refund details for the purpose of listing permission.<br>Syndicate members to forward a schedule (containing application number, payment instrument number and amount), application forms and payment instruments to collecting banks.<br>Collecting banks may not accept bid schedule, bid applications and payment instrument after T+2 day.<br>Registrar to give bid file received from the stock exchanges containing the application number and amount to all the collecting banks who can use this file for validation at their end.<br>Registrar to commence validation of the electronic bid details with depositories records for DP ID, Client ID and PAN. | T + 2 |

| Sr No. | Details of Activities | Due Date (Working Day) |
|---|---|---|
| 5. | Registrar to continue validation of the electronic bid details with depositories records.<br>Collecting banks to commence clearing of payment instruments. | T+3 |
| 6. | Registrar to complete validation of the electronic bid details with depositories records.<br>Collecting banks to start forwarding application forms along with bank schedules to registrar. | T+4 |
| 7. | Registrar to prepare list of rejected bids based on mis-match between electronic bid details and depositories data base.<br>Registrar to undertake "Technical Rejection" test based on electronic bid details and prepare list of technical rejection cases. | T+5 |
| 8. | Collecting banks to submit status of clearance status of payment instrument i.e. "Final Certificate" to the registrar. | T+6 |
| 9. | Collecting banks to ensure that all application forms are forwarded to the registrar.<br>Registrar to undertake and complete reconciliation of final certificate received from the collecting banks with electronic bid details.<br>Registrar submits the final basis of allotment to Designated Stock Exchange(s) for approving the basis of allotment. | T+7 |
| 10. | Designated stock exchange(s) to approve the basis of allotment.<br>Registrar to prepare funds transfer schedule based on approved allotment.<br>Registrar to give instructions to depositories to carry out lockin for pre issue capital. | T+8 |
| 11. | Registrar and merchant banker to issue funds transfer instructions to collecting banks.<br>Collecting banks to credit the funds in Public Issue Account of the issuer and confirm the same.<br>Issuer to make allotment.<br>Registrar to give instruction to depositories for credit of shares to successful allottees.<br>Registrar to receive confirmation for pre-issue capital lock-in from depositories. | T+9 |
| 12. | Issuer and registrar to file allotment details with designated stock exchange(s) and confirm all formalities are completed except demat credit and refund.<br>Registrar to complete refund dispatch.<br>Registrar to issue bank-wise data of allottees, allotted amount and refund amount to collecting banks. | T+10 |
| 13. | Registrar to receive confirmation of demat credit from depositories and submit the same to the stock exchange(s).<br>Issuer and registrar to file confirmation of demat credit and refund dispatch with stock exchange(s).<br>Issuer to make a listing application to stock exchange(s) and stock exchanges to give listing and trading permission.<br>Issuer, merchant banker and registrar to publish allotment advertisement before the commencement of trading, prominently displaying the date of commencement of trading, in all the newspapers where issue opening/closing advertisements have appeared earlier.<br>Stock exchange(s) to issue commencement trading notice. | T+11 |
| 14. | Trading commences | T+12 |

*Working days will be all days excluding Sundays and bank holidays

### XVII. Entities seeking listing of their securities post-IPO shall have to submit their shareholding pattern one day prior to the date of listing

In order to improve the quality of disclosures made by listed entitties, SEBI has decided to alter the following amendments of the Equity Listing Agreement (LA).

a) Entities which seek listing of their securities post-IPO shall mandatorily submit their shareholding pattern as per Clause 35 of the LA one day prior to the date of listing, in order to ensure public dissemination of updated shareholding pattern. The stock exchanges shall upload the same on their websites before commencement of trading in the said securities.

b) With a view to ensure public dissemination of the shareholding pattern pursuant to capital restructuring in listed entities, it has been decided that in all cases wherein the change in capital structure due to such restructuring exceeds +/- 2% of the paid up share capital of the entities, the listed entities shall file a revised shareholding pattern with the stock exchanges within 10 days from the date of allotment of shares pursuant to such change in the capital structure, as per the format specified in clause 35 of the LA alongwith a footnote on what necessitated the filing of the revised shareholding pattern. The stock exchanges shall upload the same on their websites immediately.

c) In the case of listed entities which have issued Depository Receipts (DRs) overseas, in order to ensure a holistic and true picture of the promoter/promoter group holding in such entities, it has been decided that details of 'shares held by custodians and against which DRs have been issued' which are presently required to be disclosed in Table (I) (a) of Clause 35 shall be further segregated as those pertaining to the 'promoter/promoter group' and to the 'public'.

d) In order to enable investors to manage their cash/securities flows efficiently and to enhance process transparency, it has been decided to mandate companies to have a pre-announced fixed pay date for payment of dividends and for credit of bonus shares.

e) In order to ensure public dissemination of details of agreements entered into by corporates with media companies, it has been decided that the listed entities shall disclose details of such agreements on their websites and also notify the stock exchange of the same for public dissemination.

f) In order to ensure/enhance public dissemination of all basic information about the listed entity, it has been decided to mandate that the listed entities maintain a functional website that contains certain basic information about them, duly updated for all statutory filings, including agreements entered into with media companies, if any.

## 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 - prescribes the eligibility and disclosure norms through the ICDR Regulations 2009 to be complied by the issuer, promoter for accessing the market. In this section we discuss the market design related to public issues, offer for sale, rights issue by listed and unlisted companies as per the ICDR Regulations prescribed by SEBI.

**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:

- File a draft offer document with SEBI, along with specified fees through an eligible merchant banker, at least 30 days prior to the filing of red herring prospectus or shelf prospectus with the Registrar Of Companies (RoCs) or filing the letter of offer with the designated stock exchanges as the case may be.
- Obtain In-principle approval from all the recognized stock exchanges in which the issuer proposes to get its specified securities listed.

- Enter into an agreement with the depository for dematerialisation of its securities already issued or proposed to be issued

A company can make an IPO as per the following conditions:-

- It has net tangible assets of at least ₹ 3 crore in each of the preceding 3 full years, of which not more than 50% is held in monetary assets; provided that if more than 50% of the net tangible assets are held in monetary assets, the company has made firm commitments to deploy such excess monetary assets in its business/project;
- It has a net worth of at least ₹ 1 crore in each of the preceding 3 full years;
- 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; Provided further that extraordinary items shall not be considered for calculating distributable profits in terms of section 205 of Companies Act, 1956;
- The aggregate of the proposed issue and all previous issues made in the same financial year in terms of size does not exceed five times its pre-issue net worth as per the audited balance sheet of the preceding financial year and
- 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.

In case the above mentioned conditions are not satisfied, an issuer can still make an IPO on compliance of the guidelines as specified:

1. issue should be made through the book building process with at least 50% of net offer to public being allotted to the QIBs, if not, then the full subscription monies has to be refunded,

   OR

1. the project should have at least 15% of the cost of project contribution by public financial institutions or scheduled commercial banks 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

2. minimum post-issue face value capital of the company should be ₹ 10 crore,

   OR

2. there should be compulsory market making for at least 2 years from the date of listing of securities subject to certain conditions as specified in the regulations.

A company can make an initial public offer of convertible debt instruments without making a prior public issue of its equity shares and can list the same.

Pursuant to a public issue, no allotment can be made if the number of prospective allottees is less than one thousand.

**Credit Rating for Debt Instruments:**

No public issue or rights issue of convertible debt instruments can be made unless a credit rating of not less than investment grade is obtained from at least one credit rating agencies registered with SEBI. In case the credit rating is obtained from more than one credit rating agencies, all the credit rating/s including the unaccepted credit ratings, should be disclosed. All the credit ratings obtained during the three years preceding the public or rights issue of debt instrument (including convertible instruments) for any listed security of the issuer company should be disclosed in the offer document.

**IPO Grading:**

No issuer should make an IPO of equity shares or any other security which may be converted into or exchanged with equity shares at a later date, unless the following conditions are satisfied as on the date of filing of Prospectus (in case of fixed price issue) or Red Herring Prospectus (in case of book built issue) with ROC.

- The issuer has obtained grading for the IPO from atleast one credit rating agency.
- Disclosures of all the grades obtained along with the rationale/description furnished by the credit rating agency(ies) for each of the grades obtained, have been made in the Prospectus (in case of fixed price issue) or Red Herring Prospectus (in case of book built issue)
- The expenses incurred for grading IPO have been borne by the unlisted company obtaining grading for IPO.

Every company obtaining grading for IPO should disclose the grades obtained, along with the rationale/description furnished by the credit rating agency(ies) for each of the grades obtained in the prospectus, abridged prospectus, issue advertisements and at all other places where the issuer company is advertising for the IPO.

**Pricing of Public Issues:**

An issuer may determine the price of specified securities, coupon rate and conversion price of convertible debt instruments in consultation with the lead merchant banker or through the book building process. An issuer making an initial public offer may determine the face value of equity shares subject to the provisions of the Companies Act, 1956, SEBI Act and regulations

If the issue price per equity share is ₹ 500 or more, the issuer shall have the option to determine the face value at below ₹10 per equity share, subject to the condition that the face value shall not be less than ₹ 1 per equity share. In case the issue price per equity share is less than ₹ 500 per equity share, the face value of the shares shall be ₹ 10 per equity share.

The above clause does not apply to initial public offer made by any government company, statutory authority or corporation or any special purpose vehicle set up by any of them, which is engaged in infrastructure sector.

The disclosure about the face value of equity shares (including the statement about the issue price being "X" times of the face value) shall be made in the advertisements, offer documents and application forms

**Differential Pricing:**

An issuer may offer equity shares and convertible securities at different prices; subject to the following condition;

(a) the retail individual investors/shareholders or employees entitled for reservation making an application for equity shares and convertible securities of value not more than ₹2 lakh, may be offered equity shares and convertible securities at a price lower than the price at which net offer is made to other categories of applicants provided that such difference is not more than 10% of the price at which equity shares and convertible securities are offered to other categories of applicants;

(b) in case of a book built issue, the price of the equity shares and convertible securities offered to an anchor investor cannot be lower than the price offered to other applicants;

(c) in case of a composite issue , the price of the equity shares and convertible securities offered in the public issue may be different from the price offered in rights issue and justification for such price difference should be given in the offer document.

(d) in case the issuer opts for the alternate method of book building, the issuer may offer specified securities to its employees at a price lower than the floor price. However, the difference between the floor price and the price at which equity shares and convertible securities are offered to employees should not be more than 10% of the floor price.

**Price and price band:**

The issuer can mention the price or price band in the draft prospectus (In case of a fixed price issue) and the floor price or price band in the red herring prospectus (in case of a book built issue) and determine the price at a later date before registering the prospectus with the Registrar of Companies which would require to contain only one price or the specific coupon rate, as the case may be.

The cap on the price band shall be less than or equal to 120 %. of the floor price. The floor price or the final price shall not be less than the face value of the specified securities. The "cap on the price band" includes cap on the coupon rate in case of convertible debt instruments.

**Contribution of Promoters and lock-in:**

- The promoters' contribution in case of initial public offer should not be less than 20% of the post issue capital.
- In case of further public offer, 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 issue size 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 which should be kept in an escrow account with a Scheduled Commercial Bank and the said contribution/amount should be released to the company along with the public issue proceed.

- The minimum promoters' contribution should be locked in for a period of 3 years in case of public issues, however. However, f 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 commencement of commercial production (the last date of the month in which commercial production in a manufacturing company is expected to commence as stated in the offer document) or date of allotment in the public issue, whichever is later.
- The entire pre-issue share capital, other than promoters that shall be locked for a period of one year. Securities allotted in firm allotment basis are also locked in 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. The locked-in securities held by promoters may be pledged only with banks or public FIs as collateral security for loans granted by such banks or FIs.

**Pre-Issue Obligations:**

The lead merchant banker has to exercises due diligence and satisfy himself about all aspects of issue including offering, veracity and adequacy of disclosures in the offer document. The liability of the merchant banker will continue even after the completion of issue process.

The lead merchant banker has to pay the requisite fee in accordance with regulation 24A of the Securities and Exchange Board of India (Merchants bankers) Rules and Regulations, 1992 along with draft offer document filed with the Board. In case of a fast track issue, the requisite fee shall be paid along with the copy of the red herring prospectus, prospectus or letter of offer, as the case may be.

Each company issuing securities through public or rights issue 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 responsible for drafting of the offer documents has to submit to the Board the copy of the MOU entered into with the issuer company and the draft of the offer document.
- In case a public or rights issue is managed by more than one merchant banker the rights, obligation and responsibilities of each merchant banker should be demarcated as specified in schedule .I
- In case of under subscription of an issue, the Lead Merchant Banker responsible for underwriting arrangements should invoke underwriting obligations and ensure that the notice for devolvement containing the obligations of the underwriters is issued in terms of the regulations as specified in schedule I.
- The lead Merchant Banker should furnish to the Board a due diligence certificate as specified in schedule IV, along with the draft offer document.
- In case of a fast track issue of convertible debt instruments the lead merchant banker should furnish a due diligence certificate to the Board as per the format specified in Schedule VI.

The lead merchant bankers should satisfy themselves about the ability of the underwriters to discharge their under writing obligations. In respect of every underwritten issue, the lead merchant banker(s) should undertake a minimum underwriting obligation of 5% to the total underwriting commitment of ₹25 lakhs whichever is less. The outstanding underwriting commitments of a merchant banker should not exceed 20 times its net worth at any point of time. In respect of an underwritten issue, the lead merchant banker should ensure that the relevant details of underwriters are included in the offer document.

The draft offer documents filed with the Board should be made public for a period of 21 days from the date of filing the offer document with the Board and filed with the stock exchanges where the securities are proposed to be listed. Further, the draft offer documents should be put on the websites of the lead managers/syndicate members associated with the issue and also ensure that the contents of documents hosted on the websites are the same as that of their printed versions.

Twenty-one days after the draft offer document has been made public, the lead merchant banker should file a statement with the Board 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.

The lead manager should also ensure that the issuer company has entered into agreements with all the depositories for dematerialization of securities.

An issuer company 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.

**Post-Issue Obligations:**

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 Executive Director/Managing Director of the Designated Stock Exchange along with the post issue lead merchant banker and the registrars to the Issue are responsible for the finalization of allotment in a fair and proper manner as specified in Schedule XV.

The lead merchant banker should ensure that the dispatch of share certificates/refund orders and demat credit is completed and the allotment and listing documents submitted to the stock exchanges within 2 working days of the date of allotment.

**Credit Rating:**

Credit rating agencies (CRA) can be promoted by public financial institutions, scheduled commercial banks, foreign banks operating in India, by any body corporate having continuous minimum net worth of ₹100 crore for the previous five years. Further, foreign credit rating agencies recognized by or under any law for the time being in force in the country of its incorporation, having at least five years experience in rating securities 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. No company can make a public issue or rights issue of debt instruments (whether convertible or not), unless credit rating is obtained from at least one credit rating agency registered with the Board and disclosed in the offer document. Where ratings are obtained from more than one credit rating agencies, all the ratings including the unaccepted ratings should be disclosed in the offer document.

**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 |
|---|---|
| Category I | To carry on activity of the issue management, to act as adviser, consultant, manager, underwriter, portfolio manager |
| Category II | To act as adviser, consultant, co-manager, underwriter, portfolio manager |
| Category III | To act as underwriter, adviser, consultant to an issue |
| Category IV | To act only as adviser or consultant to an issue |

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 capital adequacy requirement should be a net worth of Rupees 50 million. 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 ₹ 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 and Rights Issues

### Resource Mobilisation

During 2009-10, resources mobilised from public and rights issues increased by 254.84 % to ₹575,552 million (US $ 12,750 million) in comparison to ₹ 162,200 million (US $ 3,184 million) in 2008-09. 76 companies accessed the primary market through 47 public issues and 29 rights issues. The 47 public issues comprised of 39 equity instruments of Initial public offerings (IPOs), five equity instruments of FPO and three Non convertible debenture (NCD). The primary market exhibited a stellar performance by coming out with 39 IPOs in 2009-10 compared to 21 issues in the previous year. The amount of capital raised through IPOs was up by 1085.60 % at ₹ 246,961 million (US $ 5,471 million) from ₹ 20,820 million (US $ 409 million) in 2008-09. In first two quarters of FY2011, companies have raised ₹ 137,414 million with an average issue size of US $ 98.20 million compared to an issue size of US $ 140.28 million in 2009-10. Considering the outstanding performance of the primary market, the capital raising activity in the FPOs market has been a quite subdued. Though market has seen two companies raising capital through FPOs in the first six months of FY2011 against five FPOs in 2009-10, the average issue size has dwindled down to US $ 111.97 million from US $ 976.54 million in 2009-10.

**Table 2-2: Resource Mobilisation from Public and Rights Issues**

| Issue | 2008-09 | | | 2009-10 | | | (Apr'10 - Sep'10) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Number | Amount (₹ mn) | Amount (US $ mn) | Number | Amount (₹ mn) | Amount (US $ mn) | Number | Amount (₹ mn) | Amount (US $ mn) |
| **1. Public Issues (i) + (ii)** | **22** | **35,830** | **703** | **47** | **492,366** | **10,908** | **34** | **152,523** | **3,378.89** |
| i. Public Issues | 21 | 20,830 | 409 | 44 | 467,366 | 10,354 | 33 | 147,523 | 3,268.12 |
| Public Issues (IPO) | 21 | 20,830 | 409 | 39 | 246,961 | 5,471 | 31 | 137,414 | 3,044 |
| Public Issues (FPO) | - | - | - | 5 | 220,405 | 4,883 | 2 | 10,109 | 224 |
| ii. Public Issues (Bond/NCD) | 1 | 15,000 | 294 | 3 | 25,000 | 554 | 1 | 5,000 | 110.77 |
| **2. Rights Issues** | **25** | **126,370** | **2,480** | **29** | **83,186** | **1,843** | **10** | **34,890** | **773** |
| **Total (1+2)** | **47** | **162,200** | **3,184** | **76** | **575,552** | **12,750** | **44** | **187,413** | **4,151.82** |

*Source: SEBI*
*– Nil / Negligible*
*All offers for sale are initial public offers, hence are already counted under IPOs.*

During the period Apr-Sep 2010, private issuers have raised ₹ 161,360 million – a 49.68% of the resources what they have mobilised in 2009-10, wheras public issuers have remained dormant as they raised ₹ 26,050 million – 10.39% of capital mobilised through the public issues in 2009-10.

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

| Sector | 2008-09 | | 2009-10 | | Apr'10 - Sep'10 | |
|---|---|---|---|---|---|---|
| | Number | Amount (₹ mn) | Number | Amount (₹ mn) | Number | Amount (₹ mn) |
| Private | 47 | 162,200 | 71 | 324,770 | 41 | 161,360 |
| Public | -- | -- | 5 | 250,780 | 3 | 26,050 |
| **Total** | **47** | **162,200** | **76** | **575,550** | **44** | **187,410** |

*Source: SEBI*
*– Nil*
*This includes issues and rights issues.*

### Industry-wise distribution, Size wise distribution

The power sector contributed the maximum share of 43.95 % of the total resources mobilized during 2009-10 with six issues mobilizing ₹ 252,930 million. The banking sector is at the leading position in the league table with ₹ 36,340 million, accounting for 19.39 % of the total resources mobilized in the first six months of FY2011. In 2009-10 the banking sector contributed 5.45% to the total resources. Over the years a range of industries have emerged as the major contributors of resources mobilized.

**Table 2-4: Industry-wise Distribution of Resources Mobilised**

| Industry | 2008-09 | | | 2009-10 | | | Apr'10 - Sep'10 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Number | Amount (₹ Mn) | Percentage Share | Number | Amount (₹ Mn) | Percentage Share | Number | Amount (₹ Mn) | Percentage Share |
| Banking/FIs | 0 | - | 0.00 | 6 | 31,380 | 5.45 | 4 | 36,340 | 19.39 |
| Cement & Construction | 3 | 800 | 0.49 | 8 | 27,800 | 4.83 | 2 | 27,920 | 14.90 |
| Chemical | 4 | 2,180 | 1.34 | 1 | 360 | 0.06 | 3 | 1,380 | 0.74 |
| Electronics | 0 | - | 0.00 | 1 | 11,560 | 2.01 | 0 | - | 0.00 |
| Engineering | 0 | - | 0.00 | 1 | 500 | 0.09 | 4 | 13,440 | 7.17 |
| Entertainment | 2 | 11,560 | 7.13 | 9 | 24,610 | 4.28 | 2 | 6,200 | 3.31 |
| Finance | 3 | 19,660 | 12.12 | 2 | 18,260 | 3.17 | 2 | 17,760 | 9.48 |
| Food Processing | 0 | - | 0.00 | 2 | 4,430 | 0.77 | 1 | 12,450 | 6.64 |
| Healthcare | 3 | 1,440 | 0.89 | 3 | 10,590 | 1.84 | 2 | 2,770 | 1.48 |
| Information Technology | 1 | 420 | 0.26 | 6 | 5,400 | 0.94 | 0 | - | 0.00 |
| Paper & Pulp | 0 | - | 0.00 | 1 | 350 | 0.06 | 0 | - | 0.00 |
| Power | 2 | 9,580 | 5.91 | 6 | 252,930 | 43.95 | 3 | 20,260 | 10.81 |
| Telecom | 2 | 1,000 | 0.62 | 0 | - | 0.00 | 0 | - | 0.00 |
| Textile | 5 | 7,100 | 4.38 | 3 | 2,370 | 0.41 | 1 | 1,080 | 0.58 |
| Others | 22 | 108,460 | 66.87 | 27 | 185,010 | 32.14 | 20 | 47,810 | 25.51 |
| **Total** | **47** | **162,200** | **100.00** | **76** | **575,550** | **100.00** | **44** | **187,410** | **100.00** |

*Source: SEBI*

Table 2-5 exhibits the size wise distribution of public and rights issues during 2009-10. About 97.81 % of resource mobilization was through public issues of issue size above ₹ 100 crore. In terms of number of issues however there were only 45 issues out of 76 above ₹ 100 crore.

**Table 2-5: Size wise distribution of Resources Mobilised**

| Issue Size | 2008-09 | | | 2009-10 | | | Apr'10 - Sep'10 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Number | Amount (₹ Mn) | Percentage Share | Number | Amount (₹ Mn) | Percentage Share | Number | Amount (₹ Mn) | Percentage Share |
| < ₹ 5 crore | 1 | 30 | 0.02 | 1 | 20 | 0.00 | 0 | - | 0.00 |
| ≥ ₹ 5 crore & < ₹ 10 crore | 1 | 70 | 0.04 | 3 | 240 | 0.04 | 1 | 50 | 0.03 |
| ≥ ₹ 10 crore & < ₹ 50 crore | 21 | 5,090 | 3.14 | 18 | 5,960 | 1.04 | 4 | 1,500 | 0.80 |
| ≥ ₹ 50 crore & < ₹ 100 crore | 6 | 4,450 | 2.74 | 9 | 6,360 | 1.11 | 12 | 8,260 | 4.41 |
| ≥ ₹ 100 crore | 18 | 152,550 | 94.06 | 45 | 562,980 | 97.81 | 27 | 177,600 | 94.77 |
| **Total** | **47** | **162,190** | **100.00** | **76** | **575,560** | **100.00** | **44** | **187,410** | **100.00** |

*Source: SEBI*

There were 45 mega issues (₹ 3,000 million and above) during Apr'09 - Sep'10, the largest being the FPO issue of NMDC Limited (₹ 99,673 million) followed by the FPO issue of NTPC Limited (₹ 84,788 million). The 45 mega issues mobilized 90.62 % of the total resources raised.

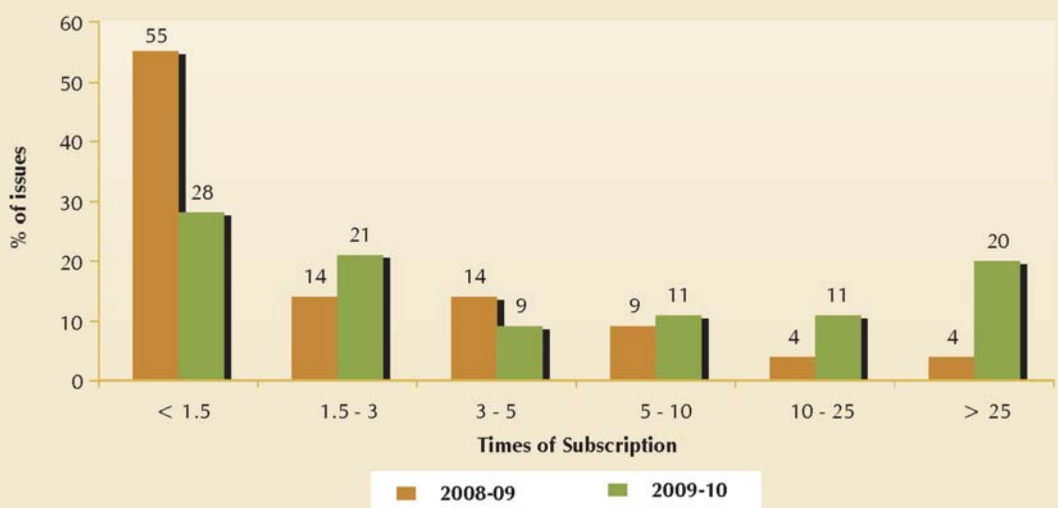
**Table 2-6: Mega Issues in 2009-10**

| Name of the Company | Type of Issue | Type of instrument | Issue open date | Offer Size (₹ Mn.) | Percentage Share in the Grand Total |
|---|---|---|---|---|---|
| Shriram Transport Finance Limited | Public | NCD | 27-Jul-09 | 10,000 | 1.31 |
| Adani Power Limited | IPO | Equity | 28-Jul-09 | 30,165 | 3.95 |
| NHPC Limited | IPO | Equity | 7-Aug-09 | 60,386 | 7.91 |
| L&T Finance Limited | Public | NCD | 18-Aug-09 | 10,000 | 1.31 |
| Oil India Limited | IPO | Equity | 7-Sep-09 | 27,773 | 3.64 |
| Pipavav Shipyard Limited | IPO | Equity | 16-Sep-09 | 4,987 | 0.65 |
| The Tinplate Company of India Limited | Rights | Rights & FCDs | 17-Sep-09 | 3,743 | 0.49 |
| Television Eighteen India Limited | Rights | Equity | 29-Sep-09 | 5,041 | 0.66 |
| Wire and Wireless India Limited | Rights | Equity | 29-Sep-09 | 4,499 | 0.59 |
| Fortis Healthcare Limited | Rights | Equity | 30-Sep-09 | 9,971 | 1.31 |
| Indiabulls Power Limited | IPO | Equity | 12-Oct-09 | 15,291 | 2.00 |
| Den Networks Limited | IPO | Equity | 28-Oct-09 | 3,645 | 0.48 |
| Cox & Kings (India) Limited | IPO | Equity | 18-Nov-09 | 6,104 | 0.80 |
| D. B. Corp. Ltd. | IPO | Equity | 11-Dec-09 | 3,842 | 0.50 |
| JSW Energy Limited | IPO | Equity | 7-Dec-09 | 27,000 | 3.54 |
| Godrej Properties Limited | IPO | Equity | 9-Dec-09 | 4,689 | 0.61 |
| Jubilant Foodworks Limited | IPO | Equity | 18-Jan-10 | 3,287 | 0.43 |
| DB Realty Limited | IPO | Equity | 29-Jan-10 | 15,000 | 1.97 |
| Religare Enterprises Limited | Rights | Equity | 1-Feb-10 | 18,143 | 2.38 |
| NTPC Limited | FPO | Equity | 3-Feb-10 | 84,788 | 11.11 |
| Hathway Cable & Datacom Limited | IPO | Equity | 9-Feb-10 | 6,660 | 0.87 |
| L&T Finance Limited | Public | NCD | 9-Feb-10 | 5,000 | 0.66 |
| REC Limited | FPO | Equity | 19-Feb-10 | 35,299 | 4.63 |
| United Bank of India | IPO | Equity | 23-Feb-10 | 3,250 | 0.43 |
| NMDC Ltd | FPO | Equity | 10-Mar-10 | 99,673 | 13.06 |
| IBN18 Broadcast Ltd | Rights | Equity | 10-Mar-10 | 5,095 | 0.67 |
| IL&FS Transporation Networks Ltd | IPO | Equity | 11-Mar-10 | 7,000 | 0.92 |
| Shree Ganesh Jewellery House Ltd. | IPO | Equity | 19-Mar-10 | 3,710 | 0.49 |
| Videocon Industries Ltd. | Rights | Equity | 29-Mar-10 | 11,563 | 1.52 |
| Adani Enterprises Ltd | Rights | Equity | 31-Mar-10 | 14,785 | 1.94 |
| Nitesh Estates Ltd. | IPO | Equity | 23-Apr-10 | 4,050 | 0.53 |
| SJVN Ltd. | IPO | Equity | 29-Apr-10 | 10,627 | 1.39 |
| JP Infratech Ltd. | IPO (Fresh+OFS) | Equity | 29-Apr-10 | 22,576 | 2.96 |
| Standard Chartered PLC | IPO | IDR | 25-May-10 | 24,863 | 3.26 |
| Suzlon Energy Ltd | Rights | Equity | 18-Jun-10 | 13,077 | 1.71 |
| REI Agro Ltd | Rights | Equity | 30-Jun-10 | 12,454 | 1.63 |
| Engineers India Ltd. | FPO | Equity | 27-Jul-10 | 9,590 | 1.26 |
| SKS Microfinance Limited | IPO | Equity | 28-Jul-10 | 16,288 | 2.13 |
| Gujarat Pipavav Port Limited | IPO | Equity | 23-Aug-10 | 5,539 | 0.73 |
| Indosolar Limited | IPO | Equity | 13-Sep-10 | 3,570 | 0.47 |
| State Bank of Mysore | Rights | Equity | 15-Sep-10 | 5,830 | 0.76 |
| Eros International Media Ltd. | IPO | Equity | 17-Sep-10 | 3,500 | 0.46 |
| Orient Green Power Co Ltd | IPO | Equity | 21-Sep-10 | 9,000 | 1.18 |
| Ramky Infrastructure Ltd | IPO | Equity | 21-Sep-10 | 5,300 | 0.69 |
| Va Tech Wabag Ltd | IPO (Fresh+OFS) | Equity | 22-Sep-10 | 4,730 | 0.62 |
| Total - Mega Issues (₹ Mn.) | | | | **691,382** | **90.62** |
| Grand Total-Resource Mobilisation from Public and Rights Issues (₹ Mn.) | | | | **762,970** | **100** |

*Source: SEBI*

The Prime Annual Report captures the response to public issues to Indian Public, which is presented in the following chart. The public issues managed to generate a good euphoria amongst the investors, which can be seen from the fact that 42% of the issues were subscribed more than 5 times as a result of underpricing compared to 17% in 2008-09. Only 28 % of the public issues were subscribed less than 1.5 times in comparison to 55 % in the previous fiscal year. The most subscribed issues during 2009-10 were Persistent Systems Ltd., which was over subscribed 92.86 times followed by DQ Entertainment Ltd. which was over-subscribed 69.61 times. Merchant bankers are getting a good response to IPO Application Supported by Blocked Amount (ASBA) from retail investors, as it contributed to 10.61% of the total retail amount collection for 2009-10.

Chart 2-1: Response to Public Issues (IPO and FPO)



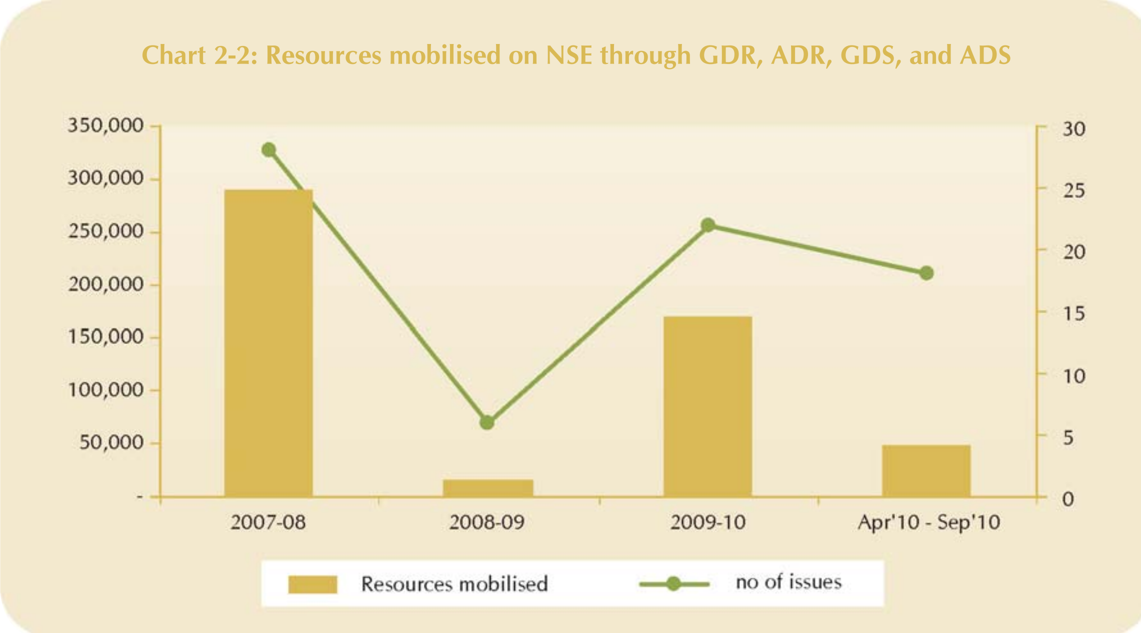

*Source: Prime Database (includes only public issues and not rights issues)*

## Euro Issues

Indian companies raise resources from international markets through the issue of Foreign Currency Convertible Bonds (FCCBs) and also through GDRs, ADRs, GDs, ADs which 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 2009-10, there was a steep rise in the resources mobilised through Euro issues, that increased to ₹ 159,670 million (US $ 3,537 million) for 2009-10 as against ₹ 47,880 million (US $ 940 million) raised during 2008-09. (Table 2-1).

The resources mobilized by the companies listed on NSE through GDRs, ADRs, GDSs and ADSs also witnessed a jump from ₹ 15,418 million (US $ 303 million) in 2008-09 to ₹ 170,539 million (US $ 3,778 million) in 2009-10. In current fiscal year 18 companies have mopped up ₹ 48,866 million collectively with an average issue size of ₹ 2,715 million, 65% down from issue size of ₹ 7,752 million in 2009-10.




*Source: NSE*

**StanChart - India's first Indian Depository Receipt (IDR)**

Standard Chartered PLC was the first foreign company to be listed on Indian stock exchanges through an IDR route. An IDR is rupee-denominated instrument in the form of a depository receipt created by a Domestic Depository (custodian of securities registered with the Securities and Exchange Board of India) against the underlying equity of issuing company to enable foreign companies to raise funds from the Indian securities markets. Investors will receive depository receipts in dematerialised form and each receipt will represent a certain number of shares.

IDRs are used as a medium to own an interest in a foreign company and can be listed on the stock exchanges. Investors would have an exposure to the global business of the foreign company and not only the Indian business. For example, the exposure would be to Standard Chartered PLC (global company) and not just Standard Chartered Bank India (the Indian business). An IDR is a mechanism that allows investors in India to invest in listed foreign companies, including multinational companies, in Indian rupees.

Pursuant to the current SEBI Regulations and the RBI Circular, IDRs may be held, purchased or transferred by Retail Individual Bidders, non-institutional bidders and qualified institutional bidders including persons resident in India, NRIs and FIIs, including SEBI approved sub-accounts of FIIs registered with SEBI, or to, or for the account or benefit of, such persons, in each case subject to applicable laws. Insurance companies are not permitted to invest in or hold IDRs. Commercial banks may invest or hold IDRs subject to compliance with applicable prudential limits specified by the RBI from time to time.

The IDRs are represented by Dematerialised IDRs evidenced by the Register maintained or procured to be maintained by the Depository showing the latest available registered holding position received from NSDL and CDSL. NSDL and CDSL will credit the dematerialised account of an IDR Holder with the relevant number of IDRs held by that IDR Holder.

## Performance of Initial Public Offerings (IPOs) listed on NSE

During 2009-10, ₹ 236,835 million (US $ 5,246 million) were raised through the thirty three IPOs listed on NSE. They were from the various sectors viz. Finance, Infrastructure, Manufacturing and Information technology. L&T Finance Ltd. came out with an IPO of non-convertible Debentures (NCD) mobilizing ₹ 10,000 million (US $ 196 million). Out of those thirty three IPOs excluding NCDs twenty two issues had reported listing gains and ninteen had managed to close in green by end of 2009-10. Around eleven IPOs showed negative returns on the first day of trading and ten IPOs showed negative returns by the year end March 2010 as compared to their issue price. The IPO of ARSS Infrastructure

Projects Limited marked its outperformance with listing gains of 63.88 % on its first day of trading and IPO of Jubilant Foodworks Limited rewarded its shareholdersas with a whopping 116.28 % increase in price over the issue price at the end of March 10.

During Apr'10 – Sep'10 ₹ 107,967 million (US $ 2,404 million) were raised through the twenty one IPOs listed on NSE. Out of those twenty one IPOs, eighteen issues had reported listing gains, but just nine had managed to close in green by end of Sep'10. The IPO of Gujarat Pipavav Port Limited got listed with listing gains of 21.96 %, whereas IPO of Mandhana Industries Ltd. rewarded its shareholdersas with price appreciation of 51.50 % over the issue price, till Sep'10.

**Table: 2-8: Performance of IPOs listed on NSE during Apr 2010 to Sep 2010**

| Sr. No. | Company Name | Sector | Issue size (₹ mn.) | Date of Listing | Issue Price (₹ mn.) | Listing price (₹) | Close Price at end of Sep 2010 | Price Appreciation/ Depreciation on the first day of trading with the issue price | Price Appreciation/ Depreciation at end Sep 2010 with the issue price |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Pradip Overseas Limited | Manufacturing | 1166 | 5-Apr-10 | 110 | 115 | 80.40 | 4.55% | -26.91% |
| 2 | Persistent Systems Limited | Information Technology | 1680.1 | 6-Apr-10 | 310 | 361.6 | 446.35 | 16.65% | 43.98% |
| 3 | Shree Ganesh Jewellery House Limited | Manufacturing | 3710.2 | 9-Apr-10 | 260 | 250 | 171.35 | -3.85% | -34.10% |
| 4 | Intrasoft Technologies Limited | Information Technology | 536.5 | 12-Apr-10 | 145 | 150 | 97.55 | 3.45% | -32.72% |
| 5 | Goenka Diamond and Jewels Limited | Manufacturing | 1265.1 | 16-Apr-10 | 135 | 124 | 106.25 | -8.15% | -21.30% |
| 6 | Talwalkars Better Value Fitness Ltd. | Services | 774.4 | 10-May-10 | 128 | 147.95 | 230.25 | 15.59% | 79.88% |
| 7 | Nitesh Estates Ltd. | Infrastructure | 4050 | 13-May-10 | 54 | 54 | 44.40 | 0.00% | -17.78% |
| 8 | Tarapur Transformers Ltd. | Manufacturing | 637.5 | 18-May-10 | 75 | 75 | 35.10 | 0.00% | -53.20% |
| 9 | Mandhana Industries Ltd. | Manufacturing | 1079 | 19-May-10 | 130 | 131 | 196.95 | 0.77% | 51.50% |
| 10 | SJVN Ltd. | Infrastructure | 10627.4 | 20-May-10 | 26 | 27.1 | 24.15 | 4.23% | -7.12% |
| 11 | JP Infratech Ltd. | Infrastructure | 22576.1 | 21-May-10 | 102 | 98 | 92.95 | -3.92% | -8.87% |
| 12 | Standard Chartered PLC | Bank | 24863.4 | 11-Jun-10 | 104 | 106 | 119.40 | 1.92% | 14.81% |
| 13 | Parabolic Drugs Limited | Pharmaceuticals | 2000 | 1-Jul-10 | 75 | 75 | 57.45 | 0.00% | -23.40% |
| 14 | Technofab Engineering Limited | Engineering | 716.6 | 16-Jul-10 | 240 | 276 | 235.00 | 15.00% | -2.08% |
| 15 | Hindustan Media Ventures Limited | Media & Entertainment | 2700 | 21-Jul-10 | 166 | 177.95 | 191.05 | 7.20% | 15.09% |
| 16 | Aster Silicates Limited | Manufacturing | 531 | 28-Jul-10 | 118 | 128.05 | 52.65 | 8.52% | -55.38% |
| 17 | SKS Microfinance Limited | Finance | 16287.8 | 16-Aug-10 | 985 | 1040 | 1,337.35 | 5.58% | 35.77% |
| 18 | Bajaj Corp Limited | FMCG | 2970 | 18-Aug-10 | 660 | 760 | 697.75 | 15.15% | 5.72% |
| 19 | Prakash Steelage Limited | Manufacturing | 687.5 | 25-Aug-10 | 110 | 122 | 164.50 | 10.91% | 49.55% |
| 20 | Gujarat Pipavav Port Limited | Services | 5538.5 | 9-Sep-10 | 46 | 56.1 | 60.55 | 21.96% | 31.63% |
| 21 | Indosolar Limited | Manufacturing | 3570 | 29-Sep-10 | 29 | 29.5 | 24.45 | 1.72% | -15.69% |

**Initial Public Offerings (IPOs) of NCDs during 2009-10**

| Sr. No. | Company Name & Series | Sector | Issue size | Date of Listing | Issue Price | #REF! | Close Price at end of March 2010 | Price Appreciation/ Depreciation on the first day of trading | Price Appreciation/ Depreciation at end March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| | | | (₹ mn.) | | (₹) | | | (%) | |
| 1 | L&TFINANCE-Series N1 | FINANCE | 1066.38 | 24-Sep-09 | 1000 | 1,029.90 | 1,036.00 | 2.99 | 3.60 |
| | L&TFINANCE-Series N2 | | 2963.48 | 24-Sep-09 | 1000 | 1,030.00 | 1,034.00 | 3.00 | 3.40 |
| | L&TFINANCE-Series N3 | | 1263.20 | 24-Sep-09 | 1000 | 1,044.00 | 1,111.00 | 4.40 | 11.10 |
| | L&TFINANCE-Series N4 | | 4706.94 | 24-Sep-09 | 1000 | 1,038.00 | 1,054.01 | 3.80 | 5.40 |

*Source: NSE*
*There were no IPOs during the period April - March 09*

## 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 endeavour 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. The ranking of collecting merchant bankers based on the amount collected by them for issues offered to Indian public during 2009-10 is in table 2-9. According to the league table HDFC Bank and ICICI Bank has managed to hold on to their top positions, whereas Standard Chartered Bank has successfully captured third post from Axis Bank.

**Table 2-9: League Table of Collecting Bankers**

| Rank 2008-09 | Rank 2009-10 | Bank | Amount Collected (₹ millions) | % of Total |
|---|---|---|---|---|
| 1 | 1 | HDFC Bank Ltd. | 352,749 | 23.06% |
| 2 | 2 | ICICI Bank Ltd. | 338,006 | 22.10% |
| 6 | 3 | Standard Chartered Bank Ltd. | 211,565 | 13.83% |
| 8 | 4 | Kotak Mahindra Bank LTd. | 161,477 | 10.56% |
| 7 | 5 | HSBC Ltd. | 111,223 | 7.27% |
| 3 | 6 | Axis Bank Ltd. | 95,148 | 6.22% |
| 5 | 7 | ABN Amro Bank N.V. | 80,220 | 5.24% |
| 16 | 8 | State Bank of India | 64,345 | 4.21% |
| 13 | 9 | IDBI Bank Ltd. | 59,340 | 3.88% |
| 14 | 10 | Yes Bank Ltd. | 14,231 | 0.93% |
| | | **Total** | **1,529,656.57** | |

*Source: Prime Database*

## Debt Issues

Government and corporate sector collectively raised a total of ₹ 8,155,967 million (US $ 180,682 million) from primary market during 2009-10. About 76.46% has been raised by the Government, while the balance by the corporate sector through private placement.

Table 2-7: Performance of IPOs listed on NSE during Apr 2009 to Mar 2010

| Sr. No. | Company Name | Sector | Issue size (₹ mn.) | Date of Listing | Issue Price (₹) | Listing price (₹) | Close Price at end of March 2010 | Price Appreciation/ Depreciation on the first day of trading with the issue price | Price Appreciation/ Depreciation at end March 2010 with the issue price |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Mahindra Holidays & Resorts India Limited | Services | 2779.58 | 16-Jul-09 | 300 | 317.45 | 544.70 | 5.82% | 81.57% |
| 2 | Excel Infoways Limited | Services | 481.70 | 3-Aug-09 | 85 | 95.85 | 39.55 | 12.76% | -53.47% |
| 3 | Raj Oil Mills Limited | Manufacturing | 1140.00 | 12-Aug-09 | 120 | 119.25 | 59.75 | -0.62% | -50.21% |
| 4 | Adani Power Limited | Infrastructure | 30165.20 | 20-Aug-09 | 100 | 100.10 | 116.00 | 0.10% | 16.00% |
| 5 | NHPC Limited | Infrastructure | 60385.46 | 1-Sep-09 | 36 | 36.75 | 30.45 | 2.08% | -15.42% |
| 6 | Jindal Cotex Limited | Manufacturing | 934.28 | 22-Sep-09 | 75 | 87.30 | 81.00 | 16.40% | 8.00% |
| 7 | Globus Spirits Limited | FMCG | 750.00 | 23-Sep-09 | 100 | 91.00 | 135.35 | -9.00% | 35.35% |
| 8 | Oil India Limited | Petrochemicals | 27772.48 | 30-Sep-09 | 1050 | 1,141.20 | 1,154.75 | 8.69% | 9.98% |
| 9 | Pipavav Shipyard Limited | Services | 4986.60 | 9-Oct-09 | 58 | 56.70 | 70.20 | -2.24% | 21.03% |
| 10 | Euro Multivision Limited | Information Technology | 660.00 | 15-Oct-09 | 75 | 53.55 | 24.10 | -28.60% | -67.87% |
| 11 | Thinksoft Global Services Limited | Information Technology | 455.75 | 26-Oct-09 | 125 | 164.40 | 189.55 | 31.52% | 51.64% |
| 12 | Indiabulls Power Limited | Infrastructure | 15291.00 | 30-Oct-09 | 45 | 39.50 | 30.75 | -12.22% | -31.67% |
| 13 | Den Networks Limited | Media & Entertainment | 3644.50 | 24-Nov-09 | 195 | 163.40 | 195.75 | -16.21% | 0.38% |
| 14 | Astec LifeSciences Limited | Petrochemicals | 615.01 | 25-Nov-09 | 82 | 84.00 | 49.15 | 2.44% | -40.06% |
| 15 | Cox And Kings (India) Limited | Services | 6103.89 | 11-Dec-09 | 330 | 425.40 | 481.35 | 28.91% | 45.86% |
| 16 | JSW Energy Limited | Infrastructure | 26577.30 | 4-Jan-10 | 100 | 100.85 | 111.85 | 0.85% | 11.85% |
| 17 | Godrej Properties Limited | Infrastructure | 4688.50 | 5-Jan-10 | 490 | 537.25 | 511.55 | 9.64% | 4.40% |
| 18 | D. B. Corp Limited | Services | 3842.20 | 6-Jan-10 | 212 | 265.90 | 239.90 | 25.42% | 13.16% |
| 19 | MBL Infrastructures Limited | Infrastructure | 1026.00 | 11-Jan-10 | 180 | 206.55 | 226.20 | 14.75% | 25.67% |
| 20 | Infinite Computer Sol Ltd | Information Technology | 1898.3831 | 3-Feb-10 | 165 | 191.80 | 190.70 | 16.24% | 15.58% |
| 21 | Jubilant Foodworks Limited | Manufacturing | 3287.22 | 8-Feb-10 | 145 | 229.10 | 313.60 | 58.00% | 116.28% |
| 22 | Syncom Healthcare Limited | Pharmaceuticals | 562.50 | 15-Feb-10 | 75 | 87.75 | 120.60 | 17.00% | 60.80% |
| 23 | Vascon Engineers Ltd | Manufacturing | 1782.00 | 15-Feb-10 | 165 | 148.05 | 154.90 | -10.27% | -6.12% |
| 24 | Thangamayil Jewellery Ltd | Miscellaneous | 287.53 | 19-Feb-10 | 75 | 71.05 | 81.55 | -5.27% | 8.73% |
| 25 | Aqua Logistics Ltd | Services | 1521.57 | 23-Feb-10 | 220 | 244.60 | 271.05 | 11.18% | 23.20% |
| 26 | D B Realty Limited | Infrastructure | 15000.00 | 24-Feb-10 | 468 | 456.20 | 453.85 | -2.52% | -3.02% |
| 27 | Emmbi Polyarns Ltd | Miscellaneous | 389.60 | 24-Feb-10 | 45 | 28.75 | 20.65 | -36.11% | -54.11% |
| 28 | Hathway Cable & Datacom | Media & Entertainment | 6660.00 | 25-Feb-10 | 240 | 207.65 | 207.50 | -13.48% | -13.54% |
| 29 | ARSS Infrastructure Projects Limited | Infrastructure | 1030.15 | 3-Mar-10 | 450 | 737.45 | 928.10 | 63.88% | 106.24% |
| 30 | Texmo Pipes and Products Limited | Manufacturing | 450.00 | 10-Mar-10 | 90 | 137.15 | 91.95 | 52.39% | 2.17% |
| 31 | Man Infraconstruction Limited | Infrastructure | 1417.55 | 11-Mar-10 | 252 | 349.85 | 358.75 | 38.83% | 42.36% |
| 32 | United Bank of India | Bank | 3249.80 | 18-Mar-10 | 66 | 68.65 | 68.80 | 4.02% | 4.24% |
| 33 | IL&FS Transportation Networks Limited | Services | 7000.00 | 30-Mar-10 | 258 | 274.65 | 278.35 | 6.45% | 7.89% |

*Source: NSE*

**Table 2-10: Resources Raised from Debt Markets**

| Issuer | (₹ mn.) 2008-09 | 2009-10 | Apr'10 - Sep'10 | (US$. mn.) 2008-09 | 2009-10 | Apr'10 - Sep'10 |
|---|---|---|---|---|---|---|
| Corporate | 1,758,267 | 1,919,777 | 1,076,772 | 34,510 | 42,529 | 23,971 |
| Public Issues | 15,000 | 25,000 | 5,000 | 294 | 554 | 111 |
| Private Placement* | 1,743,267 | 1,894,777 | 1,071,772 | 34,215 | 41,976 | 23,860 |
| Government | 4,366,880 | 6,236,190 | - | 85,709 | 138,152 | - |
| **Total** | **6,125,147** | **8,155,967** | **1,076,772** | **120,219** | **180,682** | **23,971** |

*Source: Prime Data base (for Private placement) SEBI for Public issues & RBI Annual Report 2009-10 (for Government debt).*
*- : Nil / Negligible*
** Only debt placements with a tenor and put / call option of 1 year or more.*

## Private Placement of Debt

According to Prime Annual Report, a total of 192 issuers (institutional and corporates) raised ₹ 1,894,777 million (US $ 41,976 million) through 803 privately placed issues in 2009-10.

Response to most of the issues was good as 284 issues out of 803 issues i.e around 35.37% of the total issues were made by the government sector units, which mobilized 70.88%% of the total. During the period Apr-Sep 2010, there were 127 issuers who placed 467 issues amounting to ₹ 1,071,772 million (US $ 23,860 million). The amount raised through the private placement of debt issues have been on an increasing trend over the past few years.

**Table 2-11: Private Placement - Institutional & Corporate Debt**

| Year | No. of issuers | No. of Privately Placed issues | Resource Mobilisation through Private Placement of Debt (₹ mn) | Resource Mobilisation through Private Placement of Debt (US$.million) |
|---|---|---|---|---|
| 1995-96 | 47 | 73 | 100,353 | 2,921 |
| 1996-97 | 159 | 204 | 183,908 | 5,126 |
| 1997-98 | 151 | 253 | 309,833 | 7,838 |
| 1998-99 | 204 | 444 | 386,427 | 9,107 |
| 1999-00 | 229 | 711 | 550,734 | 12,626 |
| 2000-01 | 214 | 603 | 524,560 | 11,247 |
| 2001-02 | 204 | 557 | 454,269 | 9,309 |
| 2002-03 | 171 | 485 | 484,236 | 10,194 |
| 2003-04 | 140 | 364 | 484,279 | 11,161 |
| 2004-05 | 117 | 321 | 554,088 | 12,665 |
| 2005-06 | 99 | 366 | 818,466 | 18,347 |
| 2006-07 | 98 | 500 | 938,552 | 21,531 |
| 2007-08 | 104 | 613 | 1,152,661 | 28,838 |
| 2008-09 | 167 | 799 | 1,743,267 | 34,215 |
| **2009-10** | **192** | **803** | **1,894,777** | **41,976** |
| **Apr-Sep 2010** | **127** | **467** | **1,071,772** | **23,860** |

*Source: Prime Database*

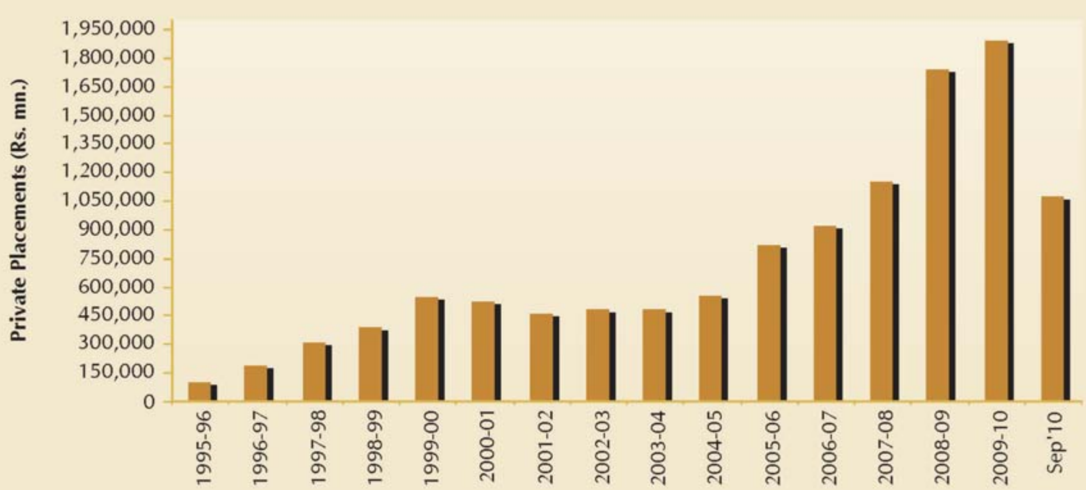
Mostly, debt securities were privately placed. Though, there were some instances of private placements of equity shares, there is no comprehensive data coverage of this. The two sources of information regarding private placement market in India are Prime database and RBI. The former data set, however, 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 idea, however, can be derived from the equity shares issued by NSE-listed companies on private placement basis.

**Table 2-12: Issuer wise distribution of private placement of debt**

| Issuer | Issue Amount (₹ mn. ) | | | Issue Amount (US $.mn. ) | | | % of Issue Amount | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2008-09 | 2009-10 | Apr-Sep 2010 | 2008-09 | 2009-10 | Apr-Sep 2010 | 2008-09 | 2009-10 | Apr-Sep 2010 |
| All India Financial Institutions/Banks | 1,028,864 | 1,085,223 | 683,143 | 20,194 | 24,041 | 15,208 | 59.02 | 57.27 | 63.74 |
| State Financial Institutions | 2,540 | 13,372 | 991.9 | 50 | 296 | 22 | 0.15 | 0.71 | 0.09 |
| Public Sector Undertakings | 118,145 | 223,555 | 73,550 | 2,319 | 4,952 | 1,637 | 6.78 | 11.80 | 6.86 |
| State Level Undertakings | 47,382 | 20,846 | 4,965 | 930 | 462 | 111 | 2.72 | 1.10 | 0.46 |
| Private Sector | 546,337 | 551,781 | 309,122 | 10,723 | 12,224 | 6,882 | 31.34 | 29.12 | 28.84 |
| **Total** | **1,743,267** | **1,894,777** | **1,071,772** | **34,215** | **41,976** | **23,860** | **100.00** | **100.00** | **100.00** |

*Source: Prime Database*

**Chart 2-3: Growth of Private Placement of Debt**




*Source: Prime Database*

Sectoral distribution shows that the banking & financial services sector continued to dominate the private placement market, raising 70.22% in 2009-10, followed by power sector, which accounted for 8.69% during the year.

**Table 2-13: Sectoral Distribution of Resources Mobilised by Private Placement**

(In percentage)

| Sector | 2008-09 | 2009-10 | Apr-Sep 2010 |
|---|---|---|---|
| Banking | 52.73 | 49.49 | 50.56 |
| Financial Services | 17.97 | 20.73 | 24.78 |
| Power | 7.27 | 8.69 | 7.64 |
| Roads & Highways | 0.89 | 1.78 | 4.67 |
| Travel/Transportation | - | 0.72 | 0.42 |
| Telecommunications | 2.50 | 1.68 | 0.60 |
| Others | 18.65 | 16.90 | 11.34 |
| **Total** | **100.00** | **100.00** | **100.00** |

*Source: Prime Database*

The maturity profile of issues in the private placement market ranged between 12 months to 240 months during 2009-10. The largest number of placements was for 36 months (145 placements) and 120 months (117 placements). A total of 62 offers had put option, while 130 offers had call option. Rating is however required for listing. Of the 803 debt private placements deals during 2009-10, 784 issues (98%) went for credit rating while 18 did not.

## Corporate Sector

There is a preference for raising resources in the primary market through debt instruments and private placement of debt has emerged as the major route for raising resources.

During 2009-10, total resources raised by the corporate sector decreased by 29.64% to ₹ 2,470,329 million (US $ 54,726 million) as compared with gross mobilization of ₹ 1,905,457 million (US $ 37,399 million). The equity route was used to raise 18.92 % of the total resources through public equity shares. The share of rights issue was 3.37 %. The resources raised through the debt issues (debt public issues and debt private placements) were 76.70 %.

**Table 2-14: Resources Raised by Corporate Sector**

| Year | Public Equity Issues (₹ mn) | Rights Issues (₹ mn) | Debt Public Issues (₹ mn) | Debt Private Place-ments (₹ mn) | Total Resource Mobilisa-tion (₹ mn) | Total Resource Mobilisa-tion (US $ mn.) | Percentage Share in the Total Resource Mobilisation | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Public Equity issues | Rights Issue | Debt Public Issues | Debt Private Place-ments |
| | 1 | 2 | 3 | 4 | | | | | | |
| 2007-08 | 522,190 | 325,180 | 10,000 | 1,152,661 | 2,010,031 | 50,288 | 25.98 | 16.18 | 0.50 | 57.35 |
| 2008-09 | 20,830 | 126,370 | 15,000 | 1,743,267 | 1,905,467 | 37,399 | 1.09 | 6.63 | 0.79 | 91.49 |
| **2009-10** | **467,366** | **83,186** | **25,000** | **1,894,777** | **2,470,329** | **54,726** | **18.92** | **3.37** | **1.01** | **76.70** |
| **Apr-Sep 2010** | **147,523** | **34,890** | **5,000** | **1,071,772** | **1,259,185** | **28,032** | **11.72** | **2.77** | **0.40** | **85.12** |

*Source: Prime Data base (for Private placement) SEBI for Public issues and Right issues*
*Notes : Only debt placements with a tenor and put / call option of 1 year or more.*

**Annexure 2-1: Details of Private Placement Issues in the equity segment by NSE – listed companies during the period April 01, 2009 to September 30, 2010.**

| Sr. No. | Company Name | No. of Securities issued | Amount Raised (₹ In millions) | Par Value | Issue Price (₹) |
|---|---|---|---|---|---|
| 1 | 3i Infotech Limited | 37500000 | 3178.13 | 10.00 | 84.75 |
| 2 | 3i Infotech Limited | 22900099 | 1799.95 | 10.00 | 78.60 |
| 3 | Aarti Drugs Limited | 400000 | 21.04 | 10.00 | 52.60 |
| 4 | Aarti Industries Limited | 3025000 | 107.84 | 5.00 | 35.65 |
| 5 | Aban Offshore Limited | 5697135 | 6975.00 | 2.00 | 1,224.30 |
| 6 | Abhishek Corporation Limited | 2000000 | 50.00 | 10.00 | 25.00 |
| 7 | Abhishek Industries Limited | 28000000 | 596.40 | 10.00 | 21.30 |
| 8 | Ackruti City Limited | 6035871 | 3023.97 | 10.00 | 501.00 |
| 9 | Adani Enterprises Limited | 74605987 | 40000.00 | 1.00 | 536.15 |
| 10 | Adhunik Metaliks Limited | 6120567 | 722.23 | 10.00 | 118.00 |
| 11 | Adhunik Metaliks Limited | 8154000 | 1000.01 | 10.00 | 122.64 |
| 12 | Adhunik Metaliks Limited | 13960400 | 1371.33 | 10.00 | 98.23 |
| 13 | Aditya Birla Nuvo Limited | 8000000 | 4329.52 | 10.00 | 541.19 |
| 14 | Agro Dutch Industries Limited | 20000000 | 200.00 | 10.00 | 10.00 |
| 15 | Ahmednagar Forgings Limited | 1830000 | 86.01 | 10.00 | 47.00 |
| 16 | Aksh Optifibre Limited | 11550000 | 225.23 | 5.00 | 19.50 |
| 17 | Allcargo Global Logistics Limited | 1081081 | 1009.73 | 10.00 | 934.00 |
| 18 | Allcargo Global Logistics Limited | 7567570 | 1413.62 | 2.00 | 186.80 |
| 19 | Allcargo Global Logistics Limited | 5663105 | 1046.54 | 2.00 | 184.80 |
| 20 | Allied Digital Services Limited | 4900000 | 2314.22 | 10.00 | 472.29 |
| 21 | Alok Industries Limited | 182100248 | 4246.58 | 10.00 | 23.32 |
| 22 | Alps Industries Limited | 1800000 | 19.80 | 10.00 | 11.00 |
| 23 | Alps Industries Limited | 1800000 | 19.80 | 10.00 | 11.00 |
| 24 | Ambica Agarbathies & Aroma industries Limited | 2800000 | 50.40 | 10.00 | 18.00 |
| 25 | Amtek Auto Limited | 7600000 | 1010.80 | 2.00 | 133.00 |
| 26 | Amtek Auto Limited | 7400000 | 984.20 | 2.00 | 133.00 |
| 27 | Amtek India Limited | 5900000 | 241.90 | 2.00 | 41.00 |
| 28 | Amtek India Limited | 6210000 | 254.61 | 2.00 | 41.00 |
| 29 | Ansal Housing and Construction Limited | 900000 | 36.00 | 10.00 | 40.00 |
| 30 | Ansal Properties & Infrastructure Limited | 9627485 | 673.92 | 5.00 | 70.00 |
| 31 | Ansal Properties & Infrastructure Limited | 7050000 | 581.63 | 5.00 | 82.50 |
| 32 | Ansal Properties & Infrastructure Limited | 1500000 | 123.75 | 5.00 | 82.50 |
| 33 | Apollo Hospitals Enterprise Limited | 1549157 | 771.00 | 10.00 | 497.69 |
| 34 | Aptech Limited | 1717103 | 370.89 | 10.00 | 216.00 |
| 35 | Arvind Limited | 7500000 | 112.50 | 10.00 | 15.00 |
| 36 | Arvind Limited | 5500000 | 82.50 | 10.00 | 15.00 |
| 37 | Asian Electronics Limited | 1200000 | 144.00 | 5.00 | 120.00 |
| 38 | Asian Electronics Limited | 833333 | 33.33 | 5.00 | 40.00 |

*Contd.*

*Contd.*

| Sr. No. | Company Name | No. of Securities issued | Amount Raised (₹ In millions) | Par Value | Issue Price (₹) |
|---|---|---|---|---|---|
| 39 | Axis Bank Limited | 3976632 | 3605.61 | 10.00 | 906.70 |
| 40 | Axis Bank Limited | 33044500 | 29961.45 | 10.00 | 906.70 |
| 41 | B.A.G Films and Media Limited | 7140000 | 123.52 | 2.00 | 17.30 |
| 42 | Bajaj Electricals Limited | 2048339 | 1607.95 | 10.00 | 785.00 |
| 43 | Bajaj Hindusthan Limited | 14500000 | 756.03 | 1.00 | 52.14 |
| 44 | Bajaj Hindusthan Limited | 35450000 | 7231.80 | 1.00 | 204.00 |
| 45 | Bajaj Holdings & Investment Limited | 4859000 | 2184.51 | 10.00 | 449.58 |
| 46 | Ballarpur Industries Limited | 45000000 | 1350.00 | 2.00 | 30.00 |
| 47 | Ballarpur Industries Limited | 55000000 | 1650.00 | 2.00 | 30.00 |
| 48 | Banswara Syntex Limited* | 187500 | 0.00 | 10.00 | 0.00 |
| 49 | Banswara Syntex Limited | 1650000 | 67.65 | 10.00 | 41.00 |
| 50 | Bartronics India Limited | 184899 | 30.00 | 10.00 | 162.25 |
| 51 | Bartronics India Limited | 308166 | 50.00 | 10.00 | 162.25 |
| 52 | Bartronics India Limited | 2200000 | 510.40 | 10.00 | 232.00 |
| 53 | Berger Paints (I) Limited | 7200000 | 363.60 | 2.00 | 50.50 |
| 54 | Berger Paints (I) Limited | 20000000 | 990.00 | 2.00 | 49.50 |
| 55 | Bharat Forge Limited | 10000000 | 2720.00 | 2.00 | 272.00 |
| 56 | Bharat Forge Limited | 6500000 | 13.00 | 0.00 | 2.00 |
| 57 | Bharati Shipyard Limited | 1370000 | 109.60 | 10.00 | 80.00 |
| 58 | Bhartiya International Limited | 800000 | 34.40 | 10.00 | 43.00 |
| 59 | Bombay Rayon Fashions Limited | 18000000 | 3330.00 | 10.00 | 185.00 |
| 60 | Bombay Rayon Fashions Limited | 5800000 | 1119.40 | 10.00 | 193.00 |
| 61 | C & C Constructions Limited | 1976284 | 500.00 | 10.00 | 253.00 |
| 62 | C & C Constructions Limited | 3153000 | 768.70 | 10.00 | 243.80 |
| 63 | Celebrity Fashions Limited | 294118 | 5.01 | 10.00 | 17.03 |
| 64 | Century Enka Limited | 800000 | 151.33 | 10.00 | 189.16 |
| 65 | Century Enka Limited | 1000000 | 189.16 | 10.00 | 189.16 |
| 66 | Cholamandalam Investment and Finance Company Limited | 10893852 | 1002.23 | 10.00 | 92.00 |
| 67 | Cholamandalam Investment and Finance Company Limited | 32608695 | 3000.00 | 10.00 | 92.00 |
| 68 | Cipla Limited | 25630000 | 6759.91 | 2.00 | 263.75 |
| 69 | Clutch Auto Limited | 368000 | 18.40 | 10.00 | 50.00 |
| 70 | Core Projects and Technologies Limited | 4800000 | 888.00 | 2.00 | 185.00 |
| 71 | Cranes Software International Limited | 3098880 | 387.36 | 2.00 | 125.00 |
| 72 | Cura Technologies Limited | 725000 | 65.25 | 10.00 | 90.00 |
| 73 | Cura Technologies Limited | 200000 | 18.00 | 10.00 | 90.00 |
| 74 | Cura Technologies Limited | 350000 | 63.00 | 10.00 | 180.00 |
| 75 | Cura Technologies Limited | 350000 | 63.00 | 10.00 | 180.00 |
| 76 | Cura Technologies Limited | 300000 | 54.00 | 10.00 | 180.00 |

*Contd.*

Note : * *Shares issued on conversion of warrants which were allotted pursuant to bonus issue.*

*Contd.*

| Sr. No. | Company Name | No. of Securities issued | Amount Raised (₹ In millions) | Par Value | Issue Price (₹) |
|---|---|---|---|---|---|
| 77 | Cura Technologies Limited | 100000 | 18.00 | 10.00 | 180.00 |
| 78 | Cura Technologies Limited | 100000 | 18.00 | 10.00 | 180.00 |
| 79 | Cura Technologies Limited | 65000 | 5.85 | 10.00 | 90.00 |
| 80 | Deep Industries Limited | 1250000 | 72.50 | 10.00 | 58.00 |
| 81 | Delta Corp Limited | 6138271 | 248.60 | 1.00 | 40.50 |
| 82 | Delta Corp Limited | 200000 | 8.10 | 1.00 | 40.50 |
| 83 | Delta Corp Limited | 8661729 | 350.80 | 1.00 | 40.50 |
| 84 | Delta Corp Limited | 16633000 | 832.65 | 1.00 | 50.06 |
| 85 | Development Credit Bank Limited | 23725835 | 810.00 | 10.00 | 34.14 |
| 86 | Dewan Housing Finance Corporation Limited | 3335000 | 250.13 | 10.00 | 75.00 |
| 87 | Dewan Housing Finance Corporation Limited | 5350000 | 754.35 | 10.00 | 141.00 |
| 88 | Dewan Housing Finance Corporation Limited | 1000000 | 222.30 | 10.00 | 222.30 |
| 89 | Dewan Housing Finance Corporation Limited | 4000000 | 889.20 | 10.00 | 222.30 |
| 90 | Dewan Housing Finance Corporation Limited | 16012231 | 2257.72 | 10.00 | 141.00 |
| 91 | Dewan Housing Finance Corporation Limited | 16869095 | 3750.00 | 10.00 | 222.30 |
| 92 | Dhanlaxmi Bank Limited | 21000000 | 3807.30 | 10.00 | 181.30 |
| 93 | Edserv Softsystems Limited | 227273 | 20.00 | 10.00 | 88.00 |
| 94 | Edserv Softsystems Limited | 2987804 | 612.50 | 10.00 | 205.00 |
| 95 | Educomp Solutions Limited | 52616 | 41.66 | 2.00 | 791.79 |
| 96 | Educomp Solutions Limited | 1620000 | 6066.90 | 10.00 | 3,745.00 |
| 97 | Elder Pharmaceuticals Limited | 1679450 | 696.97 | 10.00 | 415.00 |
| 98 | Electrosteel Castings Limited | 19243836 | 731.27 | 1.00 | 38.00 |
| 99 | Electrosteel Castings Limited | 6206578 | 235.85 | 1.00 | 38.00 |
| 100 | Electrosteel Castings Limited | 14000000 | 322.00 | 1.00 | 23.00 |
| 101 | Electrosteel Castings Limited | 33568312 | 100.70 | 0.00 | 3.00 |
| 102 | Emami Limited | 10000000 | 3100.00 | 2.00 | 310.00 |
| 103 | Emco Limited | 3090000 | 191.58 | 2.00 | 62.00 |
| 104 | Era Infra Engineering Limited | 21000000 | 1785.00 | 2.00 | 85.00 |
| 105 | Era Infra Engineering Limited | 14000000 | 1190.00 | 2.00 | 85.00 |
| 106 | Escorts Limited | 3611610 | 448.02 | 10.00 | 124.05 |
| 107 | Ess Dee Aluminium Limited | 1664000 | 860.34 | 10.00 | 517.03 |
| 108 | Everest Kanto Cylinder Limited | 6000000 | 810.00 | 2.00 | 135.00 |
| 109 | Exide Industries Limited | 50000000 | 5395.00 | 1.00 | 107.90 |
| 110 | FCS Software Solutions Limited | 20000000 | 182.00 | 1.00 | 9.10 |
| 111 | Gallantt Metal Limited | 5000000 | 155.00 | 10.00 | 31.00 |
| 112 | Gammon India Limited | 7750000 | 699.05 | 2.00 | 90.20 |
| 113 | Gammon India Limited | 12809400 | 3041.59 | 2.00 | 237.45 |
| 114 | Gemini Communication Limited | 2962900 | 53.33 | 1.00 | 18.00 |
| 115 | Geojit BNP Paribas Financial Services Limited | 13910514 | 361.67 | 1.00 | 26.00 |

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*Contd.*

| Sr. No. | Company Name | No. of Securities issued | Amount Raised (₹ In millions) | Par Value | Issue Price (₹) |
|---|---|---|---|---|---|
| 116 | GI Engineering Solutions Limited | 1100000 | 19.80 | 10.00 | 18.00 |
| 117 | Glenmark Pharmaceuticals Limited | 18712935 | 4135.56 | 1.00 | 221.00 |
| 118 | Glodyne Technoserve Limited | 1453221 | 1044.44 | 10.00 | 718.71 |
| 119 | GMR Infrastructure Limited | 13019108 | 1497.20 | 2.00 | 115.00 |
| 120 | GMR Infrastructure Limited | 225080390 | 14000.00 | 1.00 | 62.20 |
| 121 | Godrej Consumer Products Limited | 15400100 | 5313.03 | 1.00 | 345.00 |
| 122 | GSS America Infotech Limited | 1400000 | 456.48 | 10.00 | 326.06 |
| 123 | GTL Infrastructure Limited | 1500000 | 60.00 | 10.00 | 40.00 |
| 124 | GTL Infrastructure Limited | 120495015 | 4819.80 | 10.00 | 40.00 |
| 125 | Gujarat NRE Coke Limited | 4000000 | 200.00 | 10.00 | 50.00 |
| 126 | Gujarat NRE Coke Limited | 15000000 | 986.70 | 10.00 | 65.78 |
| 127 | Gujarat NRE Coke Limited | 1450000 | 95.38 | 10.00 | 65.78 |
| 128 | Gujarat NRE Coke Limited | 4000000 | 263.12 | 10.00 | 65.78 |
| 129 | Gujarat NRE Coke Limited | 400000 | 0.00 | 10.00 | 0.00 |
| 130 | Gujarat NRE Coke Limited | 20800000 | 104.00 | 5.00 | 5.00 |
| 131 | GVK Power & Infrastructure Limited | 173361500 | 7168.50 | 1.00 | 41.35 |
| 132 | HBL Power Systems Limited | 10204450 | 346.95 | 1.00 | 34.00 |
| 133 | HCL Infosystems Limited | 16438848 | 2513.50 | 2.00 | 152.90 |
| 134 | HCL Infosystems Limited | 30555713 | 4726.66 | 2.00 | 154.69 |
| 135 | HDFC Bank Limited | 26200220 | 40089.74 | 10.00 | 1,530.13 |
| 136 | Helios And Matheson Information Technology Limited | 800000 | 51.97 | 10.00 | 64.96 |
| 137 | Himachal Futuristic Communications Limited | 20000000 | 200.00 | 10.00 | 10.00 |
| 138 | Himadri Chemicals and Industries Limited | 412000 | 175.51 | 10.00 | 426.00 |
| 139 | Himadri Chemicals and Industries Limited | 6310000 | 2524.00 | 10.00 | 400.00 |
| 140 | Hindalco Industries Limited | 213147391 | 27900.99 | 1.00 | 130.90 |
| 141 | Hindustan Construction Company Limited | 47000000 | 4801.05 | 1.00 | 102.15 |
| 142 | Housing Development and Infrastructure Limited | 13000000 | 3120.00 | 10.00 | 240.00 |
| 143 | Housing Development and Infrastructure Limited | 8000000 | 1920.00 | 10.00 | 240.00 |
| 144 | Housing Development and Infrastructure Limited | 5000000 | 1200.00 | 10.00 | 240.00 |
| 145 | Housing Development and Infrastructure Limited | 70350000 | 16884.00 | 10.00 | 240.00 |
| 146 | Housing Development and Infrastructure Limited | 43161310 | 11575.00 | 10.00 | 268.18 |
| 147 | Housing Development Finance Corporation Limited | 10953706 | 3012.27 | 0.00 | 275.00 |
| 148 | ibn18 Broadcast Limited | 2500000 | 255.00 | 2.00 | 102.00 |
| 149 | IDBI Bank Limited | 259509110 | 31190.40 | 10.00 | 120.19 |
| 150 | IFB Industries Limited | 6800000 | 68.00 | 10.00 | 10.00 |
| 151 | IFB Industries Limited | 2940000 | 29.40 | 10.00 | 10.00 |
| 152 | India Foils Limited | 136000000 | 136.00 | 1.00 | 1.00 |
| 153 | Indiabulls Financial Services Limited | 56140350 | 9600.00 | 2.00 | 171.00 |
| 154 | Indiabulls Financial Services Limited | 27500000 | 137.50 | 0.00 | 5.00 |

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| Sr. No. | Company Name | No. of Securities issued | Amount Raised (₹ In millions) | Par Value | Issue Price (₹) |
|---|---|---|---|---|---|
| 155 | Indiabulls Real Estate Limited | 143594593 | 26565.00 | 2.00 | 185.00 |
| 156 | Indo Asian Fusegear Limited | 800000 | 40.00 | 10.00 | 50.00 |
| 157 | Indo Count Industries Limited | 3000000 | 30.00 | 10.00 | 10.00 |
| 158 | Indo Count Industries Limited | 250000 | 2.50 | 10.00 | 10.00 |
| 159 | Ind-Swift Laboratories Limited | 700000 | 49.00 | 10.00 | 70.00 |
| 160 | Ind-Swift Laboratories Limited | 500000 | 35.00 | 10.00 | 70.00 |
| 161 | Ind-Swift Laboratories Limited | 600000 | 42.00 | 10.00 | 70.00 |
| 162 | Ind-Swift Laboratories Limited | 637000 | 44.59 | 10.00 | 70.00 |
| 163 | Indusind Bank Limited | 54897140 | 4803.50 | 10.00 | 87.50 |
| 164 | Infrastructure Development Finance Company Limited | 157752090 | 26541.79 | 10.00 | 168.25 |
| 165 | ING Vysya Bank Limited | 7493478 | 1859.13 | 10.00 | 248.10 |
| 166 | ING Vysya Bank Limited | 9270455 | 2300.00 | 10.00 | 248.10 |
| 167 | J.Kumar Infraprojects Limited | 4000000 | 240.00 | 10.00 | 60.00 |
| 168 | J.Kumar Infraprojects Limited | 3076785 | 554.59 | 10.00 | 180.25 |
| 169 | Jai Balaji Industries Limited | 8359000 | 2732.56 | 10.00 | 326.90 |
| 170 | Jai Balaji Industries Limited | 8295586 | 1985.13 | 10.00 | 239.30 |
| 171 | Jain Irrigation Systems Limited | 1997780 | 720.00 | 10.00 | 360.40 |
| 172 | Jayaswal Neco Industries Limited | 14200000 | 479.96 | 10.00 | 33.80 |
| 173 | JCT Electronics Limited | 3478300 | 16.00 | 1.00 | 4.60 |
| 174 | JHS Svendgaard Laboratories Limited | 1550000 | 71.30 | 10.00 | 46.00 |
| 175 | JIK Industries Limited | 513050 | 5.13 | 10.00 | 10.00 |
| 176 | JIK Industries Limited | 2465800 | 24.66 | 10.00 | 10.00 |
| 177 | JIK Industries Limited | 383550 | 3.84 | 10.00 | 10.00 |
| 178 | JIK Industries Limited | 624100 | 6.24 | 10.00 | 10.00 |
| 179 | Jindal Saw Limited | 2600897 | 2130.13 | 10.00 | 819.00 |
| 180 | JSL Stainless Limited | 23447240 | 2473.68 | 2.00 | 105.50 |
| 181 | Jubilant Life Sciences Limited | 11237517 | 3871.32 | 1.00 | 344.50 |
| 182 | Jyothy Laboratories Limited | 8063200 | 2278.82 | 1.00 | 282.62 |
| 183 | K S Oils Limited | 27921406 | 1352.23 | 1.00 | 48.43 |
| 184 | K Sera Sera Limited | 4567054 | 86.50 | 10.00 | 18.94 |
| 185 | K Sera Sera Limited | 1982815 | 30.00 | 10.00 | 15.13 |
| 186 | Kale Consultants Ltd | 369475 | 16.26 | 10.00 | 44.01 |
| 187 | Kale Consultants Ltd | 725525 | 31.93 | 10.00 | 44.01 |
| 188 | Kalpataru Power Transmission Limited | 4192114 | 4503.17 | 10.00 | 1,074.20 |
| 189 | Karuturi Global Limited | 3066325 | 50.59 | 1.00 | 16.50 |
| 190 | Karuturi Global Limited | 22800000 | 273.60 | 1.00 | 12.00 |
| 191 | Karuturi Global Limited | 31500000 | 378.00 | 1.00 | 12.00 |
| 192 | KEI Industries Limited | 3000000 | 84.00 | 2.00 | 28.00 |
| 193 | Kemrock Industries and Exports Limited | 911268 | 328.06 | 10.00 | 360.00 |

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*Contd.*

| Sr. No. | Company Name | No. of Securities issued | Amount Raised (₹ In millions) | Par Value | Issue Price (₹) |
|---|---|---|---|---|---|
| 194 | Kohinoor Foods Limited | 720000 | 56.41 | 10.00 | 78.35 |
| 195 | Kopran Limited | 1850000 | 18.50 | 10.00 | 10.00 |
| 196 | Kotak Mahindra Bank Limited | 16400000 | 13661.20 | 10.00 | 833.00 |
| 197 | KSK Energy Ventures Limited | 26525714 | 5159.25 | 10.00 | 194.50 |
| 198 | Lanco Infratech Limited | 18418587 | 7273.50 | 10.00 | 394.90 |
| 199 | Larsen & Toubro Limited | 11286685 | 18728.00 | 2.00 | 1,659.30 |
| 200 | LG Balakrishnan & Bros Limited | 6 | 0.00 | 1.00 | 18.75 |
| 201 | LIC Housing Finance Limited | 10000000 | 6580.00 | 10.00 | 658.00 |
| 202 | Lloyds Steel Industries Limited | 20000000 | 200.00 | 10.00 | 10.00 |
| 203 | Lloyds Steel Industries Limited | 13000000 | 130.00 | 10.00 | 10.00 |
| 204 | LT Foods Limited | 3848485 | 254.00 | 10.00 | 66.00 |
| 205 | Lumax Auto Technologies Limited | 2000000 | 238.20 | 10.00 | 119.10 |
| 206 | Magma Fincorp Limited | 4067220 | 1224.23 | 10.00 | 301.00 |
| 207 | Mahindra & Mahindra Limited | 9395974 | 7000.00 | 10.00 | 745.00 |
| 208 | Mahindra Forgings Limited | 3000000 | 411.00 | 10.00 | 137.00 |
| 209 | Mahindra Forgings Limited | 16241300 | 1750.00 | 10.00 | 107.75 |
| 210 | Malwa Cotton Spg. Mills Limited | 550000 | 11.00 | 10.00 | 20.00 |
| 211 | Maral Overseas Limited | 19750000 | 197.50 | 10.00 | 10.00 |
| 212 | Mawana Sugars Limited | 4383561 | 160.00 | 10.00 | 36.50 |
| 213 | Max India Limited | 10326311 | 1500.00 | 2.00 | 145.26 |
| 214 | MIC Electronics Limited | 1860000 | 82.58 | 2.00 | 44.40 |
| 215 | Micro Technologies (India) Limited | 1840000 | 254.45 | 10.00 | 138.29 |
| 216 | Monnet Ispat Limited | 4300000 | 866.45 | 10.00 | 201.50 |
| 217 | Motilal Oswal Financial Services Limited | 989066 | 137.22 | 1.00 | 138.74 |
| 218 | Motilal Oswal Financial Services Limited | 984463 | 165.32 | 1.00 | 167.93 |
| 219 | MVL Industries Limited | 681702 | 9.94 | 10.00 | 14.58 |
| 220 | MVL Limited | 2828695 | 50.01 | 2.00 | 17.68 |
| 221 | MVL Limited | 469660 | 10.00 | 2.00 | 21.29 |
| 222 | Nagarjuna Fertilizer & Chemicals Limited | 375151 | 12.57 | 10.00 | 33.50 |
| 223 | NCC Limited | 27732900 | 3673.50 | 2.00 | 132.46 |
| 224 | NCL Industries Limited | 800000 | 36.00 | 10.00 | 45.00 |
| 225 | NCL Industries Limited | 1117652 | 50.29 | 10.00 | 45.00 |
| 226 | Nectar Lifesciences Limited | 26000000 | 910.00 | 1.00 | 35.00 |
| 227 | Network18 Media & Investments Limited | 8181818 | 900.00 | 5.00 | 110.00 |
| 228 | Network18 Media & Investments Limited | 9202650 | 1196.34 | 5.00 | 130.00 |
| 229 | Network18 Media & Investments Limited | 9000000 | 990.00 | 5.00 | 110.00 |
| 230 | Network18 Media & Investments Limited | 1000000 | 110.00 | 5.00 | 110.00 |
| 231 | Network18 Media & Investments Limited | 15762889 | 2049.18 | 5.00 | 130.00 |
| 232 | Nilkamal Limited | 2140181 | 600.00 | 10.00 | 280.35 |

*Contd.*

*Contd.*

| Sr. No. | Company Name | No. of Securities issued | Amount Raised (₹ In millions) | Par Value | Issue Price (₹) |
|---|---|---|---|---|---|
| 233 | Nissan Copper Limited | 14421000 | 201.89 | 10.00 | 14.00 |
| 234 | Nitin Spinners Limited | 5000000 | 50.00 | 10.00 | 10.00 |
| 235 | Omnitech Infosolutions Limited | 277794 | 45.98 | 10.00 | 165.51 |
| 236 | Omnitech Infosolutions Limited | 441416 | 73.06 | 10.00 | 165.51 |
| 237 | OnMobile Global Limited | 75862 | 33.03 | 10.00 | 435.39 |
| 238 | Opto Circuits (India) Limited | 270000 | 0.00 | 10.00 | 0.00 |
| 239 | Opto Circuits (India) Limited | 540000 | 194.40 | 10.00 | 360.00 |
| 240 | Opto Circuits (India) Limited | 567000 | 0.00 | 10.00 | 0.00 |
| 241 | Opto Circuits (India) Limited | 375000 | 78.75 | 10.00 | 210.00 |
| 242 | Opto Circuits (India) Limited | 21430484 | 4000.00 | 10.00 | 186.65 |
| 243 | Orbit Corporation Limited | 2000000 | 379.50 | 10.00 | 189.75 |
| 244 | Orbit Corporation Limited | 7840426 | 1450.48 | 10.00 | 185.00 |
| 245 | Orient Press Limited | 5000000 | 50.00 | 10.00 | 10.00 |
| 246 | Pantaloon Retail (India) Limited | 15100000 | 2763.30 | 2.00 | 183.00 |
| 247 | Pantaloon Retail (India) Limited | 5000000 | 915.00 | 2.00 | 183.00 |
| 248 | Pantaloon Retail (India) Limited | 15822200 | 4999.82 | 2.00 | 316.00 |
| 249 | Paramount Communications Limited | 2000000 | 26.00 | 2.00 | 13.00 |
| 250 | Parsvnath Developers Limited | 13856272 | 1680.07 | 10.00 | 121.25 |
| 251 | Patel Engineering Limited | 7218061 | 3443.23 | 1.00 | 477.03 |
| 252 | Phillips Carbon Black Limited | 4964376 | 992.88 | 10.00 | 200.00 |
| 253 | Pioneer Distilleries Limited | 800000 | 28.88 | 10.00 | 36.10 |
| 254 | Prajay Engineers Syndicate Limited | 8635084 | 168.38 | 10.00 | 19.50 |
| 255 | PSL Limited | 10750000 | 1493.18 | 10.00 | 138.90 |
| 256 | PTC India Limited | 66665600 | 4999.92 | 10.00 | 75.00 |
| 257 | Punj Lloyd Limited | 27900920 | 6701.80 | 2.00 | 240.20 |
| 258 | Punjab Chemicals & Crop Protection Limited | 600000 | 81.60 | 10.00 | 136.00 |
| 259 | PVR Limited | 2557000 | 421.91 | 10.00 | 165.00 |
| 260 | R. S. Software (India) Limited | 220000 | 4.29 | 10.00 | 19.50 |
| 261 | R. S. Software (India) Limited | 380000 | 7.41 | 10.00 | 19.50 |
| 262 | R. S. Software (India) Limited | 400000 | 7.80 | 10.00 | 19.50 |
| 263 | Radha Madhav Corporation Limited | 3490400 | 218.15 | 10.00 | 62.50 |
| 264 | Radha Madhav Corporation Limited | 2058000 | 128.63 | 10.00 | 62.50 |
| 265 | Radico Khaitan Limited | 28919000 | 3417.94 | 2.00 | 118.19 |
| 266 | Raj Rayon Industries Limited | 81500 | 0.82 | 10.00 | 10.00 |
| 267 | Raj Rayon Industries Limited | 899000 | 8.99 | 10.00 | 10.00 |
| 268 | Raj Rayon Industries Limited | 946500 | 9.47 | 10.00 | 10.00 |
| 269 | Rallis India Limited | 980000 | 890.34 | 10.00 | 908.51 |
| 270 | Ramkrishna Forgings Limited | 1100000 | 118.25 | 10.00 | 107.50 |
| 271 | Rana Sugars Limited | 3800000 | 43.70 | 10.00 | 11.50 |

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*Contd.*

| Sr. No. | Company Name | No. of Securities issued | Amount Raised (₹ In millions) | Par Value | Issue Price (₹) |
|---|---|---|---|---|---|
| 272 | Rana Sugars Limited | 3600000 | 41.40 | 10.00 | 11.50 |
| 273 | Rana Sugars Limited | 3500000 | 40.25 | 10.00 | 11.50 |
| 274 | Rana Sugars Limited | 6100000 | 70.15 | 10.00 | 11.50 |
| 275 | Rane Brake Lining Limited | 700000 | 35.00 | 10.00 | 50.00 |
| 276 | Rei Agro Limited | 29945550 | 1826.68 | 1.00 | 61.00 |
| 277 | Reliance Infrastructure Limited | 19600000 | 18206.24 | 10.00 | 928.89 |
| 278 | Resurgere Mines & Minerals India Limited | 65000000 | 812.50 | 1.00 | 12.50 |
| 279 | Rico Auto Industries Limited | 3270000 | 57.23 | 1.00 | 17.50 |
| 280 | RPG Life Sciences Limited | 700000 | 16.59 | 8.00 | 23.70 |
| 281 | Ruchi Soya Industries Limited | 30000000 | 1050.00 | 2.00 | 35.00 |
| 282 | Ruchi Soya Industries Limited | 21154000 | 740.39 | 2.00 | 35.00 |
| 283 | Ruchi Soya Industries Limited | 22746000 | 796.11 | 2.00 | 35.00 |
| 284 | S. Kumars Nationwide Limited | 6376195 | 150.03 | 10.00 | 23.53 |
| 285 | S. Kumars Nationwide Limited | 1666665 | 50.00 | 10.00 | 30.00 |
| 286 | S. Kumars Nationwide Limited | 13122400 | 1082.60 | 10.00 | 82.50 |
| 287 | S. Kumars Nationwide Limited | 28943750 | 2315.50 | 10.00 | 80.00 |
| 288 | Sabero Organics Gujarat Limited | 80000 | 1.42 | 10.00 | 17.75 |
| 289 | Sabero Organics Gujarat Limited | 1821681 | 32.33 | 10.00 | 17.75 |
| 290 | Sabero Organics Gujarat Limited | 2713424 | 48.16 | 10.00 | 17.75 |
| 291 | Sabero Organics Gujarat Limited | 56972 | 1.01 | 10.00 | 17.75 |
| 292 | Sathavahana Ispat Limited | 5525000 | 331.50 | 10.00 | 60.00 |
| 293 | Satyam Computer Services Limited | 302764327 | 17560.33 | 2.00 | 58.00 |
| 294 | Satyam Computer Services Limited | 198658498 | 11522.19 | 2.00 | 58.00 |
| 295 | SEL Manufacturing Company Limited | 1891000 | 349.84 | 10.00 | 185.00 |
| 296 | SEL Manufacturing Company Limited | 5700000 | 399.00 | 10.00 | 70.00 |
| 297 | Sesa Goa Limited | 33274000 | 5372.42 | 1.00 | 161.46 |
| 298 | Sezal Glass Limited | 800000 | 32.00 | 10.00 | 40.00 |
| 299 | Shiv-Vani Oil & Gas Exploration Services Limited | 2457895 | 934.00 | 10.00 | 380.00 |
| 300 | Shree Renuka Sugars Limited | 4000000 | 250.28 | 1.00 | 62.57 |
| 301 | Shree Renuka Sugars Limited | 18000000 | 2058.66 | 1.00 | 114.37 |
| 302 | Shree Renuka Sugars Limited | 36936840 | 5060.35 | 1.00 | 137.00 |
| 303 | Shreyans Industries Limited | 2750000 | 89.38 | 10.00 | 32.50 |
| 304 | Shri Lakshmi Cotsyn Limited | 778500 | 77.85 | 10.00 | 100.00 |
| 305 | Shri Lakshmi Cotsyn Limited | 1378500 | 137.85 | 10.00 | 100.00 |
| 306 | Shri Lakshmi Cotsyn Limited | 1975000 | 110.60 | 10.00 | 56.00 |
| 307 | Shri Lakshmi Cotsyn Limited | 843000 | 84.30 | 10.00 | 100.00 |
| 308 | Shriram City Union Finance Limited | 587500 | 235.00 | 10.00 | 400.00 |
| 309 | Shriram City Union Finance Limited | 662500 | 265.00 | 10.00 | 400.00 |
| 310 | Shriram City Union Finance Limited | 2000000 | 800.00 | 10.00 | 400.00 |

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*Contd.*

| Sr. No. | Company Name | No. of Securities issued | Amount Raised (₹ In millions) | Par Value | Issue Price (₹) |
|---|---|---|---|---|---|
| 311 | Shriram Transport Finance Company Limited | 8000000 | 2400.00 | 10.00 | 300.00 |
| 312 | Shriram Transport Finance Company Limited | 11658552 | 5838.60 | 10.00 | 500.80 |
| 313 | Simbhaoli Sugars Limited | 1604000 | 68.25 | 10.00 | 42.55 |
| 314 | Simplex Projects Limited | 600000 | 81.00 | 10.00 | 135.00 |
| 315 | Sobha Developers Limited | 25162135 | 5268.95 | 10.00 | 209.40 |
| 316 | Southern Petrochemicals Industries Corporation Limited | 6558676 | 118.06 | 10.00 | 18.00 |
| 317 | Southern Petrochemicals Industries Corporation Limited | 16666666 | 300.00 | 10.00 | 18.00 |
| 318 | Spentex Industries Limited | 2261000 | 38.32 | 10.00 | 16.95 |
| 319 | Spentex Industries Limited | 3842000 | 65.12 | 10.00 | 16.95 |
| 320 | Sree Rayalaseema Hi-Strength Hypo Limited | 266500 | 8.22 | 10.00 | 30.85 |
| 321 | Sri Adhikari Brothers Television Network Limited | 1925000 | 61.31 | 10.00 | 31.85 |
| 322 | Sri Adhikari Brothers Television Network Limited | 5050000 | 127.51 | 10.00 | 25.25 |
| 323 | Steel Strips Wheels Limited | 550000 | 57.75 | 10.00 | 105.00 |
| 324 | Sterlite Technologies Limited | 16125000 | 0.00 | 2.00 | 0.00 |
| 325 | Sterlite Technologies Limited | 16125000 | 419.25 | 2.00 | 26.00 |
| 326 | Strides Arcolab Limited | 2560000 | 233.34 | 10.00 | 91.15 |
| 327 | Strides Arcolab Limited | 420000 | 38.28 | 10.00 | 91.15 |
| 328 | Strides Arcolab Limited | 3220000 | 293.50 | 10.00 | 91.15 |
| 329 | Subex Limited | 4000000 | 320.00 | 10.00 | 80.00 |
| 330 | Sujana Metal Products Limited | 13000000 | 273.00 | 5.00 | 21.00 |
| 331 | Sujana Metal Products Limited | 15000000 | 315.00 | 5.00 | 21.00 |
| 332 | Sujana Metal Products Limited | 12000000 | 252.00 | 5.00 | 21.00 |
| 333 | Sujana Tower Limited | 1111111 | 40.00 | 5.00 | 36.00 |
| 334 | Sujana Tower Limited | 3200000 | 176.00 | 5.00 | 55.00 |
| 335 | Sujana Tower Limited | 10000000 | 550.00 | 5.00 | 55.00 |
| 336 | Sujana Tower Limited | 6000000 | 330.00 | 5.00 | 55.00 |
| 337 | Sujana Tower Limited | 1800000 | 99.00 | 5.00 | 55.00 |
| 338 | Sujana Universal Industries Limited | 6500000 | 81.25 | 10.00 | 12.50 |
| 339 | Sunteck Realty Limited | 2966207 | 1584.40 | 2.00 | 534.15 |
| 340 | Supreme Tex Mart Limited | 4807143 | 201.90 | 5.00 | 42.00 |
| 341 | Su-Raj Diamonds and Jewellery Limited | 18000000 | 776.16 | 10.00 | 43.12 |
| 342 | Surana Industries Limited | 3000000 | 450.00 | 10.00 | 150.00 |
| 343 | Surya Roshni Limited | 1830000 | 107.97 | 10.00 | 59.00 |
| 344 | Suryajyoti Spinning Mills Limited | 700000 | 11.20 | 10.00 | 16.00 |
| 345 | Talbros Automotive Components Limited | 410000 | 26.65 | 10.00 | 65.00 |
| 346 | Tanla Solutions Limited | 1479593 | 91.04 | 1.00 | 61.53 |
| 347 | Tantia Constructions Limited | 800000 | 71.30 | 10.00 | 89.12 |
| 348 | Tata Chemicals Limited | 11500000 | 3634.00 | 10.00 | 316.00 |
| 349 | Tata Steel Limited | 15000000 | 8910.00 | 10.00 | 594.00 |

*Contd.*

*Contd.*

| Sr. No. | Company Name | No. of Securities issued | Amount Raised (₹ In millions) | Par Value | Issue Price (₹) |
|---|---|---|---|---|---|
| 350 | Texmaco Limited | 16400000 | 1705.60 | 1.00 | 104.00 |
| 351 | The Dhampur Sugar Mills Limited | 1456804 | 228.44 | 10.00 | 156.81 |
| 352 | The Dhampur Sugar Mills Limited | 13803 | 3.19 | 10.00 | 231.30 |
| 353 | The India Cements Limited | 24594000 | 2956.20 | 10.00 | 120.20 |
| 354 | The Karnataka Bank Limited | 12115564 | 1608.34 | 10.00 | 132.75 |
| 355 | The Sirpur Paper Mills Limited | 877869 | 50.04 | 10.00 | 57.00 |
| 356 | TIL Limited | 300135 | 97.84 | 10.00 | 326.00 |
| 357 | Trigyn Technologies Limited | 1315000 | 24.74 | 10.00 | 18.81 |
| 358 | Ucal Fuel Systems Limited | 8217625 | 298.71 | 10.00 | 36.35 |
| 359 | Unitech Limited | 50000000 | 2537.50 | 2.00 | 50.75 |
| 360 | Unitech Limited | 59056781 | 2997.13 | 2.00 | 50.75 |
| 361 | Unitech Limited | 20000000 | 1015.00 | 2.00 | 50.75 |
| 362 | Unitech Limited | 421064935 | 16211.00 | 2.00 | 38.50 |
| 363 | Unitech Limited | 344361112 | 27893.25 | 2.00 | 81.00 |
| 364 | United Spirits Limited | 17681952 | 16156.00 | 10.00 | 913.70 |
| 365 | Unity Infraprojects Limited | 1449476 | 733.43 | 10.00 | 506.00 |
| 366 | Usha Martin Limited | 54500000 | 4681.55 | 1.00 | 85.90 |
| 367 | Vakrangee Softwares Limited | 1100000 | 77.00 | 10.00 | 70.00 |
| 368 | Valecha Engineering Limited | 650000 | 25.35 | 10.00 | 39.00 |
| 369 | Vardhman Polytex Limited | 2003000 | 79.18 | 10.00 | 39.53 |
| 370 | Videocon Industries Limited | 1858275 | 450.00 | 10.00 | 242.16 |
| 371 | Videocon Industries Limited | 7541300 | 1598.45 | 10.00 | 211.96 |
| 372 | Visesh Infotecnics Limited | 6300000 | 63.00 | 10.00 | 10.00 |
| 373 | Visesh Infotecnics Limited | 500000 | 5.00 | 10.00 | 10.00 |
| 374 | Websol Energy Systems Limited | 248000 | 37.20 | 10.00 | 150.00 |
| 375 | Websol Energy Systems Limited | 1000000 | 75.00 | 10.00 | 75.00 |
| 376 | Websol Energy Systems Limited | 2000000 | 454.00 | 10.00 | 227.00 |
| 377 | Welspun Corp Limited | 16694718 | 4662.00 | 5.00 | 279.25 |
| 378 | Welspun India Limited | 15603000 | 1560.30 | 10.00 | 100.00 |
| 379 | Welspun Projects Limited | 17178888 | 2113.00 | 10.00 | 123.00 |
| 380 | West Coast Paper Mills Limited | 3000000 | 135.00 | 2.00 | 45.00 |
| 381 | West Coast Paper Mills Limited | 2373578 | 115.00 | 2.00 | 48.45 |
| 382 | Yes Bank Limited | 38362709 | 10338.75 | 10.00 | 269.50 |

*Source : NSE*

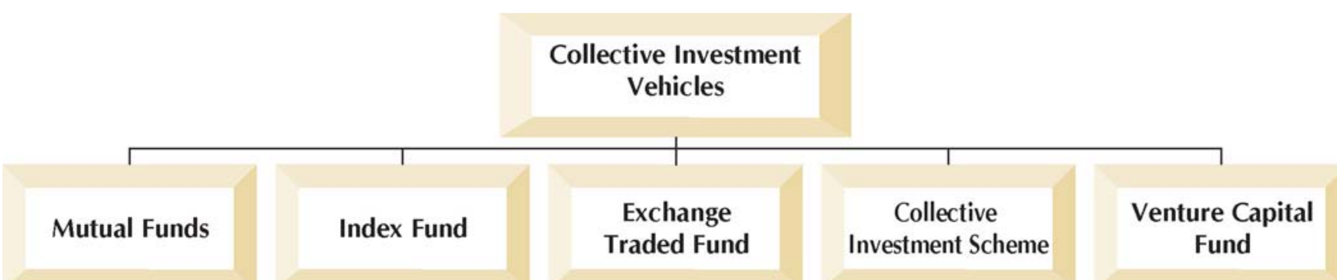
# Collective Investment Vehicles

## Introduction

A collective investment vehicle is any entity that allows investors to pool their money and invest the pooled funds, rather than buying securities directly as individuals. The most common types of collective investment vehicles are mutual funds, exchange traded funds, collective investment schemes and venture capital funds. The Collective Investment Scheme is well established in many jurisdictions and now serves as an investment vehicle for a wide range of investment opportunities around the world. The International Organization of Securities Commission (IOSCO) has, in its Report on Investment Management of the Technical Committee, defined the Collective Investment Schemes (CIS), as "an open ended collective investment scheme that issues redeemable units and invests primarily in transferable securities or money market instruments".

In India, there are five distinct categories of collective investment vehicles in operation namely, Mutual Funds (MFs), Index Fund, Exchange Traded Fund, Collective Investment Schemes (CIS) and Venture Capital Funds (VCFs) which mobilize resources from the market for investment purposes (chart 3-1). The developments in the year 2009-10 and April-September 2010 with respect to the above five different CIVs are discussed in this chapter.

**Chart 3-1: Collective Investment Vehicles**




## Mutual Funds

A mutual fund is a company that pools money from many investors and invests the money in stocks, bonds, short-term money-market instruments, other securities or assets, or some combination of these investments. Mutual Funds are essentially investment vehicles where people with similar investment objective come together to pool their money and then invest accordingly. SEBI defines mutual funds as 'A fund established in the form of a trust to raise money through the sale of units to the public or a section of the public under one or more schemes for investing in securities, including money market instruments or gold or gold related instruments or real estate assets. A Mutual Fund will have a fund manager who is responsible for investing the pooled money into specific securities (usually stocks and bonds). When you invest in a MF, you are buying shares (or portions) of the MF and become a shareholder of the fund. Mutual Funds (MFs) are considered a good route to invest and earn returns with reasonable safety. Some of the other major benefits of investing in them such as it provides various types of options of investing in various schems, diversification, professional Management, Liquidity, well Regulated, transparency, tax benefits and affordability factor.

In India, the Unit Trust of India (UTI), created in 1964 was the first MF in India. It enjoyed complete monopoly of MF business till 1986. The entry of non- UTI public sector mutual funds was set up by public sector banks and Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC) in 1987. SBI Mutual Fund was the first non-UTI Mutual Fund established in June 1987. The MF business was progressively opened to competition post 1988. This move gathered momentum after the adoption of economic liberalization in 1991 and the establishment of SEBI in 1992.

## Policy Developments for Mutual Funds during April-2009 to December-2010

Over the past years, SEBI has taken several policy measures to improve the mutual fund industry in India for investor protection, market development and effective regulation. The policy developments (from April 2009 to December 2010) pertaining to mutual funds are enumerated below.

### I. Physical verification of gold underlying the Gold ETF units to be reported to trustees on half yearly basis

SEBI, vide its circular dated December 06, 2010, has decided that physical verification of gold underlying the Gold ETF units shall be carried out by statutory auditors of mutual fund schemes. Such confirmation on physical verification of gold shall form part of the half yearly report by trustees to SEBI. This shall come into effect from the half yearly report ending April 2011 by trustees to SEBI.

### II. Amendments made in the SEBI (Mutual Fund) Regulations, 1996 related to interval schemes and uniform cut-off timings for applicability of NAV of mutual fund schemes

**A. Interval Schemes/Plans**

As per the existing regulation, there is no restriction on tenure of securities in which interval scheme can invest. This read with daily redemption option may result in asset liability mismatch. In line with the changes made in the SEBI (Mutual Funds) Regulations, 1996 regarding close ended schemes, SEBI has decided that, henceforth, for all interval schemes/plans

i. The units shall be mandatorily listed.

ii. No redemption/repurchase of units shall be allowed except during the specified transaction period (the period during which both subscription and redemption may be made to and from the scheme). The specified transaction period shall be of minimum 2 working days.

iii. Minimum duration of an interval period in an interval scheme/plan shall be 15 days.

iv. Investments shall be permitted only in such securities which mature on or before the opening of the immediately following specified transaction period.

In case of securities with put and call options the residual time for exercising the put option of the securities shall not be beyond the opening of the immediately following transaction period.

**B. Uniform cut-off timings for applicability of NAV of Mutual Fund Schemes**

It has been observed that mutual funds are deploying funds without receiving clear funds in the scheme account. As a matter of good practice and to avoid systemic risk, SEBI has decided to bring certain modifications to its circular dated October 11, 2006 as per the following details:

i) For determining the applicable NAV, the following cut-off timings shall be observed by a mutual fund in respect of purchase of units in liquid fund schemes and their plans, and the following NAVs shall be applied for such purchase:

- Where the application is received up to 2.00 p.m. on a day and funds are available for utilization before the cut-off time without availing any credit facility, whether, intra-day or otherwise – the closing NAV of the day immediately preceding the day of receipt of application;

- Where the application is received after 2.00 p.m. on a day and funds are available for utilization on the same day without availing any credit facility, whether, intra-day or otherwise – the closing NAV of the day immediately preceding the next business day ; and
- irrespective of the time of receipt of application, where the funds are not available for utilization before the cut-off time without availing any credit facility, whether, intra-day or otherwise – the closing NAV of the day immediately preceding the day on which the funds are available for utilization.

ii) For allotment of units in respect of purchase in liquid schemes, it shall be ensured that:

- Application is received before the applicable cut-off time.
- Funds for the entire amount of subscription/purchase as per the application are credited to the bank account of the respective liquid schemes before the cut-off time.
- The funds are available for utilization before the cut-off time without availing any credit facility whether intra-day or otherwise, by the respective liquid schemes.

iii) For allotment of units in respect of switch-in to liquid schemes from other schemes, it shall be ensured that:

- Application for switch-in is received before the applicable cut-off time.
- Funds for the entire amount of subscription/purchase as per the switch-in request are credited to the bank account of the respective switch-in liquid schemes before the cut-off time.
- The funds are available for utilization before the cut-off time without availing any credit facility whether intra-day or other wise, by the respective switch-in schemes.

With regard to SEBI circular dated October 24, 2008 which specifies the applicability of NAV for income/debt oriented mutual fund schemes/plans other than liquid schemes, SEBI has clarified that for determining the applicable NAV:

i) For allotment of units in respect of purchase in income/debt oriented mutual fund schemes/plans other than liquid schemes, it shall be ensured that:

- Application is received before the applicable cut-off time.
- Funds for the entire amount of subscription/purchase as per the application are credited to the bank account of the respective schemes before the cut-off time.
- The funds are available for utilization before the cut-off time without availing any credit facility whether intra-day or otherwise, by the respective scheme.

ii) For allotment of units in respect of switch-in to income/debt oriented mutual fund schemes/plans other than liquid schemes from other schemes, it shall be ensure that:

- Application for switch-in is received before the applicable cut-off time.
- Funds for the entire amount of subscription/purchase as per the switch-in request are credited to the bank account of the respective switch-in income/debt oriented mutual fund schemes/plans before the cut-off time.
- The funds are available for utilization before the cut-off time without availing any credit facility whether intra-day or otherwise, by the respective switch-in income/debt oriented mutual fund schemes/plans.

### III. Facilitating transactions in Mutual Fund schemes through the Stock Exchange infrastructure

a) In continuation to its permission to units of mutual fund schemes to be transacted through registered stock brokers of recognized stock exchanges in November 2009, SEBI, vide its circular dated November 9, 2010 has decided that units of mutual fund schemes may be permitted to be transacted through clearing members of the registered stock exchanges. Further, the capital market regulator has decided to permit Depository participants of registered Depositories to process only redemption request of units held in demat form. These steps are expected to provide more avenues for purchasing and redeeming Mutual Fund units, in addition to the existing facilities of purchasing and redeeming directly with the Mutual Funds and Stock Brokers.

b) With respect to investors having demat account and purchasing and redeeming mutual funds units through stock brokers and clearing members, SEBI has decided that investors shall receive redemption amount through broker/ clearing member's pool account. Further, payment of redemption proceeds to the broker/clearing members by MF/AMC (Asset Management Companies) shall discharge MF/AMC of its obligation of payment to individual investor. Similarly, in case of purchase of units, crediting units into broker/clearing member pool account shall discharge MF/AMC of its obligation to allot units to individual investor.

### IV. Consolidation or merger of schemes

To facilitate merger of schemes, SEBI, vide its circular dated October 22, 2010, has decided that merger or consolidation shall not be seen as change in fundamental attribute of the surviving scheme if:

a) Mutual funds are able to demonstrate that the circumstances merit merger or consolidation of schemes and the interest of the unit holders of surviving scheme is not adversely affected.

b) Fundamental attributes of the surviving scheme as per the SEBI circular dated February, 1998 do not change.

### V. Transferability of mutual fund units

To facilitate transferability of units of mutual funds held in one demat account to another demat account, SEBI vide its circular dated August 18, 2010 has decided that all AMCs shall clarify by way of an addendum that units of all mutual fund schemes held in demat form shall be freely transferable from the date of the issue of said addendum by October 1, 2010. For units of ELSS schemes, however, restrictions on transfer during the lock-in period shall continue to be applicable as per the ELSS guidelines.

### VI. Review of norms for investment and disclosure by mutual funds in derivatives

In order to have prudential limits for derivative investments by mutual funds and to bring in transparency and clarity in the disclosure of the same to investors, SEBI vide their circular dated August 18, 2010 notified modifications on investment in derivatives by mutual funds and disclosures thereof in half yearly portfolio statement.

**Exposure Limits**

I. The cumulative gross exposure through equity, debt and derivative positions should not exceed 100% of the net assets of the scheme.

II. Mutual Funds should not write options or purchase instruments with embedded written options.

III. The total exposure related to option premium paid must not exceed 20% of the net assets of the scheme.

IV. Cash or cash equivalents with residual maturity of less than 91 days may be treated as not creating any exposure.

V. Exposure due to hedging positions may not be included in the above mentioned limits subject to the following

   a. Hedging positions are the derivative positions that reduce possible losses on an existing position in securities and till the existing position remains.

   b. Hedging positions cannot be taken for existing derivative positions. Exposure due to such positions shall have to be added and treated under limits mentioned in point 1.

   c. Any derivative instrument used to hedge has the same underlying security as the existing position being hedged.

d. The quantity of underlying associated with the derivative position taken for hedging purposes does not exceed the quantity of the existing position against which hedge has been taken.

VI. Mutual funds may enter into plain vanilla interest rate swaps for hedging purposes. The counter party in such transactions has to be an entity recognized as a market maker by RBI. Further, the value of the notional principal in such cases must not exceed the value of respective existing assets being hedged by the scheme. Exposure to a single counterparty in such transactions should not exceed 10% of the net assets of the scheme.

VII. Exposure due to derivative positions taken for hedging purposes in excess of the underlying position against which the hedging position has been taken, shall be treated under the limits mentioned in point 1.

**Definition of Exposure in Case of Derivative Positions**

VIII. Each position taken in derivatives shall have an associated exposure as defined under. Exposure is the maximum possible loss that may occur on a position. However, certain derivative positions may theoretically have unlimited possible loss. Exposure in derivative positions shall be computed as follows:

| Position | Exposure |
|---|---|
| Long Future | Futures price * Lot Size * Number of Contracts |
| Short Future | Futures price * Lot Size * Number of Contracts |
| Option bought | Option Premium Paid * Lot Size * Number of Contracts |

IX. Since the disclosures currently made in the half yearly portfolio disclosure, annual report or in any other disclosures are not uniform across the industry, relevant formats of reports are prescribed under the circular IMD/DF/11/2010.

X. Further, while listing net assets, the margin amounts paid should be reported separately under cash or bank balances.

All the above provisions would be applicable for all new schemes launched after August 18, 2010. For all existing schemes, compliance with the circular would be effective from October 01, 2010.

## VII. Updation of investor related documents

SEBI, vide its circular dated December 11, 2009 had advised all mutual funds to confirm the availability of all the investor related document with them. SEBI, however, has not received any such confirmation and has observed that due to such incomplete documentation, investors' rights to approach the AMCs directly are restricted and investors are forced to depend on the distributors for executing any financial or non-financial transactions. With an aim to ensure investors have unrestricted access to AMCs and to enable AMCs to provide prompt investor service including execution of investors' financial or non-financial transactions, SEBI has directed all mutual funds/AMCs that all investor related documents shall be obtained before opening up of any new folio/account and for existing folios, AMCs shall be responsible for updation of the investor related documents.

## VIII. Changes in the SEBI Mutual Funds Regulations 1996

SEBI, vide its circular dated March 15, 2010, has made the following modifications in SEBI (Mutual Funds) Regulations, 1996:

- In order to standardize the disclosures on brokerage and commission paid to associates/related parties/group companies of sponsor/Asset Management Company in the unaudited half-yearly financial results, these disclosures shall henceforth be made in the following format:

**Brokerage paid to associates/related parties/group companies of sponsor/AMC**

| Name of associate/ related parties/group companies of sponsor/ AMC | Nature of Association/Nature of relation | Period covered* | Value of transaction (in ₹ Cr. & % of total value of transaction of the fund) | | Brokerage (₹ Cr. &% of total brokerage paid by the fund) | |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |

**Commission paid to associates/related parties/group companies of sponsor/AMC**

| Name of associate/ related parties/ group companies of sponsor/AMC | Nature of Association/ Nature of relation | Period covered* | Business given (₹ Cr. & % of total business received by the fund) | | Commission paid (₹ Cr. & % of total commission paid by the fund) | |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |

- In its persistent endeavour to make the public issue process efficient, SEBI has decided to provide Application Supported by Blocked Amount (ASBA) facility to the investors subscribing to New Fund Offers (NFOs) of mutual fund schemes. It shall co-exist with the current process, wherein cheques/demand drafts are used as a mode of payment. The Mutual Funds/AMCs have to compulsorily provide ASBA facility to the investors for all NFOs launched on or after July 01, 2010. However, in partial modification to the afore mentioned deadline, SEBI, vide its circular dated July 28, 2010 has decided that mutual funds/AMCs shall provide ASBA facility to investors for all NFOs launched on or after October 1, 2010.

- SEBI has decided to reduce the NFO period to 15 days in order to make NFO process efficient. The NFO period in case of ELSS, however, shall continue to be governed by guidelines issued by government of India. Mutual Funds/AMCs shall make investment out of the NFO proceeds only on or after the closure of the NFO period. The reduction in NFO period shall be application for all NFOs launched on or after July 01, 2010.

  Regarding initial offer period and time taken for allotment of units and dispatch of accounts statements, SEBI has decided that the present limit of maximum period of 30 days in case of open ended schemes and 45 days of close ended scheme shall be reduced to 15 days (except ELSS schemes). The mutual fund should allot units/refund of money and dispatch statements of accounts within five business days from the closure of the NFO and within five business days of allotment, all the schemes (except ELSS) shall be available for ongoing repurchase/sale/trading.

- In order to enable mutual funds to play an active role in ensuring better corporate governance of listed companies, SEBI has decided that, starting from the financial year 2010-11, AMCs shall disclose their general policies and procedures for exercising the voting rights in respect of shares held by them on the website of respective AMC as well as in the annual report distributed to the unit holders. Further, AMCs are also required to disclose the actual exercise of their proxy votes in the AGMs/EGMs of the investee companies in respect of various matters, such as corporate governance matters, changes to capital structure, stock option plans and other management compensation issues, social and corporate responsibility issues, appointment and removal of directors and any other issue that may affect the interest of the shareholders in general and interest of the unit-holders in particular. Such disclosure of voting by mutual funds in general meetings of listed companies shall be done in the following format:

**Management Proposals**

| Date | Type of Meeting (AGM / EGM) | Proposal | Management Recommendation | Vote (For / Against / Abstain) |
|---|---|---|---|---|
| | | | | |
| | | | | |

**Shareholder Proposals**

| Date | Type of Meeting (AGM / EGM) | Proposal | Management Recommendation | Vote (For / Against / Abstain) |
|---|---|---|---|---|
| | | | | |
| | | | | |

- Consequent to SEBI's decision in June 2009 regarding the abolition of entry load for all mutual fund schemes, it has further clarified that AMCs shall not collect any additional management fees referred to in Regulation 52(3) of SEBI Mutual Funds Regulation, 1996.
- From the disclosures in the scheme information documents (SID), some conflict of interest has been observed as AMCs have been entering into revenue sharing arrangements with offshore funds in respect of investments made on behalf of Fund of Fund schemes. SEBI has decided that henceforth AMCs shall not enter into any revenue sharing arrangement with the underlying funds in any manner and shall not receive any revenue from the underlying fund. Any commission or brokerage received from the underlying fund shall be credited into concerned scheme's account.

### IX. Certification programme for sale and/or distribution of mutual fund products

SEBI, vide its circular dated May 31st, 2010, has decided that the following category of persons i.e., distributors, agents or any persons associated in the sale and distribution of mutual fund products, shall be required to pass the certification examination from the National Institute of Securities Markets (NISM). The said associated persons shall be exempted from the requirement of NISM certification examination if they possess a valid certificate of the AMFI mutual fund (Advisors) module by passing before June 01, 2010. Further, SEBI, vide its circular dated June 24, 2010 has decided that a person holding a valid AMFI certification whose validity expires between June 01, 2010 December 31, 2010, would be required to comply with the Continuing Professional Education (CPE) requirements as laid down by NISM. An associated person holding a valid AMFI/NISM certification whose validity expires anytime after December 31, 2010, would be required to comply with these CPE requirements prior to the expiry of the validity of the certification.

### X. Disclosure of investor complaints with respect to Mutual Funds

Transparency in 'grievance redressal' has been identified as a key area to enhance investor protection in view of investors' feedback to improve transparency in the grievance redressal mechanism. SEBI, vide its circular dated May 13, 2010, has decided that mutual funds shall disclose details of investor complaints received by them from all sources on their websites, on the AMFI website as well as in their Annual Reports. All the complaints have been classified into four categories, such as delay/non-receipt of money, statement of account/unit certificate/annual report, service related and others. Accordingly, mutual funds were advised to upload the report for the year 2009-10 by June 30, 2010 and report for following financial years within 2 months of the close of the financial year.

### XI. Standard warning in Advertisements by Mutual Funds

As per the current guidelines pertaining to the advertisements of mutual funds through audio-visual media like television, a standard warning statement *"Mutual Fund investments are subject to market risks, read the offer document carefully* *before investing"* is required to be displayed on the screen for at least 5 seconds and be accompanied by a voice over reiteration.

It has however, been observed by SEBI that in some cases the visual and voice over were run for less than 5 seconds, or if the visual stayed for 5 seconds the voice over either started late or ended early or both. In some cases extra words were inserted in the visual and voice over. As a result, the warning was rendered unintelligible to the viewer/listener.

In an endeavour to improve the manner in which the said message is conveyed to the investors; vide SEBI circular dated February 4, 2010 the mutual funds were informed that the following changes relating to the standard warning would be made effective from May 01, 2010:

i. The standard warning in audio-visual advertisement shall be displayed as *"Mutual Fund investments are subject to market risks, read all scheme related documents carefully"*.

ii. No addition or deletion of words shall be made in the standard warning.

This was in continuation to the SEBI circulars issued in June 2003 and February 2008. Through the SEBI circular dated June 26, 2003, it was mentioned that visual is to be accompanied by voice over and therefore to strengthen this norm, it was again re-emphasized that both the visual and the voice over of the standard warning will be run for at least 5 seconds.

### XII. Valuation of debt and money market instruments

Pursuant to the discussions by the advisory committee of mutual funds regarding valuation methodology of debt and money market instruments, it was decided that the value of money market and debt securities in the portfolio of mutual fund schemes should reflect the current market scenario. Accordingly, the provisions regarding valuation of these securities were modified as follows and conveyed to all the asset management companies vide SEBI circular dated February 2, 2010. This would be effective from July 1, 2010.

- All money market and debt securities, including floating rate securities, with residual maturity of up to 91 days shall be valued at the weighted average price at which they are traded on the particular valuation day. When such securities are not traded on a particular valuation day they shall be valued on amortization basis. In case of floating rate securities with floor and caps on coupon rate and residual maturity of up to 91 days, valuation would be done on amortization basis taking the coupon rate as floor.

- All money market and debt securities, including floating rate securities, with residual maturity of over 91 days shall be valued at weighted average price at which they are traded on the particular valuation day. When such securities are not traded on a particular valuation day they shall be valued at benchmark yield/ matrix of spread over risk free benchmark yield obtained from agency(ies) entrusted for the said purpose by AMFI.

- In case securities purchased by mutual funds do not fall within the current framework of the valuation of securities then such mutual fund shall report immediately to AMFI regarding the same. Further, at the time of investment AMCs shall ensure that the total exposure in such securities does not exceed 5% of the total AUM of the scheme. AMFI has been advised that the valuation agencies should ensure that the valuation of such securities gets covered in the valuation framework within six weeks from the date of receipt of such intimation from mutual fund. In the interim period, till AMFI makes provisions to cover such securities in the valuation of securities framework, the mutual funds shall value such securities using their proprietary model which has been approved by their independent trustees and the statutory auditors.

- Further, through this circular all mutual funds were notified to provide transaction details, including inter scheme transfers, of money market and debt securities on daily basis to the agency entrusted for providing the benchmark yield/ matrix of spread over risk free benchmark yield. Submission of data would help in daily matrix generation and would improve uniformity and accuracy of valuation in the mutual funds industry.

Methodology for matrix of spread for marking Benchmark yield—in the methodology for pricing the (non-traded securities as per the existing circulars) additional duration viz. 0.25-0.5 years would be provided.

It was decided to make the aforesaid valuation applicable with effect from July 1, 2010. However, in partial modification to the earlier deadline, SEBI, vide its circular dated June 21, 2010, has decided that the aforesaid valuation would be applicable w.e.f. August 1, 2010.

## XIII. Changes and new additions made to SEBI Mutual Funds Regulations 1996

Vide SEBI circular dated December 15, 2009 following modifications were made in SEBI Mutual funds Regulations 1996.

- Sub-clause (a) of Regulation 53 of SEBI (Mutual Funds) Regulations, 1996 requires asset management companies to dispatch dividend warrants within 30 days of the declaration of the dividend. It was clarified that, in the event of failure of dispatch of dividend within the stipulated 30 day period, the AMC(s) shall be liable to pay interest @15 per cent per annum to the unit holders. This is a new clause which was inserted.

Below the format for statement of interest paid to the investors for delays in despatch of redemption / repurchase warrants, the following table on statement of interest paid to the investors for delays in dispatch of dividend would be inserted. This statement has to be sent to SEBI along with the Compliance Test Report(s)

| Name of the Investor | Date of Dividend Declaration | Date of Despatch of Dividend | Period of Delay | Amount of Interest Paid (₹) |
|---|---|---|---|---|
| | | | | |

- Under the guidelines for participation by Mutual Funds in Stock Lending Scheme, the clause pertaining to valuation of collateral securities was deleted and mutual funds were required to comply with guidelines issued in this regard by SEBI/ Stock Exchange from time to time
- Under 'Maintenance of Records', the following was inserted at the end of the paragraph: "......within 21 days from the date of closure of the exit option"
- For launching additional plans in existing open ended schemes, mutual funds shall comply with the following provisions:
  - a. Additional plans sought to be launched under existing open ended schemes which differ substantially from that scheme in terms of portfolio or other characteristics shall be launched as separate schemes in accordance with the regulatory provisions.
  - b. However, plan(s) which are consistent with the characteristics of the scheme may be launched as additional plans as part of existing schemes by issuing an addendum. Such proposal should be approved by the Board(s) of AMC and Trustees. Further:
    - i. The addendum shall contain information pertaining to salient features like applicable entry/exit loads, expenses or such other details which in the opinion of the AMC/ Trustees is material. The addendum shall be filed with SEBI 21 days in advance of opening of plan(s).
    - ii. AMC(s) shall publish an advertisement or issue a press release at the time of launch of such additional plan(s).
- The tenure of *'10 calendar days'* as stipulated in Clause 1.5 under prior approval of personal investment transactions was replaced with *'7 calendar days'*.
- The tombstone of advertisement can only give basic information about a:
  - (i) Mutual fund registered with SEBI whose Statement of Additional Information is filed with SEBI and has been uploaded on its website; or
  - (ii) scheme which is already launched and is in existence and whose Scheme information document is available.

- Issue of advertisements or distribution of sales literature must be accompanied or preceded by issue of SID and SAI, unless stated otherwise
- Pertaining to use of rankings in advertisements and sales literature, the concept of "current standardized yield" was replaced with "compounded annualized yield".
- Mutual Funds while advertising simple annualized returns of such schemes based on a period of 30 days can also advertise simple annualized returns based on 15 day or 7 day period.

### XIV. Transactions through some mutual fund distributors and compliance with the SEBI circular on AML

In terms of the SEBI master circular dated December 19, 2008 issued to all registered intermediaries on "Anti Money Laundering (AML) Standards/Combating Financing of Terrorism (CFT) / Obligations of Securities Market Intermediaries under Prevention of Money Laundering Act, 2002 and Rules framed there-under", it was prescribed that it would be the responsibility of the intermediaries to ensure customer due diligence by obtaining sufficient information to identify persons, have a policy in place for acceptance of clients and client identification procedure, monitoring of transactions etc.

It was brought to the attention of SEBI, that all documentation related to the investor including Know your Client, Power of Attorney (PoA) in respect of transactions / requests made through some mutual fund distributors is not available with the AMC/ RTA of the AMC and that the same is stated to be maintained by the respective distributors.

Thus, it was reiterated that the requirements as mentioned in the master circular dated December 19, 2008 issued by SEBI was applicable to the Mutual Funds/ AMCs and hence maintaining all the documentation pertaining to the unit holders/investor is the responsibility of the AMC.

Therefore vide SEBI Circular dated December 11, 2009, all the mutual funds and asset management companies were advised to confirm whether all the investor related documents are maintained/ available with them. If not, and to the extent of and relating to such investor accounts/folios where investor related documentation is incomplete/inadequate/ not available, then the trustees of the mutual funds were advised to ensure the following:

a. No further payment of any commissions, fees and / or payments in any other mode should be made to such distributors till full compliance/ completion of the steps enumerated.

b. Take immediate steps to obtain all investor/ unit holders documents in terms of the AML/ CFT, including KYC documents / PoA as applicable

c. Take immediate steps to obtain all supporting documents in respect of the past transactions.

d. On a one time basis, send statement of holdings and all transactions since inception of that folio in duplicate to the investor and seek confirmation from the unit holders on the duplicate copy.

e. Set up a separate customer services mechanism to handle/ address queries and grievance of the above mentioned unitholders.

f. Pending completion of documentation, exercise great care and be satisfied of investor bonafides before authorizing any transaction, including redemption, on such accounts / folios.

g. The trustees shall forthwith confirm to SEBI that the steps have been taken to address the above and also send a status to SEBI as and when process is completed to satisfaction.

### XV. Facilitating transactions in mutual fund schemes through the stock exchange infrastructure

The need for enhancing the reach of mutual fund schemes to more towns and cities has been aired through various forums/ channels. To address this issue, various models have been debated and discussed. The infrastructure that already exists for the secondary market transactions through the stock exchanges with its reach to over 1500 towns and cities, through over 200,000 stock exchange terminals can be used for facilitating transactions in mutual fund schemes. The stock exchange mechanism would also extend the present convenience available to secondary market investors to mutual fund investors.

Vide SEBI circular dated November 13, 2009 it was stated that the units of mutual fund schemes may be permitted to be transacted through registered stock brokers of recognized stock exchanges and such stock brokers will be eligible to be considered as official points of acceptance as per SEBI circular dated October 11, 2006.

The respective stock exchange would provide detailed operating guidelines to facilitate the same. In this regard, SEBI advised the following:

**i. Empanelment and monitoring of Code of Conduct for brokers acting as mutual fund intermediaries**

The stock brokers intending to extend the transaction in mutual funds through stock exchange mechanism shall be required to comply with the requirements specified in SEBI circular dated September 25, 2001 regarding passing the AMFI certification examination. All such stock brokers would then be considered as empanelled distributors with mutual fund/AMC.

These stock brokers would be required to comply with the requirements in SEBI circulars dated June 26, 2002, November 28, 2002 and August 27, 2009, applicable to intermediaries engaged in selling and marketing of mutual fund units.

It was clarified that, stock exchanges would monitor the compliance of the code of conduct specified in the SEBI circular dated November 28, 2002 regarding empanelment of intermediaries by mutual funds.

**ii. Time stamping**

Time stamping as evidenced by confirmation slip given by stock exchange mechanism to be considered sufficient compliance with clause 5, 6 and 8 of SEBI Circular dated October 11, 2006.

**iii. Statement of Account**

Where investor desires to hold units in dematerialised form, demat statement given by depository participant would be deemed to be in adequate compliance with requirements prescribed under regulation 36 of SEBI (Mutual Fund) Regulations, 1996, and SEBI circulars dated November 24, 2000 and November 20, 2006 regarding despatch of statements of account.

**iv. Investor grievance mechanism**

Stock exchanges would have to provide for investor grievance handling mechanism to the extent they relate to disputes between brokers and their client.

**v. Dematerialization of existing units held by investors**

In case investors desire to convert their existing physical units (represented by statement of account) into dematerialized form, mutual funds / AMCs shall take such steps in coordination with Registrar and Transfer Agents, Depositories and Depository participants (DPs) to facilitate the same.

**vi. Know your client (KYC)**

Where investor desires to hold units in dematerialised form, the KYC should be performed by DP in terms of SEBI circular dated August 24, 2004 and this should be considered in compliance with applicable requirements specified in this regard in terms of SEBI circular dated December 19, 2008 by mutual funds /AMCs.

Stock exchanges and mutual funds/AMCs, based on the experience gained may further improve the mechanism in the interest of investors.

Consequent to this market development, NSE introduced the Mutual Fund Service System (MFSS) on November 30, 2009 and BSE introduced its Star MF on December 5, 2009.

### XVI. Statement of Additional Information (SAI) & Scheme Information Document (SID) to be made available on SEBI website

Vide SEBI Circular dated September 29, 2009 it was informed to all the mutual funds and the Asset Management Companies (AMCs) that henceforth AMCs would be required to submit a soft copy of SAI within 7 days from September 29, 2009 and a soft copy of SIDs along with printed/final copy two working days prior to the launch of the scheme. Soft copies of these documents are required to be submitted to SEBI in PDF format.

Mutual Funds would be required to update the SID and SAI in terms of clause 5 and clause 6 of SEBI circular dated May 23, 2008. A soft copy of updated SAI and SID is required to be filed with SEBI in PDF format within 7 days along with a printed copy of the same.

Further, in continuation with the current practice of uploading the SAI on AMFI website, AMCs would also be required to upload the soft copy of SID on AMFI website two working days prior to the launch of the scheme. AMC would also have to submit an undertaking to SEBI while filing the soft copy of the aforementioned documents certifying that information contained in the soft copy of SID and SAI (as applicable) to be uploaded on SEBI website is current and relevant and matches exactly with the contents of the hard copy. Further, AMCs would be fully responsible to the content of the soft copy of SID and SAI.

### XVII. Systems audit of mutual funds

Considering the importance of systems audit in the technology driven asset management activity, it has been decided by SEBI vide circular dated September 16, 2009, that mutual funds would have a systems audit conducted by an independent CISA/CISM* qualified or equivalent auditor. The systems audit should be comprehensive encompassing audit of systems and processes inter alia related to examination of integration of front office system with the back office system, fund accounting system for calculation of net asset values, financial accounting and reporting system for the AMC, Unit-holder administration and servicing systems for customer service, funds flow process, system processes for meeting regulatory requirements, prudential investment limits and access rights to systems interface.

Accordingly, mutual funds were advised to get the above systems audit conducted once in two years and to place the Systems Audit Report and compliance status before the Trustees of the mutual fund. The systems audit report/findings along with trustee comments should be communicated to SEBI. For the financial years April 2008 – March 2010, the systems audit deadline was kept as September 30, 2010.

### XVIII. New code of conduct for mutual funds

Vide SEBI circular dated August 27, 2009 the new code of conduct for mutual funds was made applicable from August 2009 onwards.

### XIX. Exit load - Parity among all classes of unit holders

Vide SEBI circular dated May 23, 2008 SEBI has simplified the formats for Offer Document and Key Information Memorandum of Mutual Funds Scheme. The simplified Scheme Information Document format provides that "Wherever quantitative discounts are involved the following shall be disclosed – The Mutual Fund may charge the load within the stipulated limit of 7% and without any discrimination to any specific group of unit holders. However, any change at a later stage shall not affect the existing unit holders adversely."

It was observed that the mutual funds were making distinction between the unit holders by charging differential exit loads based on the amount of subscription. In order to have parity among all classes of unit holders, vide SEBI Circular dated August 7, 2009 it was decided that no distinction among unit holders should be made based on the amount of subscription while charging exit loads.

Then vide SEBI circular dated August 17, 2009 it was conveyed to all the mutual funds that they are expected to ensure compliance with the aforesaid circular on or before August 24, 2009. It was also informed that while complying with above, it should also be ensured that the principle laid down in the SEBI circular dated May 23, 2008 (clause 16 of the

* CISA: Certified Information System Auditor
CISM: Certified Information Security Manager

standard observations) that "any imposition or enhancement in the load shall be applicable on prospective investments only" should be followed and the parity among all classes of unit holders in terms of charging exit load should be made applicable at the portfolio level.

### XX. Mutual Funds – empowering investors through transparency in payment of commission and load structure

SEBI has been taking various steps to empower the investors in mutual funds by way of more transparency in the loads borne by the investor so that the investor can take informed investment decisions. Towards this end, SEBI had earlier abolished initial issue expenses and mutual fund schemes were allowed to recover expenses connected with sales and distribution through entry load only. Further, investors making direct applications to the mutual funds were exempted from entry load.

In terms of existing arrangement, though the investor pays for the services rendered by the mutual fund distributors, distributors are remunerated by Asset Management Companies (AMCs) from loads deducted from the invested amounts or the redemption proceeds. SEBI (Mutual Funds) Regulations, 1996 also permit AMCs to charge the scheme (under the annual recurring expense) for marketing and selling expenses including distributor's commission.

Further, all loads including Contingent Deferred Sales Charge (CDSC) for the scheme are maintained in a separate account and this amount is used by the AMCs to pay commissions to the distributors and to take care of other marketing and selling expenses. It has been left to the AMCs to credit any surplus in this account to the scheme, whenever felt appropriate. In order to incentivise long term investors it is considered necessary that exit loads/CDSCs which are beyond reasonable levels are credited to the scheme immediately.

In order to empower the investors in deciding the commission paid to distributors in accordance with the level of service received, to bring about more transparency in payment of commissions and to incentivize long term investment, it has been decided that:

a) There would be no entry load for all mutual fund schemes.

b) The scheme application forms should carry a suitable disclosure to the effect that the upfront commission to distributors will be paid by the investor directly to the distributor, based on his assessment of various factors including the service rendered by the distributor.

c) Of the exit load or CDSC charged to the investor, a maximum of 1% of the redemption proceeds shall be maintained in a separate account which can be used by the AMC to pay commissions to the distributor and to take care of other marketing and selling expenses. Any balance shall be credited to the scheme immediately.

d) The distributors should disclose all the commissions (in the form of trail commission or any other mode) payable to them for the different competing schemes of various mutual funds from amongst which the scheme is being recommended to the investor.

Vide circular dated June 30, 2009 it was brought to the notice of all the mutual funds that this would be applicable for following cases from August 1, 2009:

- Investments in mutual fund schemes (including additional purchases and switch-in to a scheme from other schemes),
- Redemptions from mutual fund schemes (including switch-out from other schemes);
- New mutual fund schemes launched on and after August 1, 2009;
- Systematic Investment Plans (SIP) registered on or after August 1, 2009.

### XXI. Guidelines for Investment by Mutual Funds in Money Market Instruments

Vide SEBI circular dated June 15, 2009 it was clarified that in case of the existing schemes where the investments in money market instruments of an issuer are not in compliance with the said notification, AMC should ensure compliance within a period of 3 months from the date of notification i.e. June 15, 2009.

### XXII. Guidelines for investment by mutual funds in Indian Depository Receipts (IDRs)

In terms of regulation 43(1) of SEBI (Mutual Funds) Regulations 1996 mutual funds are permitted to invest in securities. Vide circular dated June 9, 2009- it was clarified that mutual funds can invest in Indian Depository Receipts [Indian Depository Receipts as defined in Companies (Issue of Indian Depository Receipts) Rules, 2004] subject to compliance with SEBI (Mutual Funds) Regulations 1996 and guidelines issued there under, specifically investment restrictions as specified in the Seventh Schedule of the Regulations.

### XXIII. Valuation of debt securities by mutual fund

It was brought to notice of SEBI by AMFI and CRISIL that the current valuation methodology for mutual fund allowed the discretion of -50 basis points (bps) to +100 bps to account for the risks was inadequate as debt securities of similar maturity and credit rating are being traded over wide range of yields. With a view to ensure that the value of debt securities reflects the current market scenario in calculation of net asset value, it was decided to increase the discretion permitted.

Thus, through SEBI circular dated October 18, 2008, SEBI circulars dated September 18, 2000 and February 20, 2002 pertaining to valuation norms for Mutual funds were modified. The discretion of -50 basis points (bps) to +100 bps given to fund managers to value debt securities was found inadequate in the market scenario in October, 2008. With a view to ensure that the value of debt securities reflects the true fundamentals the discretion was modified as under:

| **Rated Instruments** | **Initial (Before October 2008)** | | **Changed (After October 18, 2008)** | |
|---|---|---|---|---|
| | + | - | + | - |
| Duration of up to 2 years | 100 bps | 50 bps | 500 bps | 150 bps |
| Duration over 2 years | 75 bps | 25 bps | 400 bps | 100 bps |
| **Unrated Instruments** | **Initial** | | **Changed** | |
| Duration of up to 2 years | Discretionary discount of up to +50 bps over and above mandatory discount of +50 bps | | Discretionary discount of up to +450 bps over and above mandatory discount of +50 bps | |
| Unrated instruments with duration over 2 years | Discretionary discount of up to +50 bps over and above mandatory discount of +25 bps | | Discretionary discount of up to +375 bps over and above mandatory discount of +25 bps | |

However, with a view to ensure that the value of debt securities reflects the current market scenario in calculation of net asset value, it was further decided that discretionary mark up and mark down shall be brought to the level as detailed in SEBI circulars dated September 18, 2000 and February 20, 2002. Accordingly, the discretionary mark up and mark down in case of rated debt securities and unrated securities were restored back as it was prior to October 18, 2008. This was conveyed to all the mutual funds vide SEBI circular dated June 12, 2009.

Further, it was also decided that:

- For valuation of securities purchased after June 12, 2009, the discretionary mark up or down limit, as detailed above, should be applied.
- For cases where on June 12, 2009, the increased discretionary mark up or down limit was being used, was supposed to be brought back to the proposed levels as detailed above within a period of two months.
- Chief Executive Officer (whatever his designation may be) of the Asset Management Company shall give prior approval to the use of discretionary mark up or down limit.

## Market Design of Mutual Funds

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|---|---|
| **Mutual Fund** | Mutual Fund means a fund established in the form of trust to raise money through the sale of units to the public or a section of the public under one or more schemes for investing in securities including money market instruments or gold related instruments or real estate assets. |
| **STRUCTURE OF MUTUAL FUNDS:** A typical MF in India has the following constituents: | |
| **Fund Sponsor** | A 'sponsor' is a person who, acting alone or in combination with another body corporate, establishes a MF. The sponsor should have a sound financial track record of over five years, have a positive net worth in all the immediately preceding five years and integrity in all his business transactions. In case of an existing MF, such fund which is in the form of a trust and the trust deed has been approved by the Board; the sponsor should contribute at least 40% of the net worth of the AMC (provided that any person who holds 40% or more of the net worth of an asset management company should be deemed to be a sponsor and would be required to fulfill the eligibility criteria specified in the SEBI regulations). |
| **Trustees** | Trustees mean the Board of Trustees or the Trustee Company who hold the property of the Mutual Fund in trust for the benefit of the unit holders. 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 or be associated with them in any manner whatsoever. 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 (AMC)** | 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 ₹ 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. The asset management company is required to obtain to take prior in-principle approval from the recognised stock exchange(s) where units are proposed to be listed. |
| **Custodians** | A custodian is appointed for safe keeping the securities or gold related instruments or other assets and participating in the clearing system through approved depository. Custodian also records information on stock splits and other corporate actions. No custodian in which the sponsor or its associate holds 50% or more of the voting rights of the share capital of the custodian or where 50% or more of the directors of the custodian represent the interest of the sponsor or its associates should act as custodian for a mutual fund constituted by the same sponsor or any of its associate or subsidiary company. |
| **Registrar and Transfer Agent** | Registrar and transfer agent maintains record of the unit holder's account. A fund may choose to hire an independent party registered with SEBI to provide such services or carryout these activities in-house. If the work relating to the transfer of units is processed in-house, the charges at competitive market rates may be debited to the scheme. The registrar and transfer agent forms the most vital interface between the unit holder and mutual fund. Most of the communication between these two parties takes place through registrar and transfer agent. |
| **Distributors/Agents** | To send their products across the length and breadth of the country, mutual funds take the services of distributors/agents. Distributors comprise of banks, non-banking financial companies and other distribution companies. |

| | |
|---|---|
| **Registration of Mutual Funds** | In order to register with SEBI as a MF, the sponsor has to make an application to SEBI. The sponsor should fulfill the eligibility criteria as prescribed by SEBI. |
| **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.<br><br>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 fall under the regulatory ambit of the RBI.<br><br>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.<br><br>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.<br><br>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. |
| **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. |
| **Investment and Borrowing** | – A mutual fund scheme should not invest more than 15% of its NAV in debt instruments issued by a single issuer which are rated not below investment grade by a credit rating agency authorised to carry out such activity under the Act. Such investment 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 asset management company provided that:<br>• Such limit should not be applicable for investments in Government securities and money market instruments.<br>• No mutual fund is allowed to invest more that 30% of its net assets in money market instruments of an issuer, however this is not applicable for investments in G-secs, T-bills, Collateralised borrowing and lending obligations.<br>• Further, that investment within such limit can be made in mortgage backed securitised debt which are rated not below investment grade by a credit rating agency registered with SEBI.<br>– A mutual fund scheme should not invest more than 10% of its NAV in unrated debt instruments issued by a single issuer and the total investment in such instruments should not exceed 25% of the NAV of the scheme. All such investments should be made with the prior approval of the Board of Trustees and the Board of asset management company.<br>– No mutual fund under all its schemes should own more than 10% of any company's paid up capital carrying voting rights. |

– Transfers of investments from one scheme to another scheme in the same mutual fund should be allowed only if,
  - Such transfers are done at the prevailing market price for quoted instruments on spot basis. 'Spot basis' has the same meaning as specified by stock exchange for spot transactions.
  - The securities so transferred should be in conformity with the investment objective of the scheme to which such transfer has been made.

– A scheme may invest in another scheme under the same asset management company or any other mutual fund without charging any fees, provided that aggregate inter scheme investment made by all schemes under the same management or in schemes under the management of any other asset management company should not exceed 5% of the net asset value of the mutual fund. However, this is not applicable to any fund of funds scheme.

– Every mutual fund should buy and sell securities on the basis of deliveries and should in all cases of purchases, take delivery of relative securities and in all cases of sale, deliver the securities**. A mutual fund may engage in short selling of securities in accordance with the framework relating to short selling and securities lending and borrowing specified by SEBI.** A mutual fund may enter into derivatives transactions in a recognised stock exchange, subject to the framework specified by the Board. Provided further that sale of government security already contracted for purchase shall be permitted in accordance with the guidelines issued by the RBI in this regard.

– Every mutual fund should get the securities purchased or transferred in the name of the mutual fund on account of the concerned scheme, wherever investments are intended to be of long-term nature.

– Pending deployment of funds of a scheme in securities in terms of investment objectives of the scheme a mutual fund can invest the funds of the scheme in short term deposits of scheduled commercial banks.

– No mutual fund (scheme) should make any investment in-
  - any unlisted security of an associate or group company of the sponsor; or
  - any security issued by way of private placement by an associate or group company of the sponsor; or
  - the listed securities of group companies of the sponsor which is in excess of 25% of the net assets.

– No scheme of a mutual fund should make any investment in any fund of funds scheme.

– No mutual fund scheme should invest more than 10% of its NAV in the equity shares or equity related instruments of any company. The limit of 10% should not be applicable for investments in case of index fund or sector or industry specific scheme.

– A mutual fund scheme should not invest more than 5% of its NAV in the unlisted equity shares or equity related instruments in case of open ended scheme and 10% of its NAV in case of close ended scheme.

– A fund of funds scheme will be subject to the following investment restrictions:
  - A fund of funds scheme should not invest in any other fund of funds scheme;
  - A fund of funds scheme should not invest its assets other than in schemes of mutual funds, except to the extent of funds required for meeting the liquidity requirements for the purpose of repurchases or redemptions, as disclosed in the offer document of fund of funds scheme.

**TYPES OF MFs/SCHEMES:** A wide variety of MFs/Schemes caters to different preferences of the investors based on their financial position, risk tolerance and return expectations.

All schemes of a Mutual Fund are launched by the AMC once it is approved by the trustees and a copy of the offer document has been filed with SEBI. The mutual fund should pay the minimum specified fee to the board while filing the offer document, the balance should be paid within such time as specified by SEBI. The offer document should contain disclosures which are adequate in order to enable investors to make informed investment decision. Advertisement in respect of every scheme should be in conformity with the Advertisement Code. The offer document and advertisement materials should not be misleading or contain any statement or opinion which are incorrect or false.

**Funds by Structure/Tenor**

| | |
|---|---|
| **Open ended Scheme** | An open-ended scheme means any scheme of a mutual fund which offers units for sale without specifying any duration for redemption. |
| **Close ended Scheme** | Close ended scheme means any scheme of a mutual fund in which the period of maturity of the scheme is specified. Every close ended scheme other than an equity linked savings scheme are required to be listed on a stock exchange within such time period and subject to such conditions as specified by SEBI.<br>**Listing of Close ended schemes**: Other than equity linked saving scheme, all close ended schemes are required to be listed on a recognised stock exchange within such time period and subject to such conditions as specified by SEBI. The listing of close ended scheme launched prior to the commencement of SEBI (Mutual Funds) (Amendment) Regulations, 2009 is not mandatory. Listing of close ended schemes is not mandatory if the said scheme provides for periodic repurchase facility to all the unit holders with restriction, if any, on the extent of such repurchase; or if the said scheme provides for monthly income or caters to special classed of persons like senior citizens, women, children, widows or physically handicapped or any special class of persons providing for repurchase of units at regular intervals; or if the details of such repurchase facility are clearly disclosed in the offer document; or if the said scheme opens for repurchase within a period of six months from the closure of subscription or if the said scheme is a capital protection oriented scheme.<br>**Repurchase of Close ended Schemes:** Units of a close ended scheme, other than equity linked saving scheme launched on or after the commencement of the SEBI (Mutual Funds) (Amendment) Regulations, 2009 shall not be repurchased before the end of maturity period of such scheme. The units of a close ended scheme may be open for sale or redemption at fixed predetermined intervals if the maximum and minimum amount of sale or redemption of the units and the periodicity of such sale or redemption has been disclosed in the offer document. The units of close ended scheme can be converted into open-ended scheme if the offer document of such scheme discloses the option and the period of such conversion; or the unit holders are provided with an option to redeem their units in full and the initial issue expenses of the scheme have been amortised fully in accordance with the tenth schedule of SEBI Mutual Fund Regulations, 1996. |
| **Assured return schemes** | Assures a specific return to the unit holders irrespective of performance of the scheme, which are fully guaranteed either by the sponsor or AMC. |
| **Interval Fund** | This kind of fund combines the features of open-ended and close-ended schemes, making the fund open for sale or redemption during pre-determined intervals. |

| Funds by Investment objective/Asset class | |
|---|---|
| **Equity/Growth schemes** | Equity/Growth oriented schemes provide capital appreciation over medium to long-term by investing a major part of their corpus in equities. |
| **Debt or income schemes** | Debt/Income 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** | Balanced Funds provide both growth and regular income in both equities and fixed income securities in the specified proportion as indicated in their offer documents. |
| **Liquid Funds** | Money market or liquid funds provide easy liquidity and preserve capital, but generate 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. |
| **Physical Assets** | Historically, the regulatory framework in India did not permit mutual funds to invest in physical assets. A significant change was made in January 2006, when SEBI permitted gold exchange traded fund schemes that would invest in gold and gold related instruments. Mutual Funds have also been permitted to invest in real estate since May 2008. |
| **Sector Funds** | Sector funds invest in securities of only those sectors or industries such as pharmaceuticals, software, energy, banking etc. |
| **Fund of Funds** | Fund of funds (FoF) is a scheme that invests primarily in other schemes of the same mutual fund or other mutual funds. A FoF scheme enables the investors to achieve greater diversification through one scheme. |

## Index Funds

Index funds replicate the portfolio of a particular index such as the S&P CNX Nifty. 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. The value of the fund is linked to the chosen index so that if the index rises so will the value of the fund. Conversely, if the index falls so will the value of the fund.

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, appropriate for conservative long term investors who are 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.

## Exchange Traded Funds

ETFs refer to a diversified basket of securities that are traded in real time like an individual stock on an exchange. Unlike regular open-end mutual funds, ETFs can be bought and sold throughout the trading day like any stock. 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. ETFs first came into existence in the USA in 1993. Over the last few years, more than $120 billion (as on June 2002) is invested in about 230 ETFs. About 60% of trading volumes on the American Stock Exchange are from ETFs. The most popular ETFs are QQQs (Cubes) based on the Nasdaq-100 Index, SPDRs (Spiders) based on the S&P 500 Index, iSHARES based on MSCI Indices and TRAHK (Tracks) based on the Hang Seng Index and DIAMONDs based on Dow Jones Industrial Average (DJIA). The average daily trading volume in QQQ is around 89 million shares.

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.

A gold exchange traded fund unit is like a mutual fund unit whose underlying asset is Gold and is held in demat form. It is typically an Exchange traded Mutual Fund unit which is listed and traded on a stock exchange. Every gold ETF unit is representative of a definite quantum of pure gold and the traded price of the gold unit moves in tandem with the price of the actual gold metal. The GETF aims at providing returns which closely correspond to the returns provided by Gold.

## 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 deploys the same. Despite the similarity between the CIS and MF regarding the pooling of savings and issuing of securities, they differ in their 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.

The Collective Investment Scheme is well established in many jurisdictions and now serves as an investment vehicle for a wide range of investment opportunities around the world. The International Organization of Securities Commission (IOSCO) has, in its Report on Investment Management of the Technical Committee, defined the Collective Investment Schemes (CIS), as "an open ended collective investment scheme that issues redeemable units and invests primarily in transferable securities or money market instruments".

### Guidelines under CIS Regulations

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

i. CIS should be set up and registered 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 ₹ 5 crore (provided that at the time of making the application, the applicant should have a minimum net worth of ₹ 3 crore which should be increased to ₹ 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 appraising agency.

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 CIMC should issue to the applicant whose application has been accepted, unit certificates as soon as possible but not later than six weeks from the date of closure of the subscription list: provided if the units are issued through a depository, a receipt in lieu of unit certificate will be issued as per provisions of SEBI (Depositories and Participants) Regulations, 1996 and bye laws of the depository.

viii. The units of every scheme should be listed immediately after the date of allotment of units and not later than six weeks from the date of closure of the scheme on each of the stock exchanges as mentioned in the offer document.

ix. A scheme should be winded up on the expiry of duration specified in the scheme or on the accomplishment of the purpose of the scheme. A scheme may also be wound up on the happening of any such event which in the opinion of the trustee. The scheme can also be winded if unit holders of a scheme holding three-fourth of the nominal value of the unit capital pass a resolution to that effect or if in the opinion of the CIMC, the purpose of the scheme cannot be accomplished then through the approval of least three-fourth of the nominal value of the unit capital of the scheme. However, for winding up the schemes, SEBI approval has to be obtained. Further, if in SEBIs opinion the continuation of the scheme would be prejudicial to the interest of unit holders then the scheme can be winded. When a scheme is to be winded up then the trustee should give notice disclosing the circumstances leading to such a decision in a daily newspaper having nationwide circulation and in the newspaper published in the language of the region where the Collective Investment Management Company is registered.

The trustee should dispose of the assets of the scheme concerned in the best interest of the unit holders of that scheme. If the scheme is wound up because of happening of any event which in opinion of the trustee requires the scheme to be wound up then the proceeds realized should be utilized towards the discharge of such liabilities as are due and payable under the scheme and after making appropriate provision for meeting the expenses connected with such winding up, the balance should be paid to the unit holder in proportion to their unit holding.

After completion of winding up, the trustees have to forward to SEBI and the unit holders the report on steps taken for realization of assets of the scheme, expenses for winding up and net assets available for distribution to the unit holders and a certificate from the auditors of the scheme certifying that all the assets of the scheme have been realized and the details of the distribution of the proceeds.

The unclaimed money if any at the time of winding up should be kept separately in a bank account by the trustee for a period of three years for the purpose of meeting investors' claims and thereafter should be transferred to investor protection fund, as may be specified by SEBI.

x. The CIMC on behalf of the scheme should before the expiry of one month from the close of each quarter that is 31st March, 30th June, 30th September and 31st December 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 September 30, 2010, there were two CIS entity registered with SEBI.

## 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. A venture capital fund may raise money from any investor whether India, Foreign or non-resident Indian by way of issue of units. No venture capital fund set up as a company or any scheme of a venture capital fund Set up as a trust should accept any investment from any investor which is less ₹ 0.5 million (5 lakh). However, this does not apply for investors who are employees or the principal officer or directors of the venture capital fund or directors of the trustee company or trustees where the venture capital fund has been established as a trust and the employees of the fund manager or asset management company. Each scheme launched or set up by a venture capital fund should have firm commitment from the investors for contribution of an amount of at least Rupees fifty million or (₹5 crore) before the start of the operations by the VCF.

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

iii. 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 Condition & Restrictions

i. The VCF has 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.

ii. Venture Capital Fund may invest in securities of foreign companies subject to such conditions or guidelines that may be stipulated or issued by the RBI and SEBI from time to time.

iii. A VCF, also, cannot invest in associated companies.

iv. Venture capital fund should make investment as enumerated below:

   a. At least 66.67% of the investible funds should be invested in unlisted equity shares or equity linked instruments of venture capital undertakings.

   b. Not more than 33.33% of the investible funds may be invested by way of

      - subscription to Initial Public Offer (IPO) of a VCU whose shares are proposed to be listed.
      - debt or debt instrument of a VCU in which the VCF has already made an investment by way of equity.
      - Preferential allotment of equity shares of a listed company subject to lock-in-period of one year.
      - The equity shares or equity linked instruments of a financially weak company or a sick industrial company whose shares are listed. For these regulations, a financially weak company or a sick industrial company means a company, which has at the end of the previous financial year accumulated losses, which has resulted in erosion of more than 50% but less than 100% of its networth as at the beginning of the previous financial year.
      - Special Purpose Vehicles (SPVs) which are created by a venture capital fund for the purpose of facilitating or promoting investment in accordance with these Regulations.

      The investment conditions and restrictions stipulated above should be achieved by the venture capital fund by the end of its life cycle.

v. The venture capital fund should disclose the duration of life cycle of the fund.

### Prohibition on Listing:

No venture capital fund is entitled to get its units listed on any recognized stock exchange till the expiry of three years from the date of the issuance of units by the venture capital fund.

## Market Outcome

### Number of Mutual Fund and New Fund Offers

At the end of March 2010 the number of registered MFs with the SEBI stood at 47 and it went up by a single member at the end of September 2010. As against 551 schemes in the year 2008-09, 174 new schemes were launched in 2009-10, of which 54 were open-ended and 120 were close-ended schemes. Aggregate sales of all the 174 schemes amounted to ₹ 361,660 million. The redemptions during the year were at ₹ 99,359,420 million.

## Resource Mobilisation

The MF vehicle is quite popular with investors who are wary of directly investing in the securities markets. The popularity of the MFs as an investment avenue is clearly visible from the data presented in (Table 3-1). The resource mobilization through the mutual fund route can be seen in Chart 3-2. Maximum resource mobilization was witnessed in 2007-08 which saw huge investments in MFs.

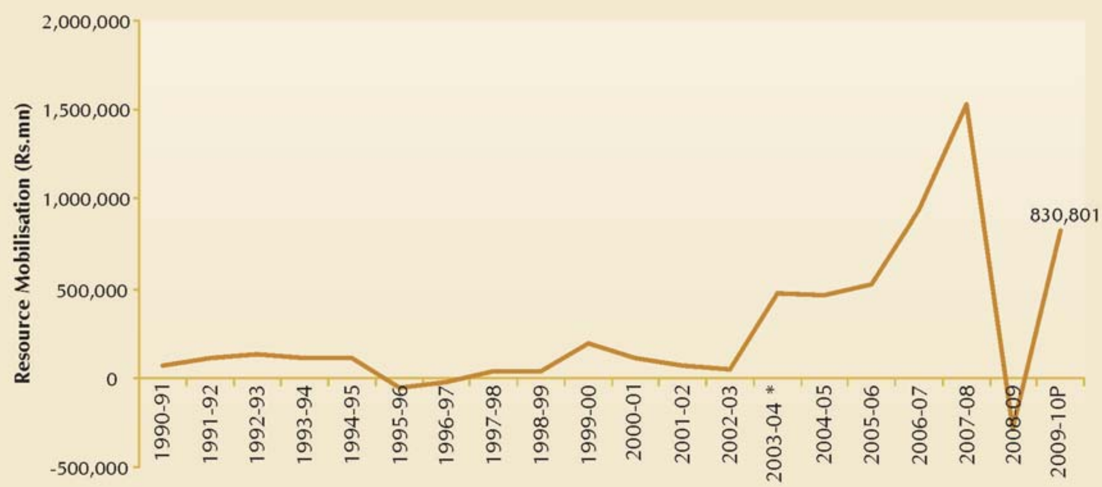
**Table 3-1: Resource Mobilisation by Mutual Funds**

(₹ mn.) (US $ mn.)

| Year | Public Sector MFs | | | Private Sector MFs | Grand Total | |
|---|---|---|---|---|---|---|
| | Bank sponsored | FI sponsored | UTI | | | |
| 1990-91 | 23,520 | 6,040 | 45,530 | - | 75,090 | 4,186 |
| 1991-92 | 21,400 | 4,270 | 86,850 | - | 112,520 | 4,598 |
| 1992-93 | 12,040 | 7,600 | 110,570 | - | 130,210 | 4,496 |
| 1993-94 | 1,480 | 2,390 | 92,970 | 15,600 | 112,440 | 3,584 |
| 1994-95 | 7,650 | 5,760 | 86,110 | 13,220 | 112,740 | 3,587 |
| 1995-96 | 1,130 | 2,350 | -63,140 | 1,330 | -58,330 | -1,698 |
| 1996-97 | 60 | 1,370 | -30,430 | 8,640 | -20,360 | -567 |
| 1997-98 | 2,370 | 2,030 | 28,750 | 7,490 | 40,640 | 1,028 |
| 1998-99 | 2,310 | 6,910 | 1,700 | 25,190 | 36,110 | 851 |
| 1999-00 | 1,560 | 3,570 | 45,480 | 148,920 | 199,530 | 4,574 |
| 2000-01 | -------------- 15,200---------- | | 3,220 | 92,920 | 111,350 | 2,387 |
| 2001-02 | -------------- 14,740---------- | | -72,840 | 129,470 | 71,370 | 1,463 |
| 2002-03 | --------------18,950---------- | | -94,340 | 121,220 | 45,830 | 965 |
| 2003-04 * | --------------37,610---------- | | 10,500* | 428,730 | 476,840 | 10,990 |
| 2004-05 | --------------16,670----------- | | 25,970 | 425,450 | 468,090 | 10,699 |
| 2005-06 | --------------------98,020--------------------- | | | 429,770 | 527,790 | 11,815 |
| 2006-07 | --------------------149,470--------------------- | | | 790,380 | 939,850 | 21,561 |
| 2007-08 | --------------------204,980--------------------- | | | 1,333,040 | 1,538,020 | 38,479 |
| 2008-09 | --------------------57,213--------------------- | | | -340,180 | -282,967 | -5,554 |
| **2009-10P** | **--------------------281,520---------------------** | | | **549,281** | **830,801** | **18,405** |

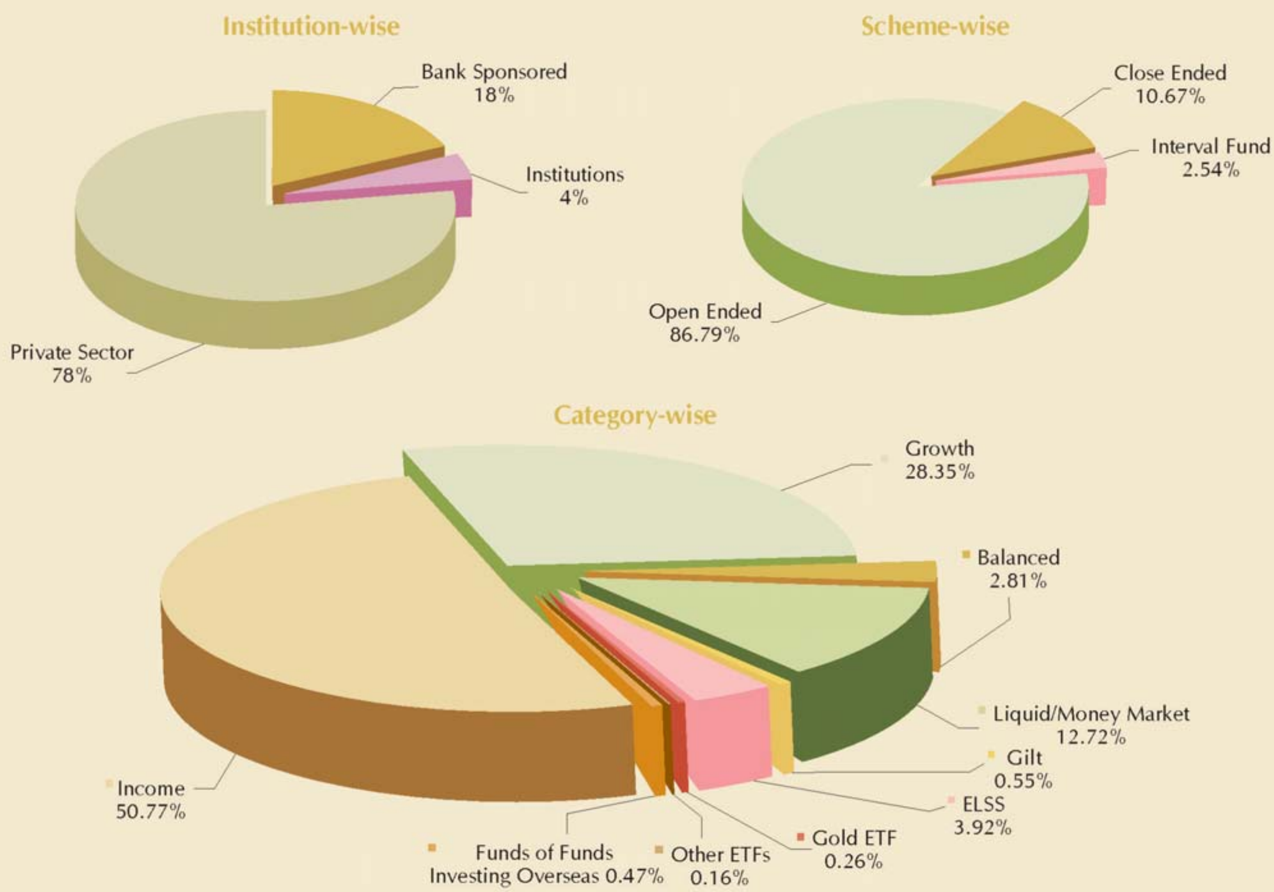
*Source: RBI*

Chart 3-2: Resource Mobilisation by Mutual Funds




The following paragraphs show the resource mobilization by mutual funds through various ways such as institution wise, scheme wise and category wise.

Chart 3-3: Assets under management at the end of March 2010



### Institution-wise Resource Mobilisation

The resource mobilization through the route of mutual funds is done broadly by three categories such as Banks, Private Sector and Institutions. The structure of the institution wise resource mobilization is depicted in table 3-2-A and table 3-2-B which gives their details of sales, purchases (redemptions) and assets under management.

The private sector MFs accounted for 78% of resource mobilization (sales) by MF industry during 2009-10. These private sector MFs witnessed a net inflow of ₹ 536,410 million (US $ 11,883 million) in 2009-10 as compared to a net outflow of ₹ 345,720 million (US $ 6,785 million) in 2008-09.

During the year 2009-10, bank sponsored MFs mobilized resources worth ₹ 14,279,900 million which was 84.56% higher than the resource mobilization of ₹ 7,737,280 million in year 2008-09. The bank sponsored schemes accounted for 18.33% of the total resource mobilization in 2009-10. In net terms, the bank sponsored MFs witnessed an inflow of ₹ 245,690 million (US $ 5443 million) in 2009-10.

### Resource Mobilisation as per Maturity Period/Tenor

The share of open-ended schemes in the total sales of mutual funds in 2009-10 continued to dominate over other schemes such as close-ended and interval funds. The share of open-ended schemes in total sales of Mutual funds was 99.57% in 2009-10 as compared to its share of 96.96% in 2008-09. The close ended schemes saw a year-on-year increase in sales of 89.61% in 2009-10 over its previous fiscal year. The details of the sales and redemptions of the Mutual funds based on the tenor for 2008-09 and 2009-10 and the first half of 2010-11 are presented in table 3-3-A and table 3-3-B respectively.

### Resource Mobilisation as per Investment Objective

The liquid/money market schemes have become very popular among investors due to the attractive returns delivered by them. They accounted for 70.31% of the gross resource mobilization in 2009-10. During the current fiscal the sale as well as repurchase has been the highest in case of these schemes resulting in a net outflow of ₹ 120,730 million (US $ 2,675 million). The liquid/money market schemes continue to perform better in the first-half of 2010-11 with a net inflow of ₹ 201,170 million.

The Income/Debt Oriented Schemes which provide regular and steady income to investors by investing in fixed income securities such as bonds, corporate debentures, government securities and money market instruments are also popular among investors and accounted for 28.9% of the total sales of all the schemes in 2009-10. This scheme has resulted in the highest net inflow of ₹ 965,780 million (US $ 21,395 million).

The Growth scheme was the second highest in terms of net inflows and accounted for 28.35% of the net resources raised. The Scheme-wise resource mobilisation by Mutual Funds for 2008-09, 2009-10 and for the first-half of 2010-11 is depicted in Table 3-3-B.

### Assets under Management

As on March 31, 2010, the MFs have managed assets of ₹ 6,139,790 million (US $ 136,017 million). As shown in Table 3-2, the share of private sector MFs in total assets decreased to 77.58% at end March 2010 from 80.26% in March 2009. The open ended schemes and the close ended schemes as at end-March 2010 accounted for 86.79% and 10.67% of total assets under management of MFs, respectively (Table 3-4) and (Chart 3-3).

The income schemes accounted for 50.77% of total assets under management as at end-March 2010, followed by growth schemes with 28.35%. The liquid/money market schemes accounted for 12.72% of assets under management of MFs as at end-March 2010 (Chart 3-3).

Table 3-2 A: Accretion of Funds with Mutual Funds

| | Category | 2008-09 | | | | 2009-10 | | | | Assets Under Management | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sale (₹ mn) | Purchase (₹ mn) | Net (₹ mn) | Net (US $. Mn) | Sale (₹ mn) | Purchase (₹ mn) | Net (₹ mn) | Net (US $. Mn) | March-09 (₹ mn) | March-10 (₹mn) | March-10 (US $ mn) |
| A | **Bank Sponsored** | **7,737,280** | **7,734,070** | **3,210** | **63** | **14,279,900** | **14,034,210** | **245,690** | **5,443** | **645,590** | **1,125,350** | **24,930** |
| i. | Joint Ventures - Predominantly Indian | 3,474,050 | 3,439,800 | 34,250 | 672 | 4,515,330 | 4,439,050 | 76,280 | 1,690 | 261,460 | 440,070 | 9,749 |
| ii. | Joint Ventures- Foreign | 31,920 | 26,370 | 5,550 | 109 | 946,060 | 933,180 | 12,880 | 285 | 6,120 | 20,770 | 460 |
| iii. | Others | 4,231,310 | 4,267,900 | (36,590) | (718) | 8,818,510 | 8,661,980 | 156,530 | 3,468 | 378,010 | 664,510 | 14,721 |
| B | **Institutions** | **3,630,660** | **3,571,120** | **59,540** | **1,169** | **9,871,550** | **9,822,840** | **48,710** | **1,079** | **178,250** | **251,050** | **5,562** |
| C | **Private Sector (i+ii+iii+iv)** | **42,895,590** | **43,241,310** | **(345,720)** | **(6,785)** | **76,038,780** | **75,502,370** | **536,410** | **11,883** | **3,349,160** | **4,763,390** | **105,525** |
| i. | Indian | 17,825,520 | 18,065,500 | (239,980) | (4,710) | 36,873,550 | 36,622,710 | 250,840 | 5,557 | 1,301,480 | 1,869,800 | 41,422 |
| ii. | Joint Ventures-Predominantly Indian | 18,758,720 | 18,659,480 | 99,240 | 1,948 | 34,009,120 | 33,671,050 | 338,070 | 7,489 | 1,532,620 | 2,252,480 | 49,900 |
| iii. | Joint Ventures - Predominantly Foreign | 3,737,720 | 3,879,590 | (141,870) | (2,784) | 2,863,120 | 2,933,490 | (70,370) | (1,559) | 202,160 | 187,640 | 4,157 |
| iv | Foreign | 2,573,630 | 2,636,740 | (63,110) | (1,239) | 2,292,990 | 2,275,120 | 17,870 | 396 | 312,900 | 453,470 | 10,046 |
| **Grand Total (A+B+C)** | | **54,263,530** | **54,546,500** | **(282,970)** | **(5,554)** | **100,190,230** | **99,359,420** | **830,810** | **18,405** | **4,173,000** | **6,139,790** | **136,017** |

*Source: AMFI Updates*

Table 3-2 B: Accretion of Funds with Mutual Funds

| | Category | April 10 - September 10 | | | | Assets Under Management at the end of | |
|---|---|---|---|---|---|---|---|
| | | Sale (₹ mn) | Purchase (₹ mn) | Net (₹ mn) | Net (US $. Mn) | September - 10 (₹mn) | September - 10 (US $ mn) |
| A | **Bank Sponsored** | **8,056,490** | **8,170,710** | **-114,220** | **-2,543** | **1,092,380** | **24,318** |
| i. | Joint Ventures - Predominantly Indian | 3,131,710 | 3,162,250 | -30,540 | -680 | 444,390 | 9,893 |
| ii. | Joint Ventures-Predominantly Foreign | 520,990 | 522,500 | -1,510 | -34 | 20,120 | 448 |
| ii. | Others | 4,403,790 | 4,485,960 | -82,170 | -1,829 | 627,870 | 13,978 |
| B | **Institutions** | **3,453,160** | **3,532,410** | **-79,250** | **-1,764** | **173,720** | **3,867** |
| C | **Private Sector (i+ii+iii+iv)** | **35,228,320** | **35,039,370** | **188,950** | **4,206** | **5,307,030** | **118,144** |
| i. | Indian | 16,543,190 | 16,482,740 | 60,450 | 1,346 | 2,051,240 | 45,664 |
| ii. | Joint Ventures- Predominantly Indian | 15,896,450 | 1,157,720 | 14,738,730 | 328,111 | 2,513,110 | 55,946 |
| iii. | Joint Ventures - Predominantly Foreign | 1,588,140 | 15,810,700 | -14,222,560 | -316,620 | 202,610 | 4,510 |
| iv | Foreign | 1,200,540 | 1,588,210 | -387,670 | -8,630 | 540,070 | 12,023 |
| **Grand Total (A+B+C)** | | **46,737,970** | **46,742,490** | **-4,520** | **-101** | **6,573,130** | **146,330** |

*Source: AMFI Updates*

Table 3-3A: Resource Mobilisation by Mutual Funds- based on the Tenor of the Scheme

| Scheme | 2008-09 | | | | 2009-10 | | | | 2010-11 (April 2010 - September 2010) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sale | Purchase | Sale | Purchase | Sale | Purchase | Sale | Purchase | Sale | Purchase | Sale | Purchase |
| | (₹ Mn.) | | (US $ mn.) | | (₹ Mn.) | | (US $ mn.) | | (₹ Mn.) | | (US $ mn.) | |
| Open-ended | 52,614,290 | 52,333,010 | 1,032,665 | 1,027,144 | 99,763,640 | 98,697,360 | 2,210,094 | 2,186,472 | 21,068,990 | 21,318,070 | 469,034 | 474,579 |
| Close-ended | 1,110,080 | 1,451,990 | 21,788 | 28,498 | 255,510 | 616,820 | 5,660 | 13,665 | 199,130 | 65,970 | 4,433 | 1,469 |
| Assured Return | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Interval fund * | 539,160 | 761,500 | 10,582 | 14,946 | 171,080 | 45,240 | 3,790 | 1,002 | 198,480 | 122,550 | 4,419 | 2,728 |
| Total | **54,263,530** | **54,546,500** | **1,065,035** | **1,070,589** | **100,190,230** | **99,359,420** | **2,219,544** | **2,201,139** | **21,466,600** | **21,506,590** | **477,885** | **478,775** |

*Source : AMFI Updates*
* *This category was introduced since April 2008, some of the existing schemes were reclassifiied*

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

| Scheme | 2008-09 | | | | 2009-10 | | | | 2010-11 (April 2010-September 2010) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sale | Purchase | Net Inflow/ (Outflow) | Net Inflow/ (Outflow) | Sale | Purchase | Net Inflow/ (Outflow) | Net Inflow/ (Outflow) | Sale | Purchase | Net Inflow/ (Outflow) | Net Inflow/ (Outflow) |
| | (₹ mn.) | | | (US $ mn.) | (₹ mn.) | | | (US $ mn.) | (₹ mn.) | | | (US $ mn.) |
| Income | 11,806,940 | 12,128,620 | (321,680) | (6,314) | 28,959,010 | 27,993,230 | 965,780 | 21,395 | 5,378,220 | 5,494,230 | (116,010) | (2,583) |
| Growth | 294,810 | 284,250 | 10,560 | 207 | 611,140 | 605,190 | 5,950 | 132 | 157,340 | 290,350 | (133,010) | (2,961) |
| Balanced | 26,950 | 26,350 | 600 | 12 | 46,930 | 53,860 | (6,930) | (154) | 22,860 | 23,450 | (590) | (13) |
| Liquid/ Money Market | 41,879,770 | 41,915,760 | (35,990) | (706) | 70,448,180 | 70,568,910 | (120,730) | (2,675) | | 15,668,680 | 201,170 | 4,478 |
| Gilt | 146,960 | 110,900 | 36,060 | 708 | 39,740 | 72,710 | (32,970) | (730) | 12,470 | 6,310 | 6,160 | 137 |
| ELSS-Equity | 33,240 | 3,560 | 29,680 | 583 | 36,010 | 20,470 | 15,540 | 344 | 5,110 | 10,470 | (5,360) | (119) |
| GOLD ETFs | 2,710 | 1,870 | 840 | 16 | 9,970 | 1,930 | 8,040 | 178 | 9,710 | 1,270 | 8,440 | 188 |
| Other ETFs * | 54,480 | 65,300 | (10,820) | (212) | 25,380 | 25,580 | (200) | (4) | 9,780 | 6,500 | 3,280 | 73 |
| Funds of Funds Investing Overseas ** | 17,670 | 9,890 | 7,780 | 153 | 13,870 | 17,540 | (3,670) | (81) | 1,260 | 5,330 | (4,070) | (91) |
| **Total** | **54,263,530** | **54,546,500** | **(282,970)** | **(5,554)** | **100,190,230** | **99,359,420** | **830,810** | **18,405** | | **21,506,590** | **(39,990)** | **(890)** |

*Source: AMFI Updates*
* *This scheme was earlier classified as Growth Funds and included in that category*
** *Funds of Funds is a scheme wherein the assets are invested in the existing schemes of mutual funds, for the earlier years the data was included in the other schemes. Since the quarter data on Funds of Funds investing overseas is shown separately and data on Funds of Funds domestic is included in the other schemes.*

**Table 3-4: Assets under Management**

| Scheme | At the end of March 2010 | | | | | | At the end of September 2010 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Open Ended | Close Ended | Interval Fund | Total | Total | % to total | Open Ended | Close Ended | Interval Fund *** | Total | Total | % to total |
| | (₹ mn.) | | | | (US $ mn) | | (₹ mn.) | | | | (US $ mn) | |
| Income | 2,547,920 | 415,790 | 153,440 | 3,117,150 | 69,055 | 50.77 | 2,459,550 | 520,410 | 246,290 | 3,226,250 | 71,822 | 49.08 |
| Growth | 1,546,670 | 191,570 | 2,300 | 1,740,540 | 38,559 | 28.35 | 1,710,500 | 143,630 | 710 | 1,854,840 | 41,292 | 28.22 |
| Balanced | 156,180 | 16,280 | – | 172,460 | 3,821 | 2.81 | 181,560 | 12,520 | – | 194,080 | 4,321 | 2.95 |
| Liquid/Money Market | 780,940 | – | – | 780,940 | 17,300 | 12.72 | 915,160 | – | – | 915,160 | 20,373 | 13.92 |
| Gilt | 33,950 | – | – | 33,950 | 752 | 0.55 | 38,600 | – | – | 38,600 | 859 | 0.59 |
| ELSS | 209,110 | 31,550 | – | 240,660 | 5,331 | 3.92 | 240,630 | 34,110 | – | 274,740 | 6,116 | 4.18 |
| Gold ETF | 15,900 | – | – | 15,900 | 352 | 0.26 | 28,490 | – | – | 28,490 | 634 | 0.43 |
| Other ETFs * | 9,570 | – | – | 9,570 | 212 | 0.16 | 16,100 | – | – | 16,100 | 358 | 0.24 |
| Funds of Funds Investing Overseas ** | 28,620 | – | – | 28,620 | 634 | 0.47 | 24,870 | – | – | 24,870 | 554 | 0.38 |
| **Total** | **5,328,860** | **655,190** | **155,740** | **6,139,790** | **136,017** | **100.00** | **5,615,460** | **710,670** | **247,000** | **6,573,130** | **146,330** | **100.00** |

*Source: AMFI Updates.*

* *This scheme was earlier classified as Growth Funds and included in that category*

** *Funds of Funds is a scheme wherein the assets are invested in the existing schemes of mutual funds, for the earlier years the data was included in the other schemes. Since the quarter data on Funds of Funds investing overseas is shown separately and data on Funds of Funds domestic is included in the other schemes.*

*** This category was introduced since April 2008.

## Mutual Fund Service System (MFSS)

In November 2009, SEBI allowed transaction in Mutual Fund schemes through the Stock Exchange infrastructure. Consequent to this market development, NSE launched India's first Mutual fund Service System (MFSS) on November 30, 2009 through which an investor can subscribe or redeem units of a mutual fund scheme. MFSS is an online order collection system provided by NSE to its eligible members for placing subscription or redemption orders on the MFSS based on orders received from the investors. This has made buying and selling of mutual funds easier for investors. The subscription/redemption request would thereafter get processed and investor would know about status of the request only in the form of direct communication from Mutual Fund/AMC/RTA. The NSE MFSS facilitates entry of both buy and sell orders. With the MFSS, investors can place an order through a registered NSE member who is eligible to participate in MFSS for subscription/redemption of units. In order to subscribe units, members are required to place buy orders. A member who wishes to redeem units of mutual fund scheme will be required to place sell orders in the system. While putting their subscription / redemption requests on the MFSS, Participants can choose between physical mode and depository mode. All orders are settled on order to order basis, on T+1 (working days).

As many as 17 fund houses have joined the NSE MFSS Platform and as on March 31, 2010 and there were 908 sub schemes available for trading. During November 2009 to March 2010, there were 2,392 orders placed for subscription worth ₹ 91,932,291 and 274 orders worth ₹ 26,217,352 were redeemed. The trend moved northwards in the April-July period of 2010-11 where 3,695 orders were placed for subscription worth ₹ 309,408,436 and 488 orders worth ₹ 55,020,097 were redeemed.

Table 3-5: MFSS Trade Statistics

| Date | Subscription | | Redemption | | Total orders |
|---|---|---|---|---|---|
| | No of orders | Total subscription amount (₹) | No of orders | Total redemption amount (₹) | |
| November 2009-March 2010 | 2392 | 91,932,291 | 274 | 26,217,352 | 2666 |
| (April-July 2010)* | 3695 | 309,408,436 | 488 | 55,020,097 | 4183 |

*: Data not available for August and September 2010*

## Unit Holding Pattern of Mutual Funds

The unit holding pattern of mutual funds, as depicted in table 3-6, shows that number of individual investors stood at 46,327,683 at end-March 2010 which accounted for 97.07% of the total number of investor accounts. It was followed by NRIs which constituted a meager 1.98% of the total number of investor accounts. On the other hand, the corporate/ institutions accounted for 54.75% of the net assets of the MF industry in 2009-10 followed by individuals which accounted for 39.77%. The individual investors saw the highest increase in net assets among the four categories with a y-o-y growth of 58.03% in 2009-10.

Table 3-6: Unit Holding Pattern of Mutual Funds

| Category | Number of Investor Accounts | | | Net Assets (₹ mn) | | |
|---|---|---|---|---|---|---|
| | 2008-09 | 2009-10 | Y-o-Y Increase | 2008-09 | 2009-10 | Y-o-Y Increase |
| **Individuals** | 46,075,763 | 46,327,683 | 0.55 | 1,552,830 | 2,453,900 | 58.03 |
| **NRIs** | 971,430 | 943,482 | -2.88 | 228,210 | 274,280 | 20.19 |
| **FIIs** | 146 | 216 | 47.95 | 49,840 | 63,350 | 27.11 |
| **Corporate/Institutions/Others** | 575,938 | 452,330 | -21.46 | 2,362,330 | 3,378,120 | 43.00 |
| **Total** | **47,623,277** | **47,723,711** | **0.21** | **4,193,210** | **6,169,650** | **47.13** |

## Index Funds

As of end September 2010, there were 44 index funds in the mutual fund industry. The performance of these ETFs (in terms of returns – 3 months, 6 months and 12 months) along with their details such as their date of launch and their underlying index is depicted in table 3-7. Comparison of Nifty based index funds with Nifty is depicted in chart 3-4A and chart 3-4B while, comparison of Sensex based index funds with Sensex is depicted in chart 3-5.

Table 3-7: Performance of Index Funds

| | Index Funds - Schemewise | Launch Date | Benchmark Index | Returns (in %) | | |
|---|---|---|---|---|---|---|
| | | | | 3M | 6M | 12M |
| 1 | **Benchmark S&P CNX 500 Fund - Dividend** | **6-Jan-09** | S&P CNX 500 | 11.48 | 14.21 | -26.65 |
| 2 | **Benchmark S&P CNX 500 Fund - Growth** | **6-Jan-09** | S&P CNX 500 | 11.48 | -28.56 | -26.67 |
| 3 | **Birla Sun Life Index Fund - Dividend** | **18-Sep-02** | Nifty 50 | 13.58 | -35.00 | -33.37 |
| 4 | **Birla Sun Life Index Fund - Growth** | **18-Sep-02** | Nifty 50 | 13.58 | -74.87 | -74.22 |
| 5 | **Canara Robeco Nifty Index - Dividend** | **8-Oct-04** | Nifty 50 | 13.26 | -28.65 | -26.66 |
| 6 | **Canara Robeco Nifty Index - Growth** | **8-Oct-04** | Nifty 50 | 13.32 | -52.63 | -51.33 |
| 7 | **Franklin India Index Fund - BSE Sensex Plan - Dividend** | **26-Mar-04** | Sensex | 13.47 | -73.32 | -72.80 |

*Contd.*

*Contd.*

| | Index Funds - Schemewise | Launch Date | Benchmark Index | Returns (in %) | | |
|---|---|---|---|---|---|---|
| | | | | 3M | 6M | 12M |
| 8 | **Franklin India Index Fund - BSE Sensex Plan - Growth** | **26-Mar-04** | Sensex | 13.47 | -73.32 | -72.80 |
| 9 | **Franklin India Index Fund - NSE Nifty Plan - Dividend** | **4-Aug-00** | Nifty 50 | 13.56 | -68.14 | -67.25 |
| 10 | **Franklin India Index Fund - NSE Nifty Plan - Growth** | **26-Mar-04** | Nifty 50 | 13.56 | -68.14 | -67.25 |
| 11 | **HDFC Index Fund - Nifty Plan** | **17-Jul-02** | Nifty 50 | 13.40 | -71.32 | -70.62 |
| 12 | **HDFC Index Fund - Sensex Plan** | **17-Jul-02** | Sensex | 13.74 | -91.00 | -90.86 |
| 13 | **HDFC Index Fund - Sensex Plus Plan** | **17-Jul-02** | Sensex | 14.47 | -93.62 | -93.40 |
| 14 | **ICICI Prudential Index Fund** | **26-Feb-02** | Nifty 50 | 13.72 | -72.87 | -72.12 |
| 15 | **ICICI Prudential Nifty Junior Index Fund - Dividend** | **29-Jun-10** | CNX Nifty Junior | 11.27 | -- | -- |
| 16 | **ICICI Prudential Nifty Junior Index Fund - Growth** | **29-Jun-10** | CNX Nifty Junior | 11.27 | -- | -- |
| 17 | **IDBI Nifty Index Fund - Dividend** | **30-Jun-10** | Nifty 50 | 11.72 | -- | -- |
| 18 | **IDBI Nifty Index Fund - Growth** | **30-Jun-10** | Nifty 50 | 13.03 | -- | -- |
| 19 | **IDBI Nifty Junior Index Fund - Dividend** | **20-Sep-10** | CNX Nifty Junior | -- | -- | -- |
| 20 | **IDBI Nifty Junior Index Fund - Growth** | **20-Sep-10** | CNX Nifty Junior | -- | -- | -- |
| 21 | **IDFC Nifty Fund - Dividend** | **3-May-10** | Nifty 50 | 13.52 | -- | -- |
| 22 | **IDFC Nifty Fund - Growth** | **3-May-10** | Nifty 50 | 13.40 | -- | -- |
| 23 | **ING Nifty Plus Fund - Dividend** | **23-Feb-04** | Nifty 50 | 12.72 | -24.50 | -22.03 |
| 24 | **ING Nifty Plus Fund - Growth** | **23-Feb-04** | Nifty 50 | 12.76 | -49.67 | -48.03 |
| 25 | **JM Nifty Plus Fund - Dividend** | **2-Feb-09** | Nifty 50 | 13.69 | -13.78 | -21.40 |
| 26 | **JM Nifty Plus Fund - Growth** | **2-Feb-09** | Nifty 50 | 13.66 | -21.51 | -21.40 |
| 27 | **LIC MF Index Fund - Nifty Plan - Dividend** | **6-Dec-02** | Nifty 50 | 13.59 | 22.86 | 26.73 |
| 28 | **LIC MF Index Fund - Nifty Plan - Growth** | **6-Dec-02** | Nifty 50 | 13.60 | -54.68 | -53.25 |
| 29 | **LIC MF Index Fund - Sensex Advantage Plan - Div** | **6-Dec-02** | Sensex | 12.63 | 20.71 | 3.84 |
| 30 | **LIC MF Index Fund - Sensex Advantage Plan - Growth** | **6-Dec-02** | Sensex | 12.63 | -57.29 | -56.99 |
| 31 | **LIC MF Index Fund - Sensex Plan - Dividend** | **6-Dec-02** | Sensex | 13.62 | 17.44 | 19.81 |
| 32 | **LIC MF Index Fund - Sensex Plan - Growth** | **6-Dec-02** | Sensex | 13.62 | -59.76 | -58.95 |
| 33 | **PRINCIPAL Index Fund - Dividend** | **26-Jul-99** | Nifty 50 | 13.48 | -37.71 | -35.96 |
| 34 | **PRINCIPAL Index Fund - Growth** | **26-Jul-99** | Nifty 50 | 13.43 | -63.41 | -62.39 |
| 35 | **SBI Magnum Index Fund - Dividend** | **17-Jan-02** | Nifty 50 | 13.66 | -42.64 | -41.12 |
| 36 | **SBI Magnum Index Fund - Growth** | **17-Jan-02** | Nifty 50 | 13.66 | -70.62 | -69.81 |
| 37 | **Tata Index Fund - Nifty Plan - Option A** | **25-Feb-03** | Nifty 50 | 13.44 | -58.07 | -56.86 |
| 38 | **Tata Index Fund - Sensex Plan - Option A** | **25-Feb-03** | Sensex | 13.21 | -69.22 | -68.72 |
| 39 | **Taurus Nifty Index Fund - Dividend** | **22-Jun-10** | Nifty 50 | 14.00 | -- | -- |
| 40 | **Taurus Nifty Index Fund - Growth** | **22-Jun-10** | Nifty 50 | 13.98 | -- | -- |
| 41 | **UTI Master Index Fund - Dividend** | **1-Jun-98** | Nifty 50 | 13.53 | -75.71 | -75.21 |
| 42 | **UTI Master Index Fund - Growth** | **1-Jun-98** | Sensex | 13.53 | -75.71 | -75.21 |
| 43 | **UTI Nifty Fund - Dividend** | **14-Feb-00** | Nifty 50 | 13.57 | -21.28 | -19.18 |
| 44 | **UTI Nifty Fund - Growth** | **14-Feb-00** | Nifty 50 | 13.58 | -59.91 | -58.83 |

*Source: NSE and ICRA*
*Note: Returns are calculated as at end of September 2010*

**Chart 3-4A: Comparison of different Index Funds vis-a-vis Nifty (Dividend scheme) (NAVs of Index Funds rebased to 100 for April 01, 2009)**


**Chart 3-4B: Comparison of different Index Funds vis-a-vis Nifty (Growth Schemes) (NAV of Index Funds rebased to 100 for April 01, 2009)**

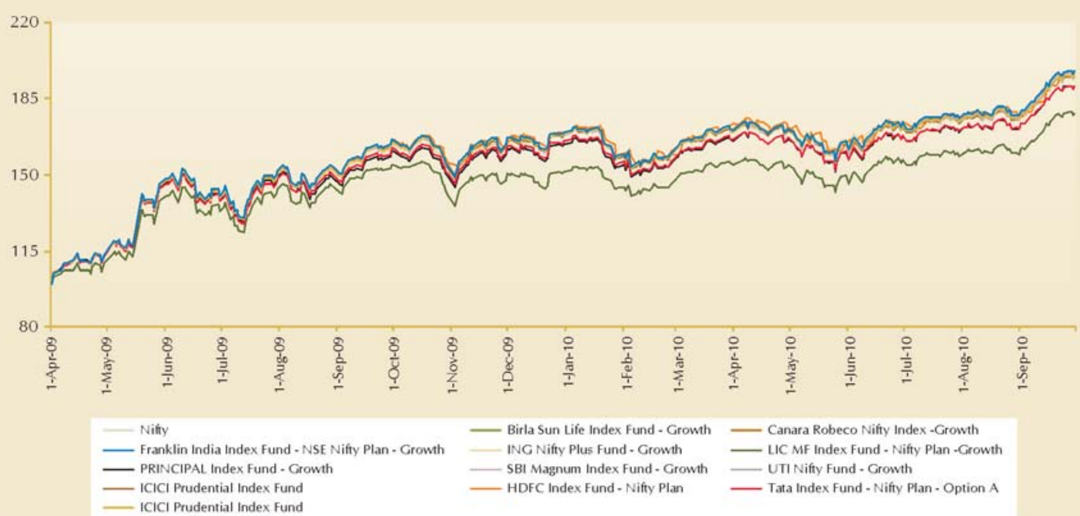
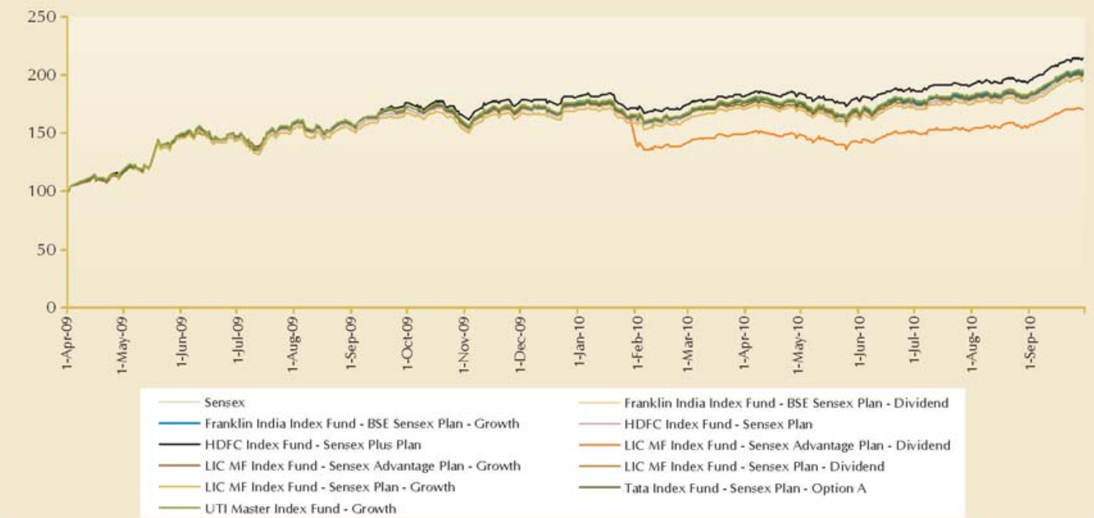


**Chart 3-5: Performance of Sensex Underlying Index Funds vis-a-vis Sensex (Growth & Dividend Scheme) (NAVs of Index Funds rebased to 100 for April 01, 2009)**




## Exchange Traded Funds

As of September 2010, there were 25 exchange traded funds in India (listed at NSE and BSE), out of which there were 15 index based ETFs and 10 Gold based ETFs. The performance of these ETFs (in terms of returns – 3 months, 6 months and 12 months) along with their details such as their date of launch and there underlying index is depicted in table 3-8.

**Table 3-8: Performance of Exchange Traded Funds**

| | ETFs | Type of ETF | Launched by | Listed at | Launch Date | 3 month | 6 month | 12 month |
|---|---|---|---|---|---|---|---|---|
| | **Index Based ETF** | | | | | | | |
| 1 | Bank BeES | Index Based-CNX Bank | Benchmark Mutual Fund | NSE | 27-May-04 | 30.49 | 31.69 | 41.14 |
| 2 | Hang Seng BeES | | Benchmark Mutual Fund | NSE | 18-Mar-10 | 8.12 | 7.27 | - |
| 3 | ICICI SENSEX Prudential Exchange Traded Fund | Index Based-Sensex | ICICI | BSE | 13-Jan-03 | 13.49 | 14.79 | 17.83 |
| 4 | Junior BeES | Index Based-CNX Nifty Junior | Benchmark Mutual Fund | NSE | 21-Feb-03 | 11.64 | 17.30 | 34.37 |
| 5 | Kotak Nifty ETF | | | | | 13.76 | 15.71 | - |
| 6 | Kotak PSU Bank ETF | Index Based-CNX PSU Bank | Kotak | NSE | 16-Nov-07 | 35.02 | 48.32 | 53.21 |
| 7 | Kotak Sensex ETF | Index Based-Sensex | Kotak | BSE | 16-Jun-08 | 13.59 | 15.26 | 18.08 |
| 8 | Liquid BeES | Money Market ETF | Benchmark Mutual Fund | NSE | 27-May-04 | 0 | 0 | 0 |
| 9 | MOSt Shares M50 | | | | | - | - | - |
| 10 | Nifty BeES | Index Based-Nifty 50 | Benchmark Mutual Fund | NSE | 28-Dec-01 | 13.69 | 15.65 | 19.41 |
| 11 | PSU Bank BeES | Index Based-CNX PSU Bank | Benchmark Mutual Fund | NSE | 1-Nov-07 | 34.95 | 48.17 | 50.04 |
| 12 | Quantum Index Fund - Growth | Index Based-Nifty 50 | Quantum | NSE | 18-Jul-08 | 13.57 | 15.47 | 18.89 |
| 13 | Reliance Banking ETF | Index Based-CNX Bank | Reliance | NSE | 27-Jun-08 | 30.27 | 31.47 | 40.84 |

*Contd.*

*Contd.*

| | ETFs | Type of ETF | Launched by | Listed at | Launch Date | 3 month | 6 month | 12 month |
|---|---|---|---|---|---|---|---|---|
| 14 | S&P CNX NIFTY UTI National Depository Receipts Scheme | Index Based-Nifty 50 | UTI | NSE | 7-Jul-03 | 13.53 | 15.69 | 19.65 |
| 15 | Shariah BeES | Index Based-Nifty 50 | Benchmark Mutual Fund | NSE | 18-Mar-09 | 6.59 | 8.07 | 9.88 |
| | **GOLD ETFs** | | | | | | | |
| 16 | Gold BeES | Based on Gold | Benchmark Mutual Fund | NSE | 19-Mar-07 | 1.57 | 16.62 | 21.49 |
| 17 | HDFC Gold ETF | Based on Gold | HDFC MF | NSE | 25-Jun-10 | - | - | - |
| 18 | ICICI Prudential Gold ETF | Based on Gold | ICICI Prudential AMC | NSE | 16-Jul-10 | - | - | - |
| 19 | Kotak Gold ETF | Based on Gold | Kotak | NSE | 8-Aug-07 | - | - | - |
| 20 | Quantum Gold Fund - Growth | Based on Gold | Quantum | NSE | 28-Feb-08 | 1.57 | 16.60 | 21.47 |
| 21 | Reliance Gold ETF - Dividend | Based on Gold | Reliance | NSE | 27-Jun-08 | 1.58 | 16.62 | 21.49 |
| 22 | Religare Gold ETF | Based on Gold | Religare MF | NSE | 28-Jan-10 | 1.57 | 16.62 | - |
| 23 | SBI Gold ETS | Based on Gold | SBI | NSE | 28-May-09 | 1.83 | 16.75 | 21.19 |
| 24 | UTI Gold ETF | Based on Gold | UTI | NSE | 1-Mar-07 | - | - | - |

*Source: NSE and ICRA*

**Table 3-9: Turnover of ETFs listed at NSE and BSE**

| Sr. No. | | Name of ETF | 2009-10 | | | (April-September 2010) | |
|---|---|---|---|---|---|---|---|
| | | | ETF Symbol | Sum of Total Traded Value (₹ Mn) | Sum of Total Traded Value (US $ Mn) | Sum of Total Traded Value (₹ Mn) | Sum of Total Traded Value (US $ Mn) |
| 1 | INDEX BASED ETFs | Benchmark Asset Management Company Bank BeES | BANK BEES | 1,375.94 | 30.48 | 284.49 | 6.33 |
| 2 | | Benchmark Mutual Fund - Hang Seng Benchmark Exchange Traded Scheme | HNGSNG BEES | 71.01 | 1.57 | 584.21 | 13.01 |
| 3 | | Benchmark Mutual Fund-Nifty Junior Benchmark ETF | JUNIOR BEES | 1,339.98 | 29.68 | 1,689.72 | 37.62 |
| 4 | | Kotak Mahindra Mutual Fund-Kotak Nifty ETF | KOTAK NIFTY | 131.11 | 2.90 | 170.36 | 3.79 |
| 5 | | Kotak PSU Bank ETF | KOTAK PSU BK | 145.22 | 3.22 | 643.33 | 14.32 |
| 6 | | Kotak Sensex | KOTAK SENSEX | 341.58 | 7.57 | 161.14 | 3.59 |
| 7 | | Liquid Benchmark Exchange Traded Scheme | LIQUIDBEES | 24,157.02 | 535.16 | 14,064.74 | 313.11 |
| 8 | | Motilal Oswal Mutual Fund - Motilal Oswal MOSt Shares M50 ETF | M50 ETF | - | - | 1,497.67 | 33.34 |
| 9 | | Benchmark Mutual Fund-Nifty BeES | NIFTY BEES | 16,084.82 | 356.33 | 5,654.07 | 125.87 |
| 10 | | Benchmark Mutual Fund - PSU Bank Benchmark Exchange Traded Scheme | PSUBNK BEES | 218.40 | 4.84 | 150.80 | 3.36 |
| 11 | | Quantum Index Fund -Exchange Traded Fund | QUANTUM INDX | 12.56 | 0.28 | 5.99 | 0.13 |
| 12 | | Reliance Mutual Fund -Banking Exchange Traded Fund | REL BANK ETF | 78.11 | 1.73 | 41.67 | 0.93 |
| 13 | | Benchmark Mutual Fund - Shariah Benchmark Exchange Traded Scheme | SHARIA BEES | 12.82 | 0.28 | 6.13 | 0.14 |
| 14 | | ICICI SENSEX Prudential Exchange Traded Fund (SPICE)-Listed at BSE | SPICE-ETF | 4.71 | 0.10 | 1.42 | 0.03 |
| 15 | | S&P CNX NIFTY UTI Notional Depository Receipts Sceheme (SUNDER) | UTISUNDERETF | 14.20 | 0.31 | 20.06 | 0.45 |
| | | **Total Turnover of Index Funds** | | **43,987.46** | **974.47** | **24,975.80** | **556.01** |

*Contd.*

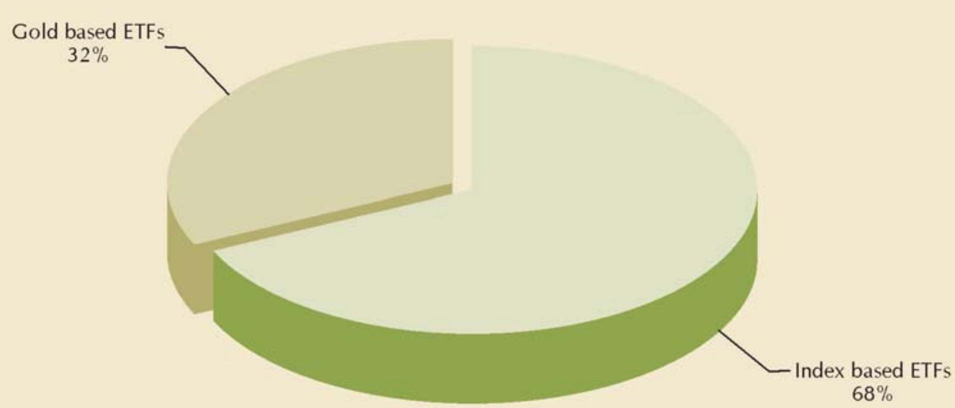
*Contd.*

| Sr. No. | | Name of ETF | 2009-10 | | | (April-September 2010) | |
|---|---|---|---|---|---|---|---|
| | | | ETF Symbol | Sum of Total Traded Value (₹ Mn) | Sum of Total Traded Value (US $ Mn) | Sum of Total Traded Value (₹ Mn) | Sum of Total Traded Value (US $ Mn) |
| 16 | GOLD BASED ETFs | Benchmark Mutual Fund - Gold Benchmark Exchange Traded Scheme | GOLDBEES | 12,132.50 | 268.77 | 14,159.01 | 315.20 |
| 17 | | HDFC Mutual Fund-HDFC Gold Exchange Traded Fund | HDFCMFGETF | - | - | 310.15 | 6.90 |
| 18 | | ICICI Prudential Mutual Fund - ICICI Prudential Gold ETF | ICICIPRUGETF | - | - | 66.07 | 1.47 |
| 19 | | Kotak Mutual Fund - Gold Exchange Traded Fund | KOTAKGOLDETF | 1,380.26 | 30.58 | 1,713.08 | 38.14 |
| 20 | | Quantum Gold Fund -Exchange Traded Fund | QUANTUM GOLD | 172.71 | 3.83 | 364.29 | 8.11 |
| 21 | | Reliance Mutual Fund - Gold Exchange Traded Fund | RELIANCEGOLD | 3,632.53 | 80.47 | 3,941.67 | 87.75 |
| 22 | | Religare Mutual Fund - Religare Gold Exchange Traded Fund | RELIGAREGOLD | 0.83 | 0.02 | 167.33 | 3.73 |
| 23 | | SBI Mutual Fund - SBI Gold Exchange Traded Scheme - Growth Option | SBI GOLD ETS | 955.61 | 21.17 | 864.10 | 19.24 |
| 24 | | UTI Mutual Fund-UTI Gold Exchange Traded Fund | UTI GOLD ETF | 2,452.82 | 54.34 | 1,801.81 | 40.11 |
| | | **Total Turnover of Gold Based ETFs** | | **20,727.25** | **459.18** | **23,387.50** | **520.65** |
| | | **Total Turnover of all ETFs** | | **64,714.70** | **1,433.64** | **48,363.30** | **1,076.65** |
| | | Percentage of Index Funds Turnover to total ETF Turnover | | 67.97 | | 51.64 | |
| | | Percentage of Gold based ETF Turnover to total ETF turnover | | 32.03 | | 48.36 | |

*Source: NSE and BSE*

The total traded value of the 25 ETFs listed on NSE and BSE during the fiscal 2009-10 was ₹ 64,714.70 million (US $ 1,433.64 million). The details of ETF turnover at NSE & BSE is given in table 3-9. As per Chart 3-6, Index based ETFs constituted 68% of the total exchange traded funds.

**Chart 3-6: Percentage share of turnover of Index based ETFs vis-à-vis Gold based ETFs**



## Venture Capital Funds

At end September 2010, total investment by VCFs stood at ₹ 229,770 million. This information has been compiled on the basis of quarterly information submitted to SEBI by registered VCFs. Details of the industry-wise cumulative investment details of SEBI registered venture capital funds is given in table 3-10.

**Table 3-10: Industry wise Cumulative Investment details of SEBI Registered Venture Capital Funds (VCF)**

(₹ mn)

| Sectors of Economy | 31-Mar-10 | 30-Sep-10 |
|---|---|---|
| Information technology | 5630 | 5,285 |
| Telecommunications | 7770 | 8,563 |
| Pharmaceuticals | 5680 | 5,380 |
| Biotechnology | 2280 | 2,118 |
| Media/ Entertainment | 5840 | 8,472 |
| Services Sector | 9020 | 12,221 |
| Industrial Products | 8750 | 11,547 |
| Real Estate | 55840 | 81,800 |
| Others | 81920 | 94,385 |
| **Total** | **182,730** | **229,770** |

*Source : SEBI*

# Capital Market

## A. Introduction

Secondary Market refers to a market where securities are traded after being initially offered to the public in the primary market and/or listed on the Stock Exchange. 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. The Exchange has laid down rules and guidelines for various intermediaries with regards to the admission and Fee structure for Trading Members, listing criteria and listing fees for companies. With the increased application of information technology, the trading platforms of stock exchanges are accessible from anywhere in the country through their trading terminals. The trading platforms are also accessible through internet. In a geographically widespread country like India, this has significantly expanded the reach of the exchanges. Secondary market comprises of equity markets and the debt markets. This chapter focuses on equity markets, while debt markets are dealt with in chapter 5.

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.

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:

1) **Clearing Corporation:** The clearing corporation is responsible for post-trade activities such as risk management and clearing and settlement of trades executed on a stock exchange.

   The National Securities Clearing Corporation Ltd. (NSCCL), a wholly owned subsidiary of NSE, was the first clearing corporation to be established in the country and also the first clearing corporation in the country to introduce settlement guarantee. The NSCCL was incorporated in August 1995. It was set up with the objective of bringing and sustaining confidence in clearing and settlement of securities; promoting and maintaining short and consistent settlement cycles; providing counter-party risk guarantee and operating a tight risk containment system.

2) **Clearing Members:** Clearing Members are responsible for settling their obligations as determined by the clearing corporation. They do so by making available funds and/or securities in the designated accounts with clearing bank/depositories on the date of settlement.

3) **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 September 30, 2010, there are 15 custodians empanelled with NSCCL. They are Axis Bank Ltd., BNP Paribas, Citibank N.A., DBS bank Ltd., Deutsche Bank A.G., HDFC Bank Ltd.,

Hongkong & Shanghai Banking Corporation Ltd., ICICI Bank Ltd., Infrastructure leasing and Financial Services Ltd., JP Morgan Chase Bank N.A., Kotak Mahindra Bank Ltd., Orbis Financial Corporation Ltd., SBI - SG Global Securities Services, Standard Chartered Bank Ltd., and Stock Holding Corporation of India Ltd.

4) **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 13 clearing banks of NSE, such as Axis Bank Ltd., Bank of India Ltd., Canara Bank Ltd., Citibank N.A, HDFC Bank Ltd., HSBC Ltd., ICICI Bank Ltd., IDBI Bank Ltd., IndusInd Bank Ltd., Kotak Mahindra Bank, Standard Chartered Bank, State Bank of India and Union Bank of India.

5) **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. The two depositories in India are the National Securities Depository Ltd. (NSDL) and Central Depository Services (India) Ltd. (CDSL).

6) **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.

## B. 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. National Exchange for Automated Trading (NEAT) is the trading system of NSE. NEAT facilitates a system on-line, fully automated, nationwide, anonymous, order driven, screen-based trading. In this system a member can punch into the compute quantities of securities and the prices at which he likes to transact and the transaction is executed as soon as it finds a matching sale for buy order for a counter party. The numerous advantages of the NEAT system are detailed out below :

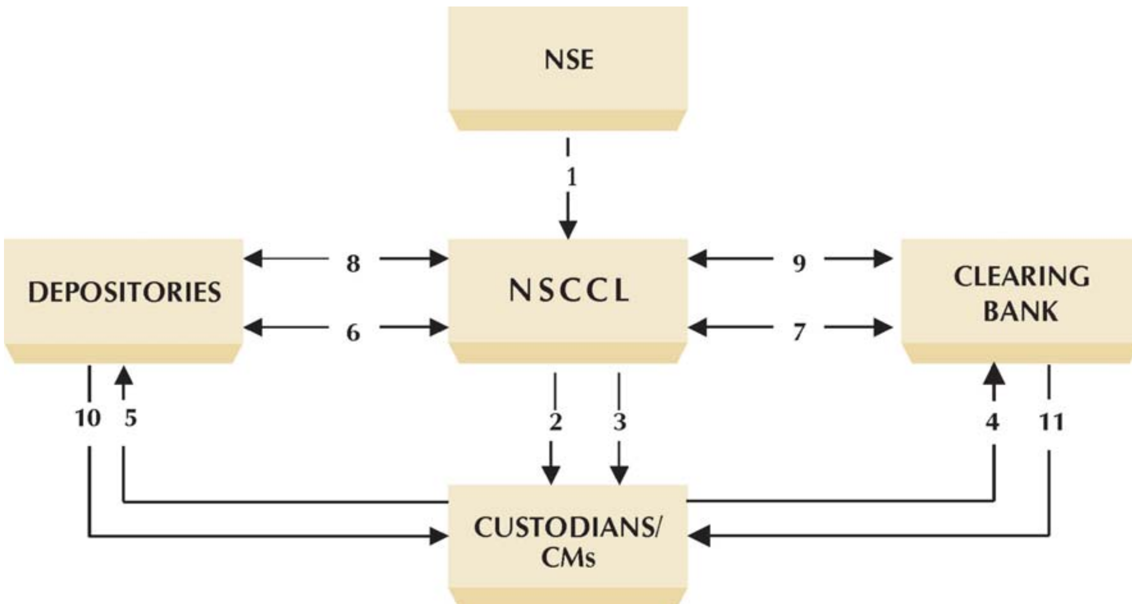
- It electronically matches orders on a price/time priority and hence cuts down on time, cost and risk of error, as well as on fraud resulting in improved operational efficiency.
- It allows faster incorporation of price sensitive information into prevailing prices, thus increasing the informational efficiency of markets.
- It enables market participants to see the full market on real-time, making the market transparent. It allows a large number of participants, irrespective of their geographical locations, to trade with one another simultaneously, improving the depth and liquidity of the market.
- It provides tremendous flexibility to the users in terms of kinds of orders that can be placed on the system. It ensures full anonymity by accepting orders, big or small, from members without revealing their identity, thus providing equal access to everybody.
- It provides a perfect audit trail which helps to resolve disputes by logging in the trade execution process in entirety.

## C. Clearing & Settlement Process

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 comprises of three main activities- clearing, settlement and risk management.

The clearing and settlement process for transaction in securities on NSE is presented in (Chart 4-1).

**Chart 4-1: 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 and then it 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.

The core processes involved in clearing and settlement include:

a) Trade Recording: The key details about the trades are recorded to provide basis for settlement. These details are automatically recorded in the electronic trading system of the exchanges.

b) Trade Confirmation: Trades which are for settlement by custodians are indicated with a custodian participant code and the same is subject to confirmation by the respective custodian. The custodian is required to confirm settlement of these trades on T+1 day by the cut-off time of 1.00 pm.

c) Determination of Obligation: The next step is determination of what counter-parties owe, and what counter-parties are due to receive on the settlement date. The NSCCL interposes itself as a central counterparty between counterparties to trades and nets the positions so that a member has security-wise net obligation to receive or deliver a security and has to either pay or receive funds.

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.

d) Pay-in of Funds and Securities: 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 CDSL). 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.

e) Pay-out of Funds and 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 Cycle

NSCCL clears and settles trades as per the well-defined settlement cycles (Table 4-1). 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 completed in 2 days from the end of the trading day.

The important settlement types are: Normal segment (N), Trade for trade Surveillance (W), Retail Debt Market (D), Limited Physical market (O), Non cleared TT deals (Z), Auction normal (A). Trades in the settlement type N, W, D and A are settled in dematerialized mode. Trades under settlement type O are settled in physical form. Trades under settlement type Z are settled directly between the members and may be settled either in physical or dematerialized mode.

Table 4-1: Settlement Cycle in CM Segment

| Activity | | T+2 Rolling Settlement |
|---|---|---|
| Trading | Rolling Settlement Trading | T |
| Clearing | Custodial Confirmation | T+1 |
| | Delivery Generation | T+1 |
| Settlement | Securities and Funds Pay-in | T+2 |
| | Securities and Funds Pay-out | T+2 |
| | Valuation Debit | T+2. |
| Post Settlement | Auction | T+2 |
| | Auction Settlement | T+3 |
| | Bad Delivery Reporting | T+4 |
| | Rectified Bad Delivery Pay-in/Pay-out | T+6 |
| | Re-bad Delivery Reporting and pickup | T+8 |
| | Close Out of Re-bad Delivery and funds pay-in & pay-out | T+9 |

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

## Dematerialised Settlement

For all trades executed on the T day, NSCCL determines the cumulative obligations of each member on the T+1 day and electronically transfers the data to Clearing Members (CMs). All trades concluded during a particular trading date are settled on a designated settlement day i.e. T+2 day. In case of short deliveries on the T+2 day in the normal segment, NSCCL conducts a buy–in auction on the T+2 day and the settlement for the same is completed on the T+3 day, whereas in case of W segment there is a direct close out. For arriving at the settlement day all intervening holidays, which include bank holidays, NSE holidays, Saturdays and Sundays are excluded. The settlement schedule for all the settlement types in the manner explained above is communicated to the market participants vide circular issued during the previous month.

# D. Policy Developments

Over the past years 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 upgradation of risk containment, so as to protect the interest of the investors. The recent policy developments (April 2009 to December 2010) pertaining to secondary markets segment are enumerated below.

### I. Comprehensive Risk Management Framework for the cash market

As per the recommendations of the Secondary Market Advisory Committee of SEBI, few changes regarding the Comprehensive Risk Management Framework for the cash market have been made on July 27, 2009. The SEBI circular provides that in case of a buy transaction in cash market, VaR margins, Extreme loss margins and mark to market losses together should not exceed the purchase value of the transaction. Further, in case of a sale transaction in cash market, the existing practice should continue viz., VaR margins and Extreme loss margins together should not exceed the sale value of the transaction and mark to market losses should also be levied.

### II. Amendment to SEBI (DIP) Guidelines, 2000 – Applications Supported by Blocked Amount (ASBA) facility in public issues and rights issues.

In its continuing endeavour to make the existing public issue facility more efficient, SEBI had introduced ASBA (ASBA Phase I) as a supplementary facility of applying in public issues, vide its circular dated July 30, 2008 which was available to retail individual investors in public issues only. In order to simplify the rights issue process as well as to make it more efficient and effective, SEBI has amended the SEBI (DIP) Guidelines 2000. ASBA Phase I was subsequently extended to rights issues vide circulars dated September 25, 2008 and August 20, 2009.

Rights issues are further issuances of capital made by listed entities to existing shareholders. These shareholders are generally in possession of basic information about the issuer company and are generally updated on major developments in the company on a continuous basis. SEBI, vide circular dated September 25, 2008, had enabled the facility of applying in rights issue through ASBA on a pilot basis. It has now been decided to make ASBA applicable to all rights issues. ASBA will co-exist with the current process, wherein cheque/demand draft is used as a mode of payment. Since the web enabled interface of stock exchanges is now operational for the purpose of acceptance of the rights issue applications, self certified syndicate banks shall upload the application data in to the aforesaid interface of stock exchanges. All applicants who desire to apply through ASBA should hold shares of the issuer company in a depository account.

### III. Prior approval for re-commencing trading on the Stock Exchange.

A stock exchange in India is recognized by the Central Government / SEBI under section 4 of Securities Contracts (Regulation) Act, 1956 for the purpose of assisting, regulating or controlling the business of buying, selling or dealing in securities. Among the existing recognized stock exchanges in India it has been observed that some of the stock exchanges have no trading over the past several years. With the completion of corporatisation and demutualisation of stock exchanges, some of the stock exchanges have generated renewed trading interest and are in the process of resuming trading for reviving the stock exchange. While these stock exchanges have no trading activity for quite some time, the regulatory changes introduced by SEBI in the interim may not have been complied with. Considering that a stock exchange is required to have adequate and effective trading systems, clearing and settlement system, monitoring and surveillance mechanisms, risk management systems etc, the resumption of trading activity without basic infrastructure may not be in the interest of investors / trade. In light of the above, the stock exchanges that have no trading for a period of six months or more shall resume trading only after ensuring that adequate and effective trading systems, clearing and settlement systems, monitoring and surveillance mechanisms, risk management systems are in place and have also complied with all other regulatory requirements stipulated by SEBI from time to time. Further, the stock exchanges shall resume trading only after obtaining prior approval from SEBI. In case the stock exchanges have no trading for a period of less than six months, the stock exchange shall ensure that necessary regulatory requirements have been complied with before resuming trading and the matter may be placed before its Board with reasons, if any.

### IV. Facilitating transactions in Mutual Fund schemes through the Stock Exchange infrastructure

SEBI vide circular SEBI /IMD / CIR No.11/183204/ 2009 dated November 13, 2009 has permitted units of mutual fund schemes to be transacted through registered stock brokers of recognized stock exchanges. In order to provide more avenues for purchasing and redeeming Mutual Fund units, in addition to the existing facilities of purchasing and redeeming directly with the Mutual Funds and Stock Brokers, units of mutual funds schemes are allowed to be transacted through clearing members of the registered Stock Exchanges.

Investors shall receive redemption amount (if units are redeemed) and units (if units are purchased) through broker/ clearing member's pool account. Mutual Funds(MF)/ Asset management Companies(AMC) would pay proceeds to the broker/clearing member (in case of redemption) and broker/clearing member in turn to the respective investor and similarly units shall be credited by MF/AMC into broker/clearing member's pool account (in case of purchase) and broker/clearing member in turn to the respective investor.

### V. Reporting of Lending of securities bought in the Indian Market.

FIIs have been submitting daily reports of information pertaining to securities lent by the FIIs to entities abroad, based on which disclosures have been made available for public dissemination twice in a week, one on Tuesday and another on Friday. On a review it has been decided to modify the periodicity of these reports from daily submissions to weekly submissions. In accordance with this change in periodicity of reports, the FIIs shall now be required to submit the reports every Friday.

### VI. Review of Securities Lending and Borrowing (SLB) Framework

Pursuant to feedback received from market participants and proposals for revision of SLB received from NSE and BSE, the SLB framework was revised vide circular no. MRD/DoP/SE/ Cir-31/2008 dated October 31, 2008. The tenure of contracts in SLB has been revised upto a maximum period of 12 months. The Approved Intermediary (Clearing corporation/ Clearing House) shall have the flexibility to decide the tenure (maximum period of 12 months). The lender / borrower have the facility of early recall / repayment of shares.

In case the borrower fails to meet the margin obligations, the Approved Intermediary (AI) shall obtain securities and square off the position of such defaulting borrower, failing which there shall be a financial close-out. In case lender recalls the securities anytime before completion of the contract, the AI on a best effort basis shall try to borrow the security for the balance period and pass it onward to the lender. The AI will collect the lending fee from the lender who has sought early recall. In case of early repayment of securities by the borrower, the margins shall be released immediately on the securities being returned by the borrower to the AI. The AI shall on a best effort basis, try to onward lend the securities and the income arising out of the same shall be passed on to the borrower making the early repayment of securities. In case AI is unable to find a new borrower for the balance period, the original borrower will have to forego lending fee for the balance period.

### VII. Companies are required to have at least 50% of the non-promoter holdings in dematerialized form

In order to moderate a sharp and volatile price movements in shares of companies, to encourage better price discovery and to increase transparency in securities market, SEBI in consultation with Stock Exchanges has decided to adopt the following measures:-

a. The securities of all companies shall be traded in the normal segment of the exchange if and only if, the company has achieved at least 50% of non-promoters holding in dematerialized form by October 31st 2010

b. In all cases, wherein based on the latest available quarterly shareholding pattern, the companies do not satisfy above criteria, the trading in such scrips shall take place in Trade for Trade segment (TFT segment) with effect from the time schedule specified above.

c. In addition to above measures, in the following cases the trading shall take place in TFT segment for first 10 trading days with applicable price band while keeping the price band open on the first day of trading (except for the original scrip, on which derivatives products are available or included in indices on which derivatives products are available).

    - Merger, demerger, amalgamation, capital reduction/consolidation, scheme of arrangement, in terms of the Companies Act and/or as sanctioned by the Courts, in cases of rehabilitation packages approved by the Board of Industrial and Financial Reconstruction under Sick Industrial Companies Act and in cases of Corporate Debt Restructuring (CDR) packages by the CDR Cell of the RBI.
    - Securities that are being admitted to trading from another exchange by way of direct listing/MOU/securities admitted for trading under permitted category.
    - Where suspension of trading is being revoked after more than one year.

### VIII. Introduction of call auction in Pre-open session with effect from October 18, 2010.

In a bid to reduce volatility in the opening prices and introduce international standards, NSE introduced call auction mechanism - an alternative price discovery mechanism to be conducted in the pre-open session. The call auction is expected to make improvements in the Indian securities market by:

- Giving investors a choice of achieving a zero impact cost trade

- Reducing transaction costs and execution risk
- Reducing bid-offer spreads in the continuous market when any news breaks out in between close of the market on previous day and the next day's open price.

The pre-open session shall be duration of 15 minutes i.e. from 9:00 am to 9:15 am. The call auction in pre-open session will be introduced initially for securities forming part of indices CNX Nifty and SENSEX. The pre-open session is comprised of Order collection period and order matching period. The order collection period of 8* minutes shall be provided for order entry, modification and cancellation. (* - System driven random closure between 7th and 8th minute) During this period orders can be entered, modified and cancelled. The information like Indicative equilibrium / opening price of scrip, total buy and sell quantity of the scrip, indicative NIFTY Index value and percentage change of indicative equilibrium price to previous close price shall be computed based on the orders in order book and shall be disseminated during pre-open session.

Order matching period will start immediately after completion of order collection period. Order will be matched at a single (equilibrium) price which will be open price. The order matching will happen in a following sequence:

- Eligible limit orders will be matched with eligible limit orders
- Residual eligible limit orders will be matched with market orders
- Market orders will be matched with market orders

During order matching period order modification, order cancellation, trade modification and trade cancellation will not be allowed. The trade details will be disseminated to respective members before the start of normal market.

**Equilibrium price determination:**
In a call auction price mechanism, equilibrium price is determined as shown below. Assume that NSE received bids for particular stock xyz at different prices in between 9:00 am and 9:15 am. Based on the principle of demand supply mechanism, exchange will arrive at the equilibrium price – the price at which the maximum number of shares can be bought / sold. In below example, the opening price will be ₹ 105 where maximum 27,500 shares can be traded.

| Share price (₹) | Order Book | | Demand / Supply Schedule | | Maximum tradable quantity |
|---|---|---|---|---|---|
| | Buy | Sell | Demand | Supply | |
| 103 | 13500 | 11500 | 50500 | 11500 | 11500 |
| 104 | 9500 | 9800 | 37000 | 21300 | 21300 |
| 105 | 12000 | 15000 | 27500 | 36300 | 27500 |
| 106 | 6500 | 12000 | 15500 | 48300 | 15500 |
| 107 | 5000 | 12500 | 9000 | 60800 | 9000 |
| 108 | 4000 | 8500 | 4000 | 69300 | 4000 |

After completion of order matching there shall be a silent period to facilitate the transition from pre-open session to the normal market. All outstanding orders will be moved to the normal market retaining the original time stamp. Limit orders will be at limit price and market orders will be at the discovered equilibrium price. In a situation where no equilibrium price is discovered in the pre-open session, all market orders shall be moved to normal market at previous day's close price or adjusted close price / base price following price time priority. Accordingly, Normal Market / Odd lot Market and Retail Debt Market will open for trading after closure of pre-open session i.e. 9:15 am. Block Trading session will be available for the next 35 minutes from the open of Normal Market.

The opening price shall be determined based on the principle of demand supply mechanism. The equilibrium price will be the price at which the maximum volume is executable. In case more than one price meets the said criteria, the equilibrium price will be the price at which there is minimum unmatched order quantity. In case more than one price has same minimum order unmatched quantity, the equilibrium price will be the price closest to the previous day's closing price. In case the previous day's closing price is the mid-value of pair of prices which are closest to it, then the previous day's closing price itself will be taken as the equilibrium price. In case of corporate action, previous day's closing price will be the adjustable closing price or the base price. Both limit and market orders shall reckon for computation of equilibrium price. The equilibrium price determined in pre-open session is considered as open price for the day.

In case of only market orders exists both in the buy and sell side, the market orders shall be matched at last traded price and all unmatched orders shall be shifted to the order book of the normal market at last traded price following time priority. Last traded price shall be the opening price.

In case the equilibrium price is not discovered in the pre-open session and there are no market orders to be matched at last traded price, all unmatched orders shall be shifted to the order book of the normal market following price time priority. The price of the first trade in the normal market shall be the opening price.

### IX. Introduction of Smart Order Routing

SEBI has allowed Smart Order Routing which allows the brokers' trading engines to systematically choose the execution destination based on factors such as price, costs, speed, likelihood of execution and settlement, size, nature or any other consideration relevant to the execution of the order. SEBI has asked stock exchanges to ensure that brokers adhere to the best execution policy while using Smart Order Routing.

Smart Order Routing facility shall be provided to all class of investors. Stock broker shall enter into a specific agreement with the client to provide Smart Order Routing facility. Broker-client agreement shall clearly describe the features of the Smart Order Routing facility and the obligations and rights associated with Smart Order Routing facility. Stock exchange shall ensure that Smart Order Routing is not used to place orders at venues other than the recognised stock exchanges. The broker server routing orders placed through Smart Order Routing system to the exchange trading system shall be located in India. In addition to that stock broker shall ensure that alternative mode of trading system is available in case of failure of Smart Order Routing facility.

### X. SEBI issued Guidelines for market makers on Small and Medium Enterprise (SME) exchange

SEBI has put in a framework for setting up of new exchange or separate platform of existing stock exchange having nationwide terminals for SME. As per the framework, market making has been made mandatory in respect of all scips listed and traded on SME exchange. The Market Maker shall fulfil the following conditions to provide depth and continuity on this exchange:

- The Market Maker shall be required to provide a 2-way quote for 75% of the time in a day. The same shall be monitored by the stock exchange. Further, the Market Maker shall inform the exchange in advance for each and every black out period when the quotes are not being offered by the Market Maker.
- The minimum depth of the quote shall be ₹1,00,000/- . However, the investors with holdings of value less than ₹ 1,00,000 shall be allowed to offer their holding to the Market Maker in that scrip provided that he sells his entire holding in that scrip in one lot along with a declaration to the effect to the selling broker.
- Execution of the order at the quoted price and quantity must be guaranteed by the Market Maker, for the quotes given by him.
- There would not be more than five Market Makers for scrip. These would be selected on the basis of objective criteria to be evolved by the Exchange which would include capital adequacy, networth, infrastructure, minimum volume of business etc.

### XI. Auction Session shall be conducted on T+2 day

As per extant practice, in case of default by the selling broker in a settlement, the security delivered short is bought in the auction session and is delivered to the buying broker on T+4 day. In order to reduce the time involved in delivering the shares to the buying broker, in case of default, it has been decided to conduct the auction on the same day of the settlement, after the pay-in is completed. i.e. the auction for trades done on T day shall be conducted on T+2 day after pay-in is completed and shortfall is crystallized at 2:00 pm.

However, as the bank and stock exchange holidays are not common there are days when multiple settlements are conducted on the working day immediately following the day(s) of the closure. On such days when multiple settlements are conducted on the same day, the auction session of first settlement shall be conducted on the same day and settled the next day. The auction for the second settlement (S2) shall be conducted on the next day along with the shortages/ auction of that day. The settlement of the same shall happen on the subsequent day.

## Market Design[1]

### Stock Exchanges

At the end of March 2010, there were 19 stock exchanges registered with SEBI having a total of 8804 registered brokers and 75378 registered sub-brokers trading on them (Annexure 4-1). The stock exchanges need to be recognized under the Securities Contracts (Regulation) Act, 1956. The SEBI has approved and notified the Corporatisation and Demutualisation Scheme of 19 Stock Exchanges. 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. Some important features of the NSE structure are:

- It is a for-profit company, owned by Shareholders which are financial institutions which also have broking firms as subsidiaries;
- Ownership, trading rights and management are segregated;
- The Board of NSE 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.

### 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 the 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.

| | |
|---|---|
| *Fees/Eligibility Criteria* | 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 down by the SEBI. The admission of trading members is based on various criteria like capital adequacy, track record, education, and experience. The detailed eligibility criteria for trading membership in the CM, WDM, F&O and CD segment is presented in Table- 4-2. This reflects a conscious decision of NSE to ensure quality broking services. |
| *Corporatisation No of Brokers and Sub brokers* | 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 of end March 2010, 4,197 brokers, accounting for 47.67%% of total brokers have become corporate entities. Amongst those registered with NSE around 89.69% of them were corporatised, followed by BSE with 82.35% corporate brokers.<br>As at end-March 2010, there were 75,378 sub-brokers registered with SEBI, as compared with 62,471 sub-brokers as at end of previous year. NSE and BSE together constituted 98.58% of the total sub-brokers. |

[1] 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 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.

**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,
- Securities Contracts (Regulation) Act, 1956 (SC(R)A),
- Securities Contracts (Regulation) Rules (SC(R)R), 1957,
- Circulars/guidelines issued by Central Government and SEBI.
- Rules, bye-laws and regulations of the concerned stock exchange and by the listing agreement entered into by the issuer and the stock exchange.

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.

| | |
|---|---|
| *Key provisions of Various Acts governing the listing of securities* | • The Companies Act, 1956 requires a company intending to issue securities to the public to 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.<br>• 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.<br>• According to the Securities Contract Regulation Act 1956, for any security to be listed on any recognized stock exchange, it has to fulfill the eligibility criteria and comply with the regulations made by SEBI.<br>• The Securities Contract (Regulation) Act, 1956 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 requirements with respect to listing prescribed by these rules.<br>• The listing agreement states that the issuer should agree to adhere to the agreement of listing, except for a written permission from 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.<br>As per SEBI provision, 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). |
| *Listing Fees in the CM Segment* | 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. as per the below table. For Companies who have a paid up share, bond and/ or debenture and/or debt capital, etc. of more than ₹500 crores |

would have to pay minimum fees of ₹ 3,75,000 and an additional listing fees of ₹ 2,500 for every increase of ₹ 5 crores or part thereof in the paid up share, bond and/ or debenture and/or debt capital, etc. For Companies who have a paid up share, bond and/ or debenture and/or debt capital, etc. of more than ₹ 1,000 crores would have to pay minimum fees of ₹ 6,30,000 and an additional listing fees of ₹ 2,750 for every increase of ₹ 5 crores or part thereof in the paid up share, bond and/ or debenture and/or debt capital, etc. The detailed structure of listing fee is as below:

| Sr. No. | Listing Fees | Amount (₹) |
|---|---|---|
| 1 | Initial Listing Fees | 25,000 |
| 2 | Annual Listing Fees (based on paid up share, bond and/ or debenture and/or debt capital, etc.) | |
| a | Upto ₹ 1 Crore | 10,000 |
| b | Above ₹ 1 Crore and upto ₹ 5 Crores | 15,000 |
| c | Above ₹ 5 Crore and upto ₹ 10 Crores | 25,000 |
| d | Above ₹ 10 Crore and upto ₹ 20 Crores | 45,000 |
| e | Above ₹ 20 Crore and upto ₹ 30 Crores | 70,000 |
| f | Above ₹ 30 Crore and upto ₹ 40 Crores | 75,000 |
| g | Above ₹ 40 Crore and upto ₹ 50 Crores | 80,000 |
| h | Above ₹ 50 Crores and upto ₹ 100 Crores | 1,30,000 |
| i | Above ₹ 100 Crore and upto ₹ 150 Crores | 1,50,000 |
| j | Above ₹ 150 Crore and upto ₹ 200 Crores | 1,80,000 |
| k | Above ₹ 200 Crore and upto ₹ 250 Crores | 2,05,000 |
| l | Above ₹ 250 Crore and upto ₹ 300 Crores | 2,30,000 |
| m | Above ₹ 300 Crore and upto ₹ 350 Crores | 2,55,000 |
| n | Above ₹ 350 Crore and upto ₹ 400 Crores | 2,80,000 |
| o | Above ₹ 400 Crore and upto ₹ 450 Crores | 3,25,000 |
| p | Above ₹ 450 Crore and upto ₹ 500 Crores | 3,75,000 |

**Internet trading**

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. At the end of March 2010, a total number of 363 members were permitted to allow investor's web based access to NSE's trading system. The members of the exchange in turn had registered 5,143,705 clients for web based access as on March 31, 2010. During the year 2009-10, 11.13% of the trading value in the Capital Market segment (₹ 921,380 - US $ 204,116 million) was routed and executed through the internet.

**Trading Regulations**

*Insider Trading*

Insider Trading is considered as an offence and is hence prohibited as per the SEBI (Prohibition of Insider Trading) Regulations, 1992. The same was amended in the year 2003. The act prohibits an insider from dealing (on his behalf or on behalf of any other person) in securities of a company listed on any stock exchange, when in possession of any unpublished price sensitive information. Further, it has also prohibited any insider from communicating, counseling or procuring directly or indirectly any unpublished price sensitive information to any person who while in possession of such unpublished price sensitive information should not deal in securities. Price sensitive information means any information which is related directly or indirectly to a company and which if published is likely to

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| | materially affect the price of securities of a company. It includes information like periodical financial results of the company, intended declaration of dividends (both interim and final), issue of securities or buy-back of securities, any major expansion plans or execution of new projects, amalgamation, merger or takeovers, disposal of the whole or substantial part of the undertaking and significant changes in policies, plans or operations of the company. SEBI is empowered to investigate on the basis of any complaint received from the investors, intermediaries or any other person on any matter having a bearing on the allegations of insider trading. |
| ***Unfair Trade Practices*** | The SEBI (Prohibition of Fraudulent and Unfair Trade Practices relating to the Securities Market) Regulations 2003 enable SEBI to investigate into cases of market manipulation and fraudulent and unfair trade practices. The regulations specifically prohibit fraudulent dealings, market manipulations, misleading statements to induce sale or purchase of securities, unfair trade practices relating to securities. When SEBI has reasonable ground to believe that the transaction in securities are being dealt with in a manner detrimental to the investor or the securities market in violation of these regulations and when any intermediary has violated the rules and regulations under the act, then it can order to investigate the affairs of such intermediary or persons associated with the securities market. 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 SEBI (Substantial Acquisition of shares and Takeover) Regulations, 1997. These regulations were formulated so that the process of acquisition and takeovers is carried out in a well-defined and orderly manner following the fairness and transparency.

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| *The SEBI (Substantial Acquisition of shares and Takeover) Regulations, 1997* | In context of this regulation '**acquirer**' is defined as a person who directly or indirectly acquires or agrees to acquire shares or voting rights in the target company or acquires or agrees to acquires '**control**' over the target company, either by himself or with any person acting in concert with the acquirer. The term '**control**' includes right to appoint majority of the directors or to control the management or policy decisions exercisable by any person or persons acting individually or in concert, directly or indirectly, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements or in any other manner. This implies that where there are two or more persons in control over the target company, the cesser of any one of such persons from such control should not be deemed to be in control of management. |
| *Chapter II 'Disclosures of shareholding and control in a listed company' of the SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 1997* | Certain categories of persons are required to disclose their shareholding and/or control in a listed company to that company. Such companies, in turn, are required to disclose such details to the stock exchanges where shares of the company are listed. In case of acquisition of 5 percent and more share or voting rights of a company, an acquirer would have to disclose at every stage the aggregate of his shareholding or voting rights in that company to the company and to the stock exchange where shares of the target company are listed. No acquirer either by himself or through/ with persons acting in concert with him should acquire, additional shares or voting rights unless such acquirer makes a public announcement to acquire shares in accordance with the regulations. As per the regulations, the mandatory public offer is triggered on:<br>Limit of 15 percent or more but less than 55 percent of the shares or voting rights in a company.<br>Limit of 55 percent or more but less than 75 percent of the shares. In a case where the target company had obtained listing of its shares by making an offer of at least ten percent of issue size to the public in terms of the relevant clause mentioned in the Securities Contracts (Regulations) Rules 1957 or in terms of any relaxation granted from strict enforcement of the said rule, then the limit would be 90 percent instead of 75 percent. Further, if the acquire (holding 55% more but less than 75 percent) is desirous of consolidating his holding while ensuring that the public shareholding in |

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| | the target company does not fall below the minimum level permitted in the listing agreement, he may do so only by making a public announcement in accordance with these regulations. Irrespective of whether or not there has been any acquisition of shares or voting rights in a company, no acquirer should acquire control over the target company, unless such person makes a public announcement to acquire shares and acquires such shares in accordance with the regulations.<br><br>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 or other specified securities by any of the following methods:-<br>▪ From the existing security holders on a proportionate basis through the tender offer<br>▪ From the open market through (i) book building process (ii) stock exchange<br>▪ From odd-lot holders.<br><br>The company has to disclose the pre and post-buy back holding 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 tender offer an offer for buy back should not remain open for more than 30 days. The company should complete the verifications of the offers received within 15 days of the closure of the offer and shares or other specified securities. The payment 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 Nifty 50 or Sensex, whichever is breached earlier. 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:<br>• Daily price bands of 2% (either way) on a set of specified securities,<br>• Daily price bands of 5% (either way) on a set of specified securities,<br>• Price bands of 20% (either way) on all remaining securities (including debentures, warrants, preference shares etc which are traded on CM segment of NSE),<br>• Daily price bands of 10% (either way) on specified securities,<br>• 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.<br><br>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. |

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| **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. Starting with twelve scrips on January 15, 1998, all investors are required to mandatorily trade in dematerialized form. 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. |
| ***Statistics: NSDL & CDSL*** | At the end of March 2010, the number of companies connected to NSDL and CDSL were 8,124 and 6,805 respectively. The number of dematerialised securities have increased from 353.69 billion at the end of March 2009 to 429.09 billion at the end of March 2010. However, during the same period the value of dematerialised securities has increased by 82.01% from ₹ 35,463 billion to ₹ 64,545 billion.<br><br>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, as at the end of March 2010 and September 2010 are presented in (Table 4-4).<br><br>The Depositories in India provide depository services to investors through Depository Participants (DPs). The Depositories do not charge the investors directly, but charge their DPs who in turn charge the clients. DPs are free to have their own charge structure for their clients. However, as per SEBI directive, DPs cannot charge investors towards opening of a Beneficiary Owner (BO) account (except statutory charges), credit of securities into BO account and custody charges. It may be added that the depositories have been reducing its charges along with the growth in volumes. |
| **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.<br>A member was required to pay the exchange, transaction charges at the rate of 0.0035% (₹ 3.5 per ₹ 1 lakh) of the turnover till September, 2009. NSE has, with effect from October, 2009, changed the transaction charges structure to a slab based one, as below: |

| Total Traded Value in a month | Revised Transaction Charges (₹ per lakh of Traded Value) |
|---|---|
| Up to First ₹ 1250 cores | ₹ 3.25 each side |
| More than ₹ 1250 crores up to ₹ 2500 crores (on incremental volume) | ₹ 3.20 each side |
| More than ₹ 2500 crores up to ₹ 5000 crores (on incremental volume) | ₹ 3.15 each side |
| More than ₹ 5000 crores up to ₹ 10000 crores (on incremental volume) | ₹ 3.10 each side |
| More than ₹ 10000 crores up to ₹ 15000 crores (on incremental volume) | ₹ 3.05 each side |
| Exceeding ₹ 15000 crores (on incremental volume) | ₹ 3.00 each side |

Trading members are also required to pay securities transaction tax (STT) on all delivery based transaction at the rate of 0.125% (payable by both buyer and seller) and in case of non-delivery transactions at the rate of 0.025% for equities payable by the seller only).

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| | The maximum brokerage chargeable by trading member in respect of trades effected in the securities admitted to dealing on the CM segment of the Exchange is fixed at 2.5% of the contract price, exclusive of statutory levies like, securities transaction tax, SEBI turnover fee, service tax and stamp duty. However, the brokerage charges as low as 0.15% are also observed in the Market.<br><br>Stamp duties are payable as per the rates prescribed by the relevant states. In Maharashtra, for brokers having registered office in Maharashtra, it is charged at @ Re. 1 for every ₹ 10,000 or part thereof (i.e. 0.01%) of the value of security at the time of purchase/sale as the case may be. However, if the securities are not delivered, it is levied at @ 20 paise for every ₹ 10,000 or part thereof (i.e. 0.002%).<br><br>As per the Finance Bill, 2008 Stock Exchanges and Clearing House Services are being charged a service tax on services rendered by them in relation to assisting, regulating or controlling the business of buying, selling or dealing in securities and including services provided in relation to trading, processing, clearing and settlement of transactions in securities, goods and forward contracts w.e.f 16th May, 2008. |
| **Institutional Trades** | Trades by Mutual Funds (MFs) 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. With effect from 21st April, 2008 a MF may engage in short selling of securities in accordance with the framework relating to short selling and securities lending and borrowing specified by SEBI. 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.<br><br>The investments by FIIs are governed by the rules and regulations of the RBI and the SEBI. As per the RBI guidelines, total holding of each FII/sub-accounts should not exceed 10% of the total paid up capital or paid up value of each series of convertible debentures. Further total holding of all the FIIs/sub- accounts put together should not exceed 24% of the paid up capital or paid up value of each series of convertible debentures. This limit of 24% can be increased to the sectoral cap / statutory limit as applicable to the Indian company concerned, by passing a resolution of its Board of Directors followed by a special resolution to that effect by its General Body. |

**Table 4-2 A: Eligibility Criteria for Membership -- CORPORATES**

(Amount in ₹ lakh)

| Particulars/ Segments | CM | CM and F&O | WDM | CM and WDM | CM,WDM and F&O |
|---|---|---|---|---|---|
| *Minimum Paid-up capital* | *30* | *30* | *30* | *30* | *30* |
| *Net Worth* | *100* | *100 (Membership in CM segment and Trading/Trading and self clearing membership in F&O segment)*<br><br>*300 (Membership in CM segment and Trading and Clearing membership in F&O segment)* | *200* | *200* | *200(Membership in WDM segment, CM segment and Trading/Trading and Self Clearing membership in F&O segment)*<br><br>*300(Membership in WDM segment, CM segment and Trading and Clearing membership in F&O segment)* |

*Contd.*

*Contd.*

| Particulars/ Segments | CM | CM and F&O | WDM | CM and WDM | CM,WDM and F&O |
|---|---|---|---|---|---|
| Interest Free Security Deposit (IFSD) with NSEIL | 85 | 110 | 150 | 235 | 260 |
| Collateral Security Deposit (CSD) with NSEIL | NIL | NIL | NIL | NIL | NIL |
| Interest Free Security Deposit (IFSD) with NSCCL | 15 | 15 * | NIL | 15 | 15 * |
| Collateral Security Deposit (CSD) with NSCCL | 25 | 25** | NIL | 25 | 25** |
| Annual Subscription | 1 | 1 | 1 | 2 | 2 |
| Advance Minimum Transaction Charges for Futures Segment | NIL | 1 | NIL | NIL | 1 |
| Education | Two directors should be HSC. Dealers should also have passed SEBI approved certification test for Capital Market Module of NCFM. | Two directors should be HSC. Dealers should also have passed SEBI approved certification test for Derivatives and Capital Market Module of NCFM. | Two directors should be HSC. Dealers should also have passed FIMMDA-NSE Debt Market (Basic Module) of NCFM. | Two directors should be HSC. Dealers should also have passed FIMMDA-NSE Debt Market (Basic Module) of NCFM.& Capital Market Module of NCFM. | Two directors should be HSC. Dealers should also have passed FIMMDA-NSE Debt Market (Basic Module) of NCFM, Capital Market Module of NCFM.& SEBI approved certification test for Derivatives |
| Experience | --------------Two year's experience in securities market---------------------- | | | | |
| Track Record | The 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. | | | | |

*Net worth requirement for Professional Clearing members in F&O segment is ₹ 300 lakhs. Further, a Professional Clearing member needs to bring IFSD of 25 lakhs with NSCCL and Collateral Security Deposit (CSD) of 25 lakhs with NSCCL as deposits.*

**Additional IFSD of 25 lakhs with NSCCL is required for Trading and Clearing (TM-CM) and for Trading and Self clearing member (TM/SCM).*

*** Additional Collateral Security Deposit (CSD) of 25 lakhs with NSCCL is required for Trading and Clearing (TM-CM) and for Trading and Self clearing member (TM/SCM).*

*In addition, a member clearing for others is required to bring in IFSD of ₹ 2 lakh and CSD of ₹ 8 lakh per trading member he undertakes to clear in the F&O segment.*

**Table 4-2 B: Requirements for Professional Clearing Memberhip**

(All values in ₹ lakh)

| Particulars | CM Segment | F&O Segment | CM and F&O Segment |
|---|---|---|---|
| Eligibility | Trading Member of NSE/SEBI Registered Custodians/Recognised Banks | | |
| Net Worth | 300 | 300 | 300 |
| Interest Free Security Deposit (IFSD) * | 25 | 25 | 34 |
| Collateral Security Deposit (CSD) | 25 | 25 | 50 |
| Annual Subscription | 2.5 | Nil | 2.5 |

** The Professional Clearing Member (PCM) is required to bring in IFSD of ₹ 2 lakh and CSD of ₹ 8 lakh per trading member whose trades he undertakes to clear in the F&O segment and IFSD of ₹ 6 lakh and CSD of ₹ 17.5 lakh (₹ 9 lakh and ₹ 25 lakh respectively for corporate Members) per trading member in the CM segment.*

*Contd.*

**Table 4-2 C: Eligibility Criteria for Membership- Individuals/ Partnership Firms.**

(Amount in ₹ lakh)

| Particulars | CM | CM and F&O | WDM | CM and WDM | CM,WDM and F&O |
|---|---|---|---|---|---|
| *Net Worth* | 75 | 75 (Membership in CM segment and Trading membership in F&O segment)<br>100 (Membership in CM segment and Trading and Self clearing membership in the F&O segment)<br>300 (Membership in CM segment and Trading and Clearing membership in F&O segment) | 200 | 200 | 200 (Membership in WDM segment, CM segment and Trading/Trading and Self Clearing membership in F&O segment)<br>300 (Membership in WDM segment,CM segment and Trading and clearing membership on F&O segment) |
| Interest Free Security Deposit (IFSD) with NSEIL | 26.5 | 51.5 | 150 | 176.5 | 201.5 |
| Collateral Security Deposit (CSD) with NSEIL | NIL | NIL | NIL | NIL | NIL |
| Interest Free Security Deposit (IFSD) with NSCCL | 6 | 6 * | NIL | 6 | 6* |
| Collateral Security Deposit (CSD) with NSCCL | 17.5 | 17.5 ** | NIL | 17.5 | 17.5 ** |
| Annual Subscription | 0.5 | 0.5 | 1 | 1.5 | 1.5 |
| Advance Minimum Transaction Charges for Futures Segment | NIL | 1 | NIL | NIL | 1 |

**Additional IFSD of 25 lakhs with NSCCL is required for Trading and Clearing Members (TM-CM) and for Trading and Self clearing member (TM/SCM).*

*** Additional Collateral Security Deposit (CSD) of 25 lakh with NSCCL is required for Trading and Clearing (TM-CM) and for Trading and Self clearing member (TM/SCM).*

**Table 4-2 D: CURRENCY DERIVATIVES- Corporates, Individuals and Firms**

(Amount in ₹ lakh)

| **Particulars** | **NSE Members** | | **NCDEX Members** | | **New Applicants** |
|---|---|---|---|---|---|
| | Trading Membership | Trading cum Clearing Membership | Trading Membership | Trading cum Clearing Membership | Trading Membership |
| Networth | 100 | 1000 | 100 | 1000 | 100 |
| Cash to NSEIL | 2 | 2 | 2 | 2 | 2 |
| Non Cash to NSEIL | 8 | 8 | 10.5 | 13 | 13 |
| Cash to NSCCL | NIL | 25 | NIL | 25 | NIL |
| Non cash to NSCCL | NIL | 25 | NIL | 25 | NIL |
| Education | Two directors should be HSC. Dealers should also have passed SEBI approved National Institute of Securities Markets (NISM) Series I – Currency Derivatives Certification Examination | Two directors should be HSC. Dealers should also have passed SEBI approved National Institute of Securities Markets (NISM) Series I – Currency Derivatives Certification Examination | Two directors should be HSC. Dealers should also have passed SEBI approved National Institute of Securities Markets (NISM) Series I – Currency Derivatives Certification Examination | Two directors should be HSC. Dealers should also have passed SEBI approved National Institute of Securities Markets (NISM) Series I – Currency Derivatives Certification Examination | Two directors should be HSC. Dealers should also have passed SEBI approved National Institute of Securities Markets (NISM) Series I – Currency Derivatives Certification Examination |

*Contd.*

*Contd.*

| Particulars | NSE Members | | NCDEX Members | | New Applicants |
|---|---|---|---|---|---|
| | Trading Membership | Trading cum Clearing Membership | Trading Membership | Trading cum Clearing Membership | Trading Membership |
| Experience | --------------Two year's experience in securities market--------------------- | | | | |
| Track Record | The 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. | | | | |

In case the member is opting for membership of any other segment(s) in combination with the membership of Currency Derivatives segment, the applicable net worth will be the minimum net worth required for the other segment(s) or the minimum net worth required for Currency Derivatives Segment, whichever is higher.

The eligibility condition for applicants planning to apply for new membership of the Exchange is that either the proprietor/one designated director/partner or the Compliance Officer of the applicant entity should be successfully certified either in Securities Market (Basic) Module or Compliance Officers (Brokers) Module or the relevant module pertaining to the segments wherein membership of the Exchange had been sought.

**Table 4-3: Listing Criteria for Companies on the CM Segment of NSE**

| Criteria | Initial Public Offerings (IPOs) | Companies listed on other exchanges |
|---|---|---|
| **Paid-up Equity Capital (PUEC)/Market Capitalisation (MC) /Net Worth** | PUEC ≥ ₹ 10 cr. and MC ≥ ₹ 25 cr. | PUEC ≥ ₹ 10 cr. and MC ≥ ₹ 25 cr. OR<br>PUEC ≥ ₹ 25 cr. OR<br>MC ≥ ₹ 50 cr. OR<br>The company shall have a net worth of not less than ₹ 50 crores in each of the preceding financial years. |
| **Company/ Promoter's Track Record** | Atleast 3 years track record of either<br>a) the applicant seeking listing OR<br>b) the promoters/promoting company incorporated in or outside India OR<br>c) Partnership firm and subsequently converted into Company not in existence as a Company for three years) and approaches the Exchange for listing. The Company subsequently formed would be considered for listing only on fulfillment of conditions stipulated by SEBI in this regard. | Atleast three years track record of either<br>a) the applicant seeking listing; OR<br>b) the promoters/promoting company, incorporated in or outside India. |
| **Dividend Record / Net worth / Distributable Profits** | -- | Dividend paid in at least 2 out of the last 3 financial years immediately preceding the year in which the application has been made OR The networth of the applicants atleast ₹50 crores OR The applicant has distributable profits in at least two out of the last three financial years. |
| **Listing** | | Listed on any other stock exchange for at least last three years OR listed on the exchange having nationwide trading terminals for at least one year. |
| **Other Requirements** | (a) No disciplinary action by other stock exchanges/regulatory authority in past 3 yrs.<br>(b) Satisfactory redressal mechanism for investor grievances,<br>(c ) distribution of shareholding and<br>(d) details of llitigation record in past 3 years<br>(e) Track record of Directors of the Company | (a) No disciplinary action by other stock exchanges/regulatory authority in past 3 yrs.<br>(b) Satisfactory redressal mechanism for investor grievances,<br>(c) distribution of shareholding and<br>(d) details of llitigation record in past 3 years<br>(e) Track record of Directors of the Company<br>(f) Change in control of a Company/Utilisation of funds raised from public |

*Contd.*

*Contd.*

***Note:***

1. (a) *In case of IPOs, Paid up Equity Capital means post issue paid up equity capital.*
   (b) *In case of Existing companies listed on other exchanges, the existing paid up equity capital as well as the paid up equity capital after the proposed issue for which listing is sought shall be taken into account.*
2. (a) *In case of IPOs, market capitalisation is the product of the issue price and the post-issue number of equity shares.*
   (b) *In case of case of Existing companies listed on other stock exchanges the market capitalisation shall be calculated by using a 12 month moving average of the market capitalisation over a period of six months immediately preceding the date of application. For the purpose of calculating the market capitalisation over a 12 month period, the average of the weekly high and low of the closing prices of the shares as quoted on the National Stock Exchange during the last twelve months and if the shares are not traded on the National Stock Exchange such average price on any of the recognised Stock Exchanges where those shares are frequently traded shall be taken into account while determining market capitalisation after making necessary adjustments for Corporate Action such as Rights / Bonus Issue/Split.*
3. *In case of Existing companies listed on other stock exchanges, the requirement of ₹25 crores market capital shall not be applicable to listing of securities issued by Government Companies, Public Sector Undertakings, Financial Institutions, Nationalised Banks, Statutory Corporations and Banking Companies who are otherwise bound to adhere to all the relevant statutes, guidelines, circulars, clarifications etc. that may be issued by various regulatory authorities from time to time*
4. *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.*
5. *Promoters mean one or more persons with minimum 3 years of experience of each of them in the same line of business and shall be holding at least 20% of the post issue equity share capital individually or severally.*
6. *In case a company approaches the Exchange for listing within six months of an IPO, the securities may be considered as eligible for listing if they were otherwise eligible for listing at the time of the IPO. If the company approaches the Exchange for listing after six months of an IPO, the norms for existing listed companies may be applied and market capitalisation be computed based on the period from the IPO to the time of listing.*

**Table 4-4: Progress of Dematerialisation: NSDL & CDSL as at the end of the period.**

| Parameters of Progress | NSDL | | | | CDSL | | | |
|---|---|---|---|---|---|---|---|---|
| | Mar-08 | Mar-09 | Mar-10 | Sep-10 | Mar-08 | Mar-09 | Mar-10 | Sep-10 |
| Companies - Agreement signed | 7,354 | 7,801 | 8,124 | 8,514 | 5,943 | 6,213 | 6,975 | 7,392 |
| Companies - Available for Demat | 7,354 | 7,801 | 8,124 | 8,514 | 5,943 | 6,213 | 6,975 | 7,392 |
| Market Cap. of Companies available (₹bn.) | 52,197 | 31,103 | 61,843 | 71,363 | 51,626 | 31,437 | 62,196 | 73,363 |
| Number of Depository Participants | 251 | 275 | 286 | 288 | 420 | 468 | 490 | 521 |
| Number of DP Locations | 7,204 | 8,777 | 11,170 | 12,042 | 6,372 | 6,934 | 8,590 | 9,735 |
| No. of Investor Accounts | 9,372,335 | 9,685,568 | 1,05,84,868 | 1,09,50,604 | 4,798,222 | 5,527,479 | 6,585,746 | 6,986,061 |
| Demat Quantity (mn.) | 236,897 | 282,270 | 351,138 | 407,719 | 49,820 | 70,820 | 77,950 | 87,040 |
| Demat Value (₹ bn.) | 43,770 | 31,066 | 56,178 | 65,485 | 5,900 | 4,397 | 8,367 | 9,782 |

*Source: NSDL & CDSL.*

### 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. Many indices are cited by news or financial services firms and are used to benchmark the performance of portfolios such as mutual funds.

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. It has a licensing and marketing agreement with Standard and Poor's (S&P), the world's leading provider of investible equity indices, for co-branding equity indices. IISL maintains a number of equity indices comprising broad-based benchmark indices, sectoral indices and customised indices. They are maintained professionally to ensure that it continues to be a consistent benchmark

Table 4-5: Capital Market Market Turnover on Stock Exchanges in India

| | Stock Exchanges | Capital Market Turnover | | | | | | | | Share in Turnover (%) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2007-08 | | 2008-09 | | 2009-10 | | Apr'10 - Sep'10 | | | | | |
| | | (₹ mn.) | (US $ million) | (₹ mn.) | (US $ million) | (₹ mn.) | (US $ million) | (₹ mn.) | (US $ million) | 2007-08 | 2008-09 | 2009-10 | Apr'10 - Sep'10 |
| 1 | NSE | 35,510,380 | 888,426 | 27,520,230 | 540,142 | 41,380,230 | 916,709 | 17,677,130 | 393,525 | 69.21 | 71.43 | 75.01 | 75.04 |
| 2 | BSE | 15,788,570 | 395,011 | 11,000,740 | 215,912 | 13,788,090 | 305,452 | 5,878,250 | 130,860 | 30.77 | 28.55 | 24.99 | 24.96 |
| 3 | Calcutta | 4460 | 112 | 3930 | 77 | 0 | - | 0 | 0 | 0.01 | 0.01 | 0.00 | 0.00 |
| 4 | Uttar Pradesh | 4,750 | 119 | 890 | 17 | 250 | 6 | 10 | 0 | 0.01 | 0.0023 | 0.00 | 0.00 |
| 5 | Ahmedabad | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 6 | Delhi | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 7 | Pune | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 8 | Ludhiana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 9 | Bangalore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 10 | ICSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 11 | Madras | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 12 | Madhya Pradesh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 13 | Vadodara | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 14 | OTCEI | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 15 | Gauhati | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 16 | Cochin | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 17 | Bhubaneshwar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 18 | Coimbatore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| 19 | Jaipur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| | **Total** | **51,308,160** | **1,283,667** | **38,525,790** | **756,149** | **55,168,570** | **1,222,166** | **23,555,390** | **524,385** | **100** | **100** | **100** | **100** |

*Source: SEBI*

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

| Month | Turnover | | | | Average Daily Turnover | | | | Market Capitalisation (end of period) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NSE | | BSE | | NSE | | BSE | | NSE | | BSE | |
| | ₹ mn | US $ mn | ₹ mn | US $ mn | ₹mn | US $ mn | ₹mn | US $ mn | ₹mn | US $ mn | ₹mn | US $ mn |
| **2007-08** | **35,510,382** | **888,426** | **15,788,552** | **395,010** | **141,476** | **3,540** | **62,903** | **1,574** | **48,581,217** | **1,215,442** | **51,380,140** | **1,285,468** |
| Apr-08 | 2,712,269 | 53,234 | 1,154,543 | 22,660 | 135,613 | 2,662 | 57,730 | 1,133 | 54,427,796 | 1,068,259 | 57,942,920 | 1,137,251 |
| May-08 | 2,779,229 | 54,548 | 1,216,701 | 23,880 | 138,961 | 2,727 | 60,840 | 1,194 | 50,988,729 | 1,000,760 | 54,288,780 | 1,065,531 |
| Jun-08 | 2,644,282 | 51,900 | 1,136,046 | 22,297 | 125,918 | 2,471 | 54,100 | 1,062 | 41,036,509 | 805,427 | 43,750,210 | 858,689 |
| Jul-08 | 2,958,162 | 58,060 | 1,239,160 | 24,321 | 128,620 | 2,524 | 53,880 | 1,058 | 44,324,270 | 869,956 | 47,325,440 | 928,860 |
| Aug-08 | 2,342,507 | 45,977 | 999,240 | 19,612 | 117,130 | 2,299 | 49,960 | 981 | 44,724,610 | 877,814 | 47,788,640 | 937,952 |
| Sep-08 | 2,622,612 | 51,474 | 1,080,900 | 21,215 | 124,890 | 2,451 | 51,470 | 1,010 | 39,001,850 | 765,493 | 41,653,870 | 817,544 |
| Oct-08 | 2,161,984 | 42,433 | 782,270 | 15,354 | 108,100 | 2,122 | 39,110 | 768 | 28,203,880 | 553,560 | 29,972,590 | 588,275 |
| Nov-08 | 1,731,228 | 33,979 | 636,940 | 12,501 | 96,180 | 1,888 | 35,390 | 695 | 26,532,810 | 520,762 | 28,189,640 | 553,280 |
| Dec-08 | 2,129,560 | 41,797 | 808,660 | 15,872 | 101,410 | 1,990 | 38,510 | 756 | 29,167,680 | 572,477 | 31,447,670 | 617,226 |
| Jan-09 | 1,911,835 | 37,524 | 705,100 | 13,839 | 95,590 | 1,876 | 35,250 | 692 | 27,987,070 | 549,305 | 29,995,250 | 588,719 |
| Feb-09 | 1,498,575 | 29,413 | 543,300 | 10,663 | 78,870 | 1,548 | 28,590 | 561 | 26,756,220 | 525,147 | 28,628,710 | 561,898 |
| Mar-09 | 2,027,985 | 39,803 | 697,890 | 13,698 | 101,400 | 1,990 | 34,890 | 685 | 28,961,940 | 568,438 | 30,860,750 | 605,707 |
| **2008-09** | **27,520,230** | **540,142** | **11,000,750** | **215,913** | **113,250** | **2,223** | **45,270** | **889** | **28,961,940** | **568,438** | **30,860,750** | **605,707** |
| Apr-09 | 2,666,960 | 55,713 | 889,430 | 18,580 | 156,880 | 3,277 | 52,320 | 1,093 | 33,750,250 | 705,040 | 35,869,780 | 749,316 |
| May-09 | 3,825,610 | 79,917 | 1,285,420 | 26,852 | 191,280 | 3,996 | 64,270 | 1,343 | 45,645,720 | 953,535 | 48,650,450 | 1,016,304 |
| Jun-09 | 4,824,140 | 100,776 | 1,591,950 | 33,256 | 219,280 | 4,581 | 72,360 | 1,512 | 44,325,960 | 925,965 | 47,499,340 | 992,257 |
| Jul-09 | 4,261,429 | 89,021 | 1,389,860 | 29,034 | 185,280 | 3,870 | 60,430 | 1,262 | 48,164,590 | 1,006,154 | 51,399,420 | 1,073,729 |
| Aug-09 | 3,649,688 | 76,242 | 1,223,190 | 25,552 | 173,795 | 3,631 | 58,250 | 1,217 | 49,757,998 | 1,039,440 | 52,856,570 | 1,104,169 |
| Sep-09 | 3,650,631 | 76,261 | 1,242,200 | 25,949 | 182,532 | 3,813 | 62,110 | 1,297 | 53,538,796 | 1,118,421 | 57,083,370 | 1,192,466 |
| Oct-09 | 3,629,688 | 75,824 | 1,140,070 | 23,816 | 181,484 | 3,791 | 57,000 | 1,191 | 50,248,302 | 1,049,683 | 53,759,200 | 1,123,025 |
| Nov-09 | 3,244,768 | 67,783 | 1,051,420 | 21,964 | 162,238 | 3,389 | 52,570 | 1,098 | 54,300,880 | 1,134,340 | 57,952,090 | 1,210,614 |
| Dec-09 | 2,929,004 | 61,187 | 980,820 | 20,489 | 139,476 | 2,914 | 46,710 | 976 | 56,996,368 | 1,190,649 | 60,813,080 | 1,270,380 |
| Jan-10 | 3,384,426 | 70,700 | 1,170,840 | 24,459 | 178,128 | 3,721 | 61,620 | 1,287 | 57,829,647 | 1,208,056 | 59,257,250 | 1,237,879 |
| Feb-10 | 2,451,434 | 51,210 | 825,100 | 17,236 | 122,572 | 2,561 | 41,250 | 862 | 57,553,054 | 1,202,278 | 59,049,290 | 1,233,534 |
| Mar-10 | 2,862,455 | 59,796 | 997,790 | 20,844 | 136,307 | 2,847 | 47,510 | 992 | 60,091,732 | 1,255,311 | 61,656,190 | 1,287,992 |
| **2009-10** | **41,380,234** | **864,429** | **13,788,090** | **288,032** | **169,591** | **3,543** | **56,510** | **1,180** | **60,091,732** | **1,255,311** | **61,656,190** | **1,287,992** |
| Apr-10 | 2,765,655 | 61,568 | 939,290 | 20,910 | 138,283 | 3,078 | 46,960 | 1,045 | 61,178,575 | 1,361,945 | 62,831,960 | 1,398,752 |
| May-10 | 2,846,249 | 63,363 | 866,800 | 19,297 | 129,375 | 2,880 | 39,400 | 877 | 59,325,783 | 1,320,699 | 60,912,640 | 1,356,025 |
| Jun-10 | 2,861,092 | 63,693 | 924,930 | 20,591 | 130,050 | 2,895 | 42,040 | 936 | 62,291,356 | 1,386,718 | 6,394,001 | 142,342 |
| Jul-10 | 2,785,508 | 62,010 | 929,570 | 20,694 | 126,614 | 2,819 | 42,250 | 941 | 63,401,199 | 1,411,425 | 6,510,777 | 144,942 |
| Aug-10 | 3,119,937 | 69,455 | 1,128,820 | 25,130 | 141,815 | 3,157 | 51,310 | 1,142 | 63,934,175 | 1,423,290 | 65,620,250 | 1,460,825 |
| Sep-10 | 3,298,687 | 73,435 | 1,088,850 | 24,240 | 157,080 | 3,497 | 51,850 | 1,154 | 69,585,335 | 1,549,095 | 71,258,070 | 1,586,333 |
| **Apr'10 - Sep'10** | **17,677,127** | **393,525** | **5,878,250** | **130,860** | **137,032** | **3,051** | **45,570** | **1,014** | **69,585,335** | **1,549,095** | **71,258,070** | **1,586,333** |

*Source : SEBI*

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. Many investment and risk management products based on IISL indices have been developed in the recent past, within India and abroad. These include index based derivatives traded on NSE, Singapore Exchange (SGX) and Chicago Mercantile Exchange (CME) and a number of index funds and exchange traded funds.

Some of the important indices of NSE, which are largely tracked by investors are:

| Indices | Particulars | Base date of the Index |
|---|---|---|
| S&P CNX NIFTY (NIFTY 50) | Blue chip index of NSE which is most popular and widely used stock market indicator in the country. It consists of diversified 50 stocks index accounting for 23 sectors of the economy and accounts for 63% of the Free Float Market Capitalization of NSE as on Dec 31, 2010. | November 3, 1995 |
| CNX Nifty Junior | This index contains the next rung of liquid securities after Nifty 50. The maintenance of the Nifty 50 and the CNX Nifty Junior are synchronised so that the two indices will always be disjoint sets. This index accounts for about 11.61% of the Free Float Market Capitalization of NSE as on Dec 31, 2010. | November 3, 1996 |
| CNX 100 | This is a diversified 100 stock index accounting for 35 sector of the economy, which is a combination of the Nifty 50 and CNX Nifty Junior. CNX 100 represents about 74% of the Free Float market capitalization as on Dec 31, 2010. | January 1, 2003 |
| S&P CNX 500 | This is India's first broad-based benchmark of the Indian capital market and helps in comparing portfolio returns vis-a-vis market returns. It represents about 92.27% of the Free Float Market Capitalization and about 81.52% of the total turnover on the NSE as on December 31, 2010. Industry weightages in the index reflect the industry weightages in the market. For e.g. if the banking sector has a 5% weightage in the universe of stocks traded on NSE, banking stocks in the index would also have an approximate representation of 5% in the index | 1994 |
| Nifty Midcap 50 and CNX Midcap | The primary objective of the Nifty Midcap 50 Index and CNX Midcap is to capture the movement of the midcap segment of the market segment which is being increasingly perceived as an attractive investment segment with high growth potential | January 1, 2004<br>January 1, 2003 |

Besides the above, IISL also has a number of sectoral indices which reflect the share market trend of these particular sectors. These include, CNX IT Index, CNX Bank Index, CNX FMCG Index, CNX PSE Index, CNX MNC Index, CNX Service Sector Index, S&P CNX Industry Indices, CNX Energy Index, CNX Pharma Index, CNX Infrastructure Index, CNX PSU BANK Index, CNX Realty Index etc.

**CNX Dividend Opportunities Index:**

The CNX Dividend Opportunities Index is designed to provide exposure to high yielding companies listed on NSE while meeting stability and tradability requirements. The CNX Dividend Opportunities Index comprises of 50 companies. The methodology employs a yield driven selection criteria that aims to maximize yield while providing stability and tradability. Currently the index comprises of companies from 24 different sectors. The index is capped at stock level of 10% i.e. no individual stock can have weightage of more than 10% in the index at any given point of time. CNX Dividend Opportunities Index represents about 13% of the free float market capitalization of the companies listed on NSE and 40% of the free float market capitalization of the companies forming part of the Dividend Opportunities eligible universe.


*Source : NSE*

The criteria for the CNX Dividend Opportunities Index include the following:

a) Companies must rank within the top 500 companies ranked by average free-float market capitalization and aggregate turnover for the last six months.
b) Earnings growth over 3 years must be positive.
c) Companies should have a positive Net worth as per latest annual audited results.
d) Companies must have reported net profit as per latest annual audited results.
e) Top 50 companies ranked by Annual Dividend Yield will form part of the index.
f) The maximum weightage of each company in the index shall be 10%.
g) In order to reduce the turnover of constituents that form part of the index, a buffer of 100% of total number of index constituents shall be applied at the time of each review. This means that if the existing constituent at the time of the review ranks within the top 100 rank, the same can be retained in the index.

Index and Exchange Traded Funds today are a source of investment for investors looking at a long term, less risky form of investment. The success of index funds depends on their low volatility and therefore the choice of the index. IISL's indices are used by a number of well known mutual funds in India for promoting Index Funds. Most ETFs charge lower annual expenses than index mutual funds. The first ETF in India, "Nifty BeEs (Nifty Benchmark Exchange Traded Scheme) based on S&P CNX Nifty, was launched in January 2002 by Benchmark Mutual Fund.

In continuation of its efforts to develop indices that meet the requirements of market participants, IISL has launched CNX Smallcap Index. The CNX Smallcap Index is designed to reflect the behaviour and performance of the small capitalised segment of the financial market. The index is calculated using free float market capitalisation methodology with a base date of January 1, 2004 indexed to a base value of 1000. The index will be maintained by IISL and the review will be carried out on a semi-annual basis.

## E. Market Outcome

### Turnover and Market Capitalisation - Growth

Trading volumes in the equity segments of the stock exchanges have witnessed a phenomenal growth over the last few years. The trading volumes saw a considerable increase in late 1990's. The compounded annual growth rate of trading volumes on all the stock exchanges taken together has been 12.27% over the period 2001-02 to 2009-10.

NSE and BSE, were the only two stock exchange which reported significant trading volumes. With the exception of Uttar Pradesh Stock Exchange, all other stock exchanges did not report any trading volumes during 2009-10 and 2010-11 (Apr-Sep). NSE consolidated its position as the market leader by contributing 75.01% of the total turnover in India in 2009-10 and 75.04% in first two quarter of 2010-11. 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 the 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.

Looking at trends in turnover in NSE and BSE over 2007-08 to latest first half of 2010-11 (Table 4-5), one finds that 2009-10 saw upsurge in turnover on the exchanges, mainly on account of recovery of the global financial markets. The turnover on the NSE rose by 50.36% in 2009-10 compared with 2008-09 and that on the BSE it rose by 25.34% over the same period. The average daily turnover on the NSE stood at US $ 3.5 billion in 2009-10 compared to US $ 2.0 billion in 2008-09. Though the average daily turnover on the BSE rose to US $ 1.1 billion in 2009-10 from 0.89 billion in the previous year, it is still below the average daily turnover of US $ 1.6 billion recorded in 2007-08.

According to the WFE statistics, in terms of number of trades in equity shares, NSE ranks fourth with 1,630,438 thousands of trades as end of December 2009 and third with 1,140,580 thousands of trades during January 2010 to September 2010. The trade details of the top ranked stock exchanges are presented in Table 4-7.

**Table 4-7: Total Number of Trades in Equity Shares (in thousands)**

| Exchange | End December 2008 | End December 2009 | End September 2010 |
|---|---|---|---|
| Nasdaq | 3,779,392 | 3,996,426 | 1,395,735 |
| NYSE Euronext (US) | 4,050,573 | 2,744,355 | 1,603,539 |
| Shanghai Stock Exchange | 1,278,881 | 2,142,611 | 1,118,041 |
| NSE | 1,368,050 | 1,630,438 | 1,140,580 |
| Shenzhen SE | 658,047 | 1,256,007 | 897,062 |
| Korea Exchange | 641,754 | 909,418 | 666,704 |

*Source : WFE Reports*

As the trends in turnover showed a jump in 2009-10 compared to 2008-09, the same was the case with market capitalization for securities available for trading on the equity segment of NSE and BSE. After witnessing enormous growth during 2007-08 in comparison to 2006-07, 2008-09 saw a fall in market capitalization followed by jump in 2009-10 over 2008-09 levels (Table 4-5). The market capitalization of NSE, which as at end March 2008 amounted to ₹ 48,581,217 million (US $ 1,215 billion), were down to ₹ 28,961,940 million (US $ 568 billion) on the NSE as at end March 2009. As at end September 2010, there has been some increase in market capitalization to US $ 1,549 billion from US $ 1,255 billion for NSE as at end of March 2010.

## World Traded Value and market capitalization

In 2009, United States ranked first in terms of traded value of US $ 46,736 billion and also in terms of market capitalization of US $ 15,077 billion. China ranked second with the traded value of US $ 8,956 billion followed by Japan and then United Kingdom. In terms of market capitalization, China was at second slot with a market capitalization of US $ 5,008 billion, followed by Japan. India ranked eleventh both in terms of traded value (US $ 1,089 billion) and market capitalization (US $ 1,179 billion) for 2009 (Table 4-7).

**Table 4-8: Top 20 countries by Value Traded and market capitalisation, 2009**

| Rank | Country | Total Value Traded (US$ millions) | Country | Total market capitalisation (USD mn) |
|---|---|---|---|---|
| 1 | United States | 46,735,935 | United States | 15,077,286 |
| 2 | China | 8,956,188 | China | 5,007,646 |
| 3 | Japan | 4,192,624 | Japan | 3,288,793 |
| 4 | United Kingdom | 3,402,496 | United Kingdom | 2,796,444 |
| 5 | Spain | 1,599,262 | Hongkong | 2,291,578 |
| 6 | Korea | 1,581,487 | France | 1,972,040 |
| 7 | Hongkong | 1,489,635 | Canada | 1,680,958 |
| 8 | France | 1,365,807 | Germany | 1,297,568 |
| 9 | Germany | 1,288,867 | Spain | 1,297,227 |
| 10 | Canada | 1,239,626 | Australia | 1,258,456 |
| 11 | India | 1,088,889 | India | 1,179,235 |
| 12 | Taiwan | 1,066,132 | Brazil | 1,167,335 |
| 13 | Switzerland | 795,556 | Switzerland | 1,070,694 |
| 14 | Australia | 761,820 | Russia | 861,424 |
| 15 | Russia | 682,540 | Korea | 836,462 |
| 16 | Brazil | 649,187 | South Africa | 704,822 |
| 17 | Netherlands | 604,159 | Taiwan | 695,865 |
| 18 | Italy | 459,728 | Netherlands | 542,533 |
| 19 | Sweden | 390,324 | Sweden | 432,296 |
| 20 | South Africa | 342,502 | Mexico | 340,565 |

*Source: S&P Global Stock Markets Factbook 2010*

Emerging markets

Developed markets

**Table 4-9: Market capitalisation and Turnover of BRIC Economies**

| Country | Traded Value (in US $ millions) | | YoY Percentage Change | Market capitalisation (in US $ millions) | | YoY Percentage Change |
|---|---|---|---|---|---|---|
| | December-08 | December-09 | | December-08 | December-09 | |
| Brazil | 727,793 | 649,187 | -10.80 | 589,384 | 1,167,335 | 98.06 |
| Russia | 562,230 | 682,540 | 21.40 | 1,321,833 | 861,424 | -34.83 |
| India | 1,049,748 | 1,088,889 | 3.73 | 645,478 | 1,179,235 | 82.69 |
| China | 5,470,529 | 8,956,188 | 63.72 | 2,793,613 | 5,007,646 | 79.25 |
| **BRIC Economies** | **7,810,300** | **11,376,804** | **45.66** | **5,350,308** | **8,215,640** | **53.55** |
| **Emerging Market Economies** | **12,720,872** | **15,959,679** | **25.46** | **9,277,306** | **13,806,558** | **48.82** |
| **World Total** | **80,516,822** | **80,418,059** | **-0.12** | **35,811,160** | **48,713,724** | **36.03** |
| **Percentage share of BRIC Economies to** | | | | | | |
| *1) Total turnover/market capitalisation of Emerging Economies* | 61.40 | 71.28 | | 57.67 | 59.51 | |
| *2) Total turnover/market capitalisation of World* | 9.70 | 14.15 | | 14.94 | 16.87 | |

*Source: S&P Global Stock Markets Factbook 2010*

The BRIC (Brazil, Russia, India, China) economies posted an year-on-year jump of 46% in the trading value from US $ 7,810 billion in 2008 to US $ 11,377 billion in 2009 (Table 4-9). China witnessed the highest rise in turnover over this period, followed by United States and Russia. India recorded a 4% year-on-year growth in turnover. As regards market capitalization, there was a jump of 54% as at end December 2009 compared to end December 2008, as against a fall of 51% at end December 2008 compared with end December, 2007. The largest upsurge in market capitalization was in Brazil, followed by India and then Taiwan. Chinese markets witnessed an increase in market capitalization of over 79%. The share of BRIC Economies in total traded value of emerging economies was substantially up in 2009 to 71.28% compared to 61.40% in 2008. Similarly, the share of BRIC economies in total world market capitalization increased from 57.67% in 2008 to 59.51% in 2009.

## Market Movements

The movement of few of the selected indices placed in table 4-10 brings out the trends witnessed in the Indian and foreign markets during 2008-09 and 2009-10. A global comparison of these selected indices, during these years, shows a varied kind of performance in 2008-09. However, during 2009-10, all these indices witnessed extra-ordinary returns in the range of 30 to 80%.

The period Apri'10 to Sep'09 saw some consolidation in index performance. S&P CNX Nifty saw a maximum return of 14.9%, whereas Nikkei index witnessed a small correction of 15.5%.

**Table 4-10: Movement of Select Indices on Indian & Foreign Markets**

| Region | Index - Country | 31-Mar-08 | 31-Mar-09 | 31-Mar-10 | 30-Sep-10 | Change during 2008-09 (%) | Change during 2009-10 (%) | Change during Apr'10 - Sep'10 (%) |
|---|---|---|---|---|---|---|---|---|
| *Americas* | Dow Jones | 12262.89 | 7608.92 | 10856.63 | 10788.05 | -37.95 | 42.68 | -0.63 |
| | Nasdaq | 2279.10 | 1528.59 | 2397.96 | 2368.62 | -32.93 | 56.87 | -1.22 |
| *Europe* | FTSE 100- UK | 5702.10 | 3926.10 | 5679.60 | 5548.60 | -31.15 | 44.66 | -2.31 |
| | CAC- France | 4707.07 | 2807.34 | 3,974.01 | 3,715.18 | -40.36 | 41.56 | -6.51 |
| *Asia Pacific* | Nifty 50 (S&P CNX Nifty)- India | 4734.50 | 3020.95 | 5249.10 | 6029.95 | -36.19 | 73.76 | 14.88 |
| | BSE Sensex- India | 15644.44 | 9708.50 | 17527.77 | 20069.12 | -37.94 | 80.54 | 14.50 |
| | Hang Seng- Hong Kong (China) | 22849.20 | 13576.02 | 21239.35 | 22358.17 | -40.58 | 56.45 | 5.27 |
| | Nikkei- Japan | 12525.54 | 8109.53 | 11089.94 | 9369.35 | -35.26 | 36.75 | -15.51 |
| | TAI- Taiwan | 8572.59 | 5210.84 | 7920.06 | 8,237.78 | -39.22 | 51.99 | 4.01 |

*Source: NSE, BSE & Bloomberg.*

Comparing the movement of the Nifty, Sensex and Nasdaq over 2009-10 (all indices rebased for 1 April 2009), as depicted in chart 4-3, it is seen that Nifty 50 performed better than the rest all indices during most part of the year. The returns on the NASDAQ were 56% during 2009-10, while that on FTSE 100 and Hang Seng were 45% and 56% respectively, over the same period (**Table 4-10**).

Chart 4-3: Movement of Nifty, Sensex and NASDAQ, March 2009-September 2010


*Source : NSE, Bloomberg*

## Volatility

The volatility of S&P CNX Nifty (Nifty 50) and Sensex since April 2009 is presented in Table 4-11. The stock markets witnessed maximum volatility during May 2009, when the volatility in Nifty was 4.15% and that in Sensex was 4.2%. May 2009 was a comparatively more volatile month due to a political uncertainty, as India held general elections to the 15th Lok Sabha between 16 April 2009 and 13 May 2009. Volatility was lowest in the month of July 2010. Volatility of S&P CNX Nifty represented by index India VIX and CBOE VIX is also plotted in (Chart 4-4). It can be observed that the S&P CNX Nifty was extremely volatile in comparison to the CBOE for the months of April 2009 to March, 2010.

Chart 4-4: Stock Market Volatility, April 2009-September 2010


*Source : NSE, Bloomberg*

Table 4-11: Stock Market Index, Volatility and P/E Ratio: April 2009 to Sep 2010

| Month/Year | Nifty 50 | | | Sensex | | |
|---|---|---|---|---|---|---|
| | Index | Volatility (%)** | P/E Ratio* | Index | Volatility (%)** | P/E Ratio* |
| Apr-09 | 3473.95 | 2.18 | 16.53 | 11403.25 | 2.12 | 15.94 |
| May-09 | 4448.95 | 4.15 | 20.82 | 14625.25 | 4.20 | 19.87 |
| Jun-09 | 4291.10 | 1.92 | 19.97 | 14493.84 | 1.75 | 19.02 |
| Jul-09 | 4636.00 | 2.22 | 20.68 | 15670 | 2.21 | 20.35 |
| Aug-09 | 4662.00 | 1.78 | 20.94 | 15667 | 1.78 | 20.45 |
| Sep-09 | 5084.00 | 0.92 | 22.9 | 17127 | 0.9 | 22.19 |
| Oct-09 | 4712.00 | 1.08 | 20.45 | 15896 | 1.08 | 20.21 |
| Nov-09 | 5033.00 | 1.58 | 22.37 | 16926 | 1.57 | 21.53 |
| Dec-09 | 5201.00 | 1.05 | 23.17 | 17465 | 1.01 | 22.36 |
| Jan-10 | 4882.00 | 1.03 | 21 | 16358 | 0.98 | 20.32 |
| Feb-10 | 4922.00 | 1.18 | 20.92 | 16429 | 1.15 | 20.15 |
| **Mar-10** | **5249.00** | **0.70** | **22.33** | **17528** | **0.68** | **21.32** |
| Apr-10 | 5278.00 | 0.80 | 22.29 | 17558.71 | 0.8 | 21.28 |
| May-10 | 5086.30 | 1.60 | 21.3 | 16944.63 | 1.5 | 19.96 |
| Jun-10 | 5312.50 | 1.20 | 22.25 | 17700.9 | 1.2 | 20.57 |
| Jul-10 | 5367.60 | 0.60 | 22.31 | 17868.29 | 0.6 | 21.2 |
| Aug-10 | 5402.40 | 0.70 | 22.73 | 17971.12 | 0.7 | 21.61 |
| **Sep-10** | **6029.95** | **0.8** | **25.46** | **20069.12** | **0.8** | **22.99** |

*Source: NSE, BSE, SEBI*
** As on the last trading day of the month.*
*** Volatility is calculated as standard deviation of the Natural Log of returns of indices for the respective period*

The volatility across different sectoral indices for the period April 2009 to September 2010 varied widely (Table 4-13). The CNX IT index was the most volatile index with the highest volatility among the sectoral indices during most of the months. The month of May 2009 saw the highest volatility of 4.37% in this index.

## Returns in Indian Market

The performance of Nifty 50 and various other indices as at the end of March 2010 and September 2010 of the last one month to 12 months is presented in table 4-12. Over a one year horizon, as at end March 2010, all indices have shown extraordinary returns in the range of 70% to 150%, with the largest gain in the CNX Nifty Junior index. Six month returns are also positive for all indices as at end March 2010. As at end September 2010, one year returns are positive for all indices. CNX Midcap index gave a return of 36% in September 2010 compared to September 2009.

**Table 4-12: Performance of Select Indices - NSE**

| As at end March 2010- In percent | | | | |
|---|---|---|---|---|
| | 1 month | 3 month | 6 month | 1 year |
| S&P CNX Nifty | 6.64 | 0.92 | 3.25 | 73.76 |
| S&P CNX 500 | 4.5 | -0.37 | 4.72 | 87.95 |
| S&P CNX Defty | 9.48 | 4.68 | 10.51 | 96.61 |
| CNX Nifty junior | 6.67 | 3.77 | 15.1 | 148.45 |
| CNX Midcap | 7.5 | 3.66 | 14.77 | 126.12 |
| **As at end Sep 2010 - In percent** | | | | |
| | **1 month** | **3 month** | **6 month** | **1 year** |
| S&P CNX Nifty | 11.62 | 13.5 | 14.88 | 18.61 |
| S&P CNX 500 | 8.55 | 11.41 | 14.19 | 19.58 |
| S&P CNX Defty | 16.86 | 17.62 | 14.9 | 26.97 |
| CNX Nifty Junior | 6.68 | 11.33 | 16.81 | 34.45 |
| CNX Midcap | 5.58 | 12.71 | 18.94 | 36.51 |

*Source : NSE*

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 50 Index for the period April 2009-December 2010 is presented in (Chart 4-5). During the early part of financial 2009-10 the S&P CNX Finance Index was giving maximum returns. However, after August 2009, CNX IT and CNX Bank Nifty indices were better performers in terms of returns. Except for CNX Infrastructure and CNX FMCG index, all other sectoral indices gave better returns than Nifty.

**Chart 4-5: Movement of Nifty 50 and Sectoral Indices, April 2009-September 2010**


*Source : NSE*

The monthly closing prices of these sectoral indices are presented in (Table 4-13).

**Table 4-13: Performance of Sectoral Indices**

| Month/ Year | Monthly Closing Prices | | | | | | Average Daily Volatility (%) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S&P CNX Nifty (Nifty 50) | S&P CNX FMCG | S&P CNX IT | Finance | S&P CNX Petrochemicals | S&P CNX Pharma-ceuticals | S&P CNX Nifty (Nifty 50) | S&P CNX FMCG | S&P CNX IT | Finance | S&P CNX Petro-chemicals | S&P CNX Pharmaceuticals |
| Apr-09 | 3473.95 | 5299.81 | 2770.85 | 2270.87 | 3443.65 | 3743.35 | 2.18 | 1.57 | 2.24 | 2.5 | 1.76 | 1.53 |
| May-09 | 4448.95 | 5410.16 | 3206.2 | 3674.26 | 3865.73 | 4220.82 | 4.15 | 2.68 | 4.37 | 3.93 | 2.10 | 2.98 |
| Jun-09 | 4291.1 | 5838.79 | 3497.65 | 3541.65 | 3967.54 | 4305.48 | 1.92 | 1.72 | 1.93 | 2.67 | 1.43 | 1.58 |
| Jul-09 | 4636.45 | 6936.45 | 4330.05 | 3605.76 | 4627.7361 | 4678.38 | 2.18 | 1.52 | 2.44 | 2.47 | 2.34 | 1.21 |
| Aug-09 | 4662.1 | 6474.87 | 4618.35 | 3636.25 | 5059.1 | 4862.33 | 1.70 | 1.94 | 1.78 | 1.72 | 1.79 | 1.05 |
| Sep-09 | 5083.95 | 6633.73 | 5122.1 | 3806.71 | 5581.62 | 5519.48 | 1.03 | 1.24 | 1.36 | 1.50 | 1.99 | 0.97 |
| Oct-09 | 4711.7 | 7163.97 | 5048.8 | 3478.26 | 5457.7456 | 5486.79 | 1.32 | 1.03 | 1.49 | 1.36 | 0.83 | 0.79 |
| Nov-09 | 5032.7 | 7399.71 | 5364.2 | 3625.42 | 5585.4336 | 5954.59 | 1.19 | 1.13 | 1.21 | 1.70 | 0.98 | 0.75 |
| Dec-09 | 5201.05 | 7207.39 | 5818.4 | 3860.71 | 6297.9684 | 6296.95 | 1.00 | 0.75 | 0.79 | 0.95 | 1.15 | 0.90 |
| Jan-10 | 4882.05 | 7012.42 | 5594.15 | 3647.59 | 6257.642 | 6039.33 | 0.97 | 0.84 | 1.77 | 1.41 | 1.24 | 1.03 |
| Feb-10 | 4922.3 | 6885.71 | 5766.7 | 3576.15 | 6528.8953 | 6238.08 | 1.14 | 0.82 | 1.13 | 1.35 | 1.96 | 0.79 |
| Mar-10 | 5249.1 | 7273.3026 | 5855.95 | 3687.3607 | 6918.3268 | 6804.0682 | 0.58 | 0.62 | 0.93 | 0.64 | 0.94 | 0.62 |
| Apr-10 | 5278 | 7467.132 | 5985.8 | 3918.7657 | 7477.2758 | 6803.4037 | 0.79 | 0.62 | 1.00 | 0.95 | 1.25 | 0.57 |
| May-10 | 5086.3 | 7665.181 | 5761.95 | 3878.1623 | 7601.0799 | 6951.0714 | 1.49 | 1.15 | 1.49 | 1.49 | 1.12 | 1.00 |
| Jun-10 | 5312.5 | 8404.3848 | 5928.3 | 4075.3981 | 8686.9076 | 7369.6981 | 1.13 | 0.97 | 1.19 | 0.99 | 1.29 | 0.54 |
| Jul-10 | 5367.6 | 8370.1722 | 6086.85 | 4295.3814 | 9117.8065 | 7158.5461 | 0.61 | 0.53 | 1.00 | 0.42 | 0.90 | 0.34 |
| Aug-10 | 5402.4 | 8746.074 | 5974.9 | 4375.1673 | 9320.9491 | 7121.7763 | 0.62 | 0.81 | 1.10 | 0.97 | 1.33 | 0.60 |
| Sep-10 | 6029.95 | 9571.1896 | 6613.4 | 4785.1588 | 9998.7476 | 7684.3435 | 0.75 | 0.98 | 1.10 | 0.78 | 1.52 | 0.60 |

*Source : NSE*

## Exchange Traded Funds

The first ETF in India, the "Nifty BeEs (Nifty Benchmark Exchange Traded Scheme) based on Nifty 50 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. Details about ETFs are available in Chapter 3.

## Liquidity

Many listed securities on stock exchanges are not traded actively. The percentage of companies traded on BSE was quite low in comparison to that on NSE during the period April 2009 to September 2010. In September 2010, only 40.80% of companies traded on BSE while 98.80% of companies traded on NSE. (Table 4-14)

**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 |
| Mar-06 | 929 | 920 | 99.03 | 7,311 | 2,548 | 34.85 |
| Apr-09 | 1,329 | 1,266 | 95.26 | 7,771 | 2,557 | 32.90 |
| May-09 | 1,280 | 1,268 | 99.06 | 7,729 | 2,870 | 37.13 |
| Jun-09 | 1,282 | 1,268 | 98.91 | 8,098 | 2,703 | 33.38 |
| Jul-09 | 1,287 | 1,269 | 98.60 | 7,745 | 2,828 | 36.51 |
| Aug-09 | 1,288 | 1,272 | 98.76 | 7,758 | 2,911 | 37.52 |
| Sep-09 | 1,287 | 1,275 | 99.07 | 7,792 | 2,917 | 37.44 |
| Oct-09 | 1,291 | 1,274 | 98.68 | 7,768 | 2,844 | 36.61 |
| Nov-09 | 1,292 | 1,286 | 99.54 | 7,887 | 2,896 | 36.72 |
| Dec-09 | 1,303 | 1,297 | 99.54 | 7,831 | 2,999 | 38.30 |
| Jan-10 | 1,338 | 1,320 | 98.65 | 7,882 | 2,923 | 37.08 |
| Feb-10 | 1,342 | 1,328 | 98.96 | 7,974 | 2,907 | 36.46 |
| **Mar-10** | **1,359** | **1,343** | **98.82** | **8,072** | **2,963** | **36.71** |
| Apr-10 | 1,367 | 1,346 | 98.46 | 8,155 | 3,039 | 37.27 |
| May-10 | 1,374 | 1,349 | 98.18 | 8,155 | 2,937 | 36.01 |
| Jun-10 | 1,388 | 1,364 | 98.27 | 8,214 | 3,024 | 36.82 |
| Jul-10 | 1,392 | 1,373 | 98.64 | 8,239 | 3,080 | 37.38 |
| Aug-10 | 1,408 | 1,389 | 98.65 | 7,639 | 3,072 | 40.21 |
| **Sep-10** | **1,412** | **1,395** | **98.80** | **7,633** | **3,114** | **40.80** |

*Source: SEBI and NSE.*
** At the end of the month. Includes listed/permitted to trade companies but excludes suspended companies.*

The companies traded on BSE for more than 100 days during 2009-10 was 88.58% and that on NSE, was 92.86% (Table 4-15). During the year 2009-10, 4.12% of BSE listed companies witnessed trading for less than 11 days and only 0.93% of NSE companies traded for less than 11 days.

**Table 4-15: Trading Frequency of Listed Stocks**

| Trading Frequency (Range of Days) | 2007-08 | | | | 2008-09 | | | | 2009-10 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BSE | | NSE | | BSE | | NSE | | BSE | | NSE | |
| | No. of Shares Traded | Per-centage of Total | No. of Shares Traded | Per-centage of Total | No. of Shares Traded | Per-centage of Total | No. of Shares Traded | Per-centage of Total | No. of Shares Traded | Per-centage of Total | No. of Shares Traded | Per-centage of Total |
| Above 100 | 2,868 | 90.59 | 1,177 | 92.97 | 2,831 | 87.22 | 1,273 | 97.85 | 2,986 | 88.58 | 1,301 | 92.86 |
| 91-100 | 17 | 0.54 | 5 | 0.39 | 29 | 0.89 | 5 | 0.38 | 22 | 0.65 | 15 | 1.07 |
| 81-90 | 18 | 0.57 | 17 | 1.34 | 32 | 0.99 | 4 | 0.31 | 26 | 0.77 | 3 | 0.21 |
| 71-80 | 18 | 0.57 | 7 | 0.55 | 21 | 0.65 | 0 | 0.00 | 24 | 0.71 | 9 | 0.64 |
| 61-70 | 18 | 0.57 | 11 | 0.87 | 24 | 0.74 | 1 | 0.08 | 27 | 0.80 | 2 | 0.14 |
| 51-60 | 18 | 0.57 | 7 | 0.55 | 25 | 0.77 | 2 | 0.15 | 21 | 0.62 | 23 | 1.64 |
| 41-50 | 15 | 0.47 | 7 | 0.55 | 33 | 1.02 | 4 | 0.31 | 30 | 0.89 | 6 | 0.43 |
| 31-40 | 15 | 0.47 | 6 | 0.47 | 34 | 1.05 | 4 | 0.31 | 29 | 0.86 | 6 | 0.43 |
| 21-30 | 33 | 1.04 | 9 | 0.71 | 32 | 0.99 | 2 | 0.15 | 28 | 0.83 | 9 | 0.64 |
| 11-20 | 43 | 1.36 | 13 | 1.03 | 38 | 1.17 | 3 | 0.23 | 39 | 1.16 | 14 | 1.00 |
| 1-10 | 103 | 3.25 | 7 | 0.55 | 147 | 4.53 | 3 | 0.23 | 139 | 4.12 | 13 | 0.93 |
| **Total** | **3,166** | **100.00** | **1,266** | **100.00** | **3,246** | **100.00** | **1,301** | **100.00** | **3,371** | **100.00** | **1,401** | **100.00** |

*Source: BSE, NSE*

## Takeovers

In 2009-10, there were 48 takeovers under open category involving ₹ 32,930 million (US $ 730 million) as against 99 takeovers involving ₹ 47,110 million (US $ 925 million) during the preceding year (Table 4-16). Under the exempted category there were 206 takeovers involving ₹ 138,640 million (US $ 3,071 million) as against 227 takeovers involving ₹ 105,020 million (US $ 2,061 million) in the previous year.

**Table 4-16: Substantial Acquisition of Shares and Takeovers**

| Year | Open Offers | | | | | | | | | Automatic Exemption | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Objectives | | | | | | Total | | | Number | Value of Shares Acquired | |
| | Change in Control of Management | | Consolidation of Holdings | | Substantial Acquisition | | | | | | | |
| | Number | Value (₹ mn) | Number | Value (₹ mn) | Number | Value (₹ Mn) | Number | Value (₹ mn) | Value (US $ Mn) | | (₹ mn) | (US $ mn) |
| 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 | 199 | 201 | 18,881 | 445 |
| 1999-00 | 42 | 2,588 | 9 | 711 | 23 | 1,300 | 74 | 4,599 | 105 | 252 | 46,774 | 1,072 |
| 2000-01 | 70 | 11,404 | 5 | 1,890 | 2 | 425 | 77 | 13,719 | 294 | 248 | 48,732 | 1,045 |
| 2001-02 | 54 | 17,562 | 26 | 18,152 | 1 | 390 | 81 | 36,104 | 740 | 276 | 25,390 | 520 |
| 2002-03 | 46 | 38,144 | 40 | 25,733 | 2 | 14 | 88 | 63,891 | 1,345 | 238 | 24,284 | 511 |
| 2003-04 | 38 | 3,952 | 16 | 1,966 | 11 | 10,030 | 65 | 15,948 | 368 | 171 | 14,357 | 331 |
| 2004-05 | 35 | 35,030 | 12 | 1,650 | 14 | 9,640 | 61 | 46,320 | 1,059 | 212 | 69,580 | 1,590 |
| 2005-06 | 78 | 32,520 | 9 | 1,190 | 15 | 7,090 | 102 | 40,800 | 915 | 245 | 171,320 | 3,840 |
| 2006-07 | 66 | 67,710 | 15 | 44,980 | 6 | 830 | 87 | 113,520 | 2,604 | 223 | 186,080 | 4,269 |
| 2007-08 | 78 | 116,570 | 28 | 132,540 | 8 | 37,960 | 114 | 287,070 | 7,182 | 232 | 64,580 | 1,616 |
| 2008-09 | 80 | 37,130 | 13 | 5,980 | 6 | 4,000 | 99 | 47,110 | 925 | 227 | 105,020 | 2,061 |
| **2009-10** | **39** | **20,530** | **7** | **11,850** | **2** | **550** | **48** | **32,930** | **730** | **206** | **138,640** | **3,071** |
| **Apr 2010 - Sep 2010** | **5** | **2,880** | **5** | **8,590** | **8** | **680** | **18** | **12,160** | **271** | **216** | **102,660** | **2,285** |
| **Total** | **693** | **388,866** | **231** | **264,971** | **125** | **77,201** | **1,049** | **731,048** | **16,735** | **3,040** | **1,051,320** | **22,658** |

*Source: SEBI.*

## Settlement Statistics

The details of settlement of trades on CM segment of NSE are provided in Annexure 4-3. There has been a substantial reduction in short and bad deliveries. Short deliveries averaged around 0.18% of total delivery in 2009-10, a marginal decline compared to that of 2008-09. The ratio of bad deliveries to net deliveries progressively declined to almost negligible in 2009-10.

During 2009-10, taking all stock exchanges together, 25.07% of securities accounting for 22.26% turnover were settled by delivery and the balance were squared up/netted out (Table 4-17). In the preceding year, 23.15% of shares accounting for 21.83% of turnover were settled by delivery. This indicates preference for non-delivery-based trades.

**Table 4-17: Delivery Pattern in Stock Exchanges**

| Sr. no | Exchange | 2008-09 | | 2009-10 | |
|---|---|---|---|---|---|
| | | Quantity | Value | Quantity | Value |
| 1 | NSE | 21.38 | 22.18 | 21.49 | 22.15 |
| 2 | BSE | 26.55 | 20.94 | 31.99 | 22.58 |
| 3 | Calcutta | 93.19 | 94.66 | 73.32 | 48.88 |
| 4 | Delhi | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | Ahmedabad | 0.00 | 0.00 | 0.00 | 0.00 |
| 6 | Uttar Pradesh | 1.26 | 0.19 | 0.56 | 0.16 |
| 7 | Bangalore | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | Ludhiana | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 | Pune | 0.00 | 0.00 | 0.00 | 0.00 |
| 10 | OTCEI | 0.00 | 0.00 | 0.00 | 0.00 |
| 11 | ISE | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | Madras | 0.00 | 0.00 | 0.00 | 0.00 |
| 13 | Vadodara | 0.00 | 0.00 | 0.00 | 0.00 |
| 14 | Bhubaneshwar | 0.00 | 0.00 | 0.00 | 0.00 |
| 15 | Coimbatore | 0.00 | 0.00 | 0.00 | 0.00 |
| 16 | Madhya Pradesh | 0.00 | 0.00 | 0.00 | 0.00 |
| 17 | Jaipur | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | Gauhati | 0.00 | 0.00 | 0.00 | 0.00 |
| 19 | Cochin | 0.00 | 0.00 | 0.00 | 0.00 |
| | **Total** | **23.15** | **21.83** | **25.07** | **22.26** |

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

## F. Risk Management:

A sound risk management system is integral to an efficient settlement system. The NSCCL ensures that trading members' obligations are commensurate with their net worth. It has put in place a comprehensive risk management system, which is constantly monitored and upgraded to pre-empt market failures. It monitors the track record and performance of members and their net worth; undertakes on-line monitoring of members' positions and exposure in the market, collects margins from members and automatically disables members if the limits are breached. The risk management methods adopted by NSE have brought the Indian stock market in line with the international markets.

### Risk Containment Measures

The risk containment measures have been repeatedly reviewed and revised to be up to date with the market realities.

### Capital Adequacy

The capital adequacy requirements stipulated by the NSE are substantially in excess of the minimum statutory requirements as also in comparison to those stipulated by other stock exchanges. Corporates seeking membership in the CM and F&O segment are required to have a net worth of ₹ 100 lakh, and keep an interest free security deposit of ₹ 125 lakh and collateral security deposit of ₹ 25 lakh with the Exchange/NSCCL. The deposits kept with the Exchange as part of the membership requirement may be used towards the margin requirement of the member. Additional capital may be provided by the member for taking additional exposure. The capital adequacy norms for Corporates, Individuals/ partnership firms are presented in detail in Table 4-1.

## 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 NSCCL 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.

## Off-line Surveillance Activity

Off-line surveillance activity consists of inspections and investigations. As per regulatory requirement, trading members are to be inspected in order to verify the level of compliance with various rules, byelaws and regulations of the exchange. The inspection verifies if investors' interests are being compromised in the conduct of business by the members.

## Margin Requirements

NSCCL imposes stringent margin requirements as a part of its risk containment measures. The categorization of stocks for imposition of margins has the structure 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 for Group I & II category, the scrips having mean impact cost of less than or equal to 1% are categorized under Group I and the scrips where the impact cost is more than 1, are categorized under Group II.
- The remaining stocks are classified into Group III.
- The impact cost is 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 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 are 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 is categorised 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 is 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 are treated as newly listed security for group categorization.

Daily margins comprises of VaR margin, Extreme Loss margin and Mark to Market margin.

### 1. 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 is applied to daily returns. The scrip wise daily VaR is 3.5 times the volatility so calculated subject to a minimum of 7.5%.
- For the securities listed in Group II, the VaR margin is higher of scrip VaR (3.5 sigma) or three times the index VaR, and it is scaled up by root 3.
- For the securities listed in Group III the VaR margin is equal to five times the index VaR and scaled up by root 3.

The index VaR, for the purpose, is the higher of the daily Index VaR based on S&P CNX NIFTY or BSE SENSEX, subject to a minimum of 5%. NSCCL may stipulate security specific margins from time to time.

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

The VaR margin is 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 is released on completion of pay-in of the settlement or on individual completion of full obligations of funds and securities by the respective member/custodians after crystallization of the final obligations on T+1 day.

### 2. Extreme Loss Margin

The Extreme Loss Margin for any security is higher of:

a. 5%, or

b. 1.5 times the standard deviation of daily logarithmic returns of the security price in the last six months. This computation is 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 is applicable for the next month.

The Extreme Loss Margin is collected/ adjusted against the total liquid assets of the member on a real time basis. The Extreme Loss Margin is collected on the gross open position of the member. The gross open position for this purpose means the gross of all net positions across all the clients of a member including its proprietary position. There is no netting off of positions across different settlements. The Extreme Loss Margin collected is released on completion of pay-in of the settlement or on individual completion of full obligations of funds and securities by the respective member/ custodians after crystallization of the final obligations on T+1 day.

### 3. Mark to Market Margin

Mark to market loss is 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 NSE is 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 is considered as notional loss for the purpose of calculating the mark to market margin payable.

The mark to market margin (MTM) is collected from the member before the start of the trading of the next day. The MTM margin is collected/adjusted from/against the cash/cash equivalent component of the liquid net worth deposited with the Exchange.

The MTM margin is collected on the gross open position of the member. The gross open position for this purpose means 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 is netted across its various securities and the positions of all the clients of a member are grossed.

## Close Out Facility

An online facility to close–out open positions of members in the capital market segment whose trading facility is withdrawn for any reason, has been provided with effect from June 13, 2007,

On disablement, the trading members will be allowed to place close-out orders through this facility. Only orders which result in reduction of existing open positions at the client level would be accepted through the close-out facility in the normal market. Members would not be allowed to create any fresh position when in the close-out mode, to place close out orders with custodial participant code and to close out open positions of securities in trade for trade segment.

## Index-based Market-wide Circuit Breakers

The index-based market-wide circuit breaker system applies at 3 stages of the index movement, either way viz. at 10%, 15% and 20%. These circuit breakers when triggered, bring about a coordinated trading halt in all equity and equity derivative markets nationwide. The market-wide circuit breakers are triggered by movement of either the BSE Sensex or the NSE S&P CNX Nifty, whichever is breached earlier.

- In case of a 10% movement of 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 shall continue trading.
- In case of a 15% movement of either index, there shall be a two-hour halt if the movement takes place before 1 p.m. If the 15% trigger is reached on or after 1:00p.m. but before 2:00 p.m., there shall be a one-hour halt. If the 15% trigger is reached on or after 2:00 p.m. the trading shall halt for remainder of the day.
- In case of a 20% movement of the index, trading shall be halted for the remainder of the day.

These percentages are translated into absolute points of index variations on a quarterly basis. At the end of each quarter, these absolute points of index variations are revised for the applicability for the next quarter. The absolute points are calculated based on closing level of index on the last day of the trading in a quarter and rounded off to the nearest 10 points in case of S&P CNX Nifty.

NSE 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. The Exchange views entries of non-genuine orders with utmost seriousness as this has market–wide repercussion.

## Daily Price Bands on Securities

As an additional measure of safety, individual scrip-wise price bands have been fixed as below:

- Daily price bands of 2% (either way)
- Daily price bands of 5% (either way)
- Daily price bands of 10% (either way)

No price bands are applicable on scrips on which derivative products are available or scrips included in indices on which derivative products are available (unless otherwise specified). In order to prevent members from entering orders at non-genuine prices in such securities, the Exchange has fixed operating range of 20%.

- Price bands of 20% (either way) on all remaining scrips (including debentures, preference shares etc).

The price bands for the securities in the Limited Physical Market are the same as those applicable for the securities in the Normal Market. For Auction market the price bands of 20% are applicable.

## Settlement Guarantee Fund

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. The market has full confidence that settlement shall take place in time and shall be completed irrespective of default by isolated trading members. As of September 2010, the Settlement Guarantee Fund was ₹ 5,261 Crore.

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

| Sr. No. | Exchanges | Participants at the end March | | | | | |
|---|---|---|---|---|---|---|---|
| | | Registered Brokers | | | Registered Sub-Brokers | | |
| | | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 |
| 1 | Ahmedabad | 321 | 325 | 329 | 97 | 96 | 95 |
| 2 | Bangalore | 256 | 257 | 261 | 156 | 158 | 158 |
| 3 | BSE | 946 | 984 | 1,003 | 20,616 | 30,059 | 33,710 |
| 4 | Bhubaneshwar | 214 | 213 | 214 | 17 | 17 | 17 |
| 5 | Calcutta | 957 | 926 | 908 | 87 | 84 | 81 |
| 6 | Cochin | 435 | 435 | 438 | 42 | 43 | 41 |
| 7 | Coimbatore | 135 | 135 | 135 | 21 | 19 | 20 |
| 8 | Delhi | 374 | 375 | 455 | 277 | 261 | 255 |
| 9 | Gauhati | 103 | 103 | 98 | 4 | 4 | 4 |
| 10 | ICSEIL | 935 | 946 | 943 | 3 | 3 | 2 |
| 11 | Jaipur | 488 | 488 | 484 | 33 | 33 | 32 |
| 12 | Ludhiana | 297 | 301 | 300 | 37 | 36 | 36 |
| 13 | Madhya Pradesh | 174 | 174 | 192 | 5 | 5 | 5 |
| 14 | Madras | 181 | 183 | 193 | 112 | 110 | 109 |
| 15 | NSE | 1,129 | 1243 | 1,310 | 22,144 | 31,328 | 40,600 |
| 16 | OTCEI | 719 | 713 | 704 | 19 | 19 | 17 |
| 17 | Pune | 188 | 188 | 186 | 158 | 156 | 156 |
| 18 | Uttar Pradesh | 354 | 351 | 339 | 8 | 3 | 3 |
| 19 | Vadodara | 311 | 312 | 312 | 38 | 37 | 37 |
| | **Total** | **8,517** | **8,652** | **8,804** | **43,874** | **62,471** | **75,378** |

*Source: SEBI*

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 (₹ mn.) | Average Daily Turnover (₹ mn.) | Turnover Ratio (%) | Demat Securities Traded (mn.) | Demat Turnover (₹ mn.) | Demat Turnover as a % of Total Turnover | Market Capitalisation (₹ mn.) * |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2001-02 | 247 | 1,019 | 175 | 27,841 | 5,131,674 | 20,776 | 80.58 | 27,772 | 5,128,661 | 99.94 | 6,368,610 |
| 2002-03 | 251 | 899 | 240 | 36,407 | 6,179,886 | 24,621 | 115.05 | 36,405 | 6,179,845 | 100.00 | 5,371,332 |
| 2003-04 | 254 | 804 | 379 | 71,330 | 10,995,339 | 43,289 | 98.09 | 71,330 | 10,995,339 | 100.00 | 11,209,760 |
| 2004-05 | 253 | 856 | 451 | 79,769 | 11,400,720 | 45,062 | 71.90 | 79,769 | 11,400,720 | 100.00 | 15,855,853 |
| 2005-06 | 251 | 928 | 609 | 84,449 | 15,695,579 | 62,532 | 55.79 | 84,449 | 15,695,579 | 100.00 | 28,132,007 |
| 2006-07 | 249 | 1,114 | 785 | 85,546 | 19,452,865 | 78,124 | 57.77 | 85,546 | 19,452,865 | 100.00 | 33,673,500 |
| 2007-08 | 251 | 1,244 | 1,173 | 149,847 | 35,510,382 | 141,476 | 73.09 | 149,847 | 35,510,382 | 100.00 | 48,581,217 |
| 2008-09 | 243 | 1277 | 1,365 | 142,635 | 27,520,230 | 113,252 | 95.02 | 142,635 | 27,520,230 | 100.00 | 28,961,942 |
| Apr-09 | 17 | 1,279 | 127 | 18,316 | 2,666,965 | 156,880 | --- | 18,316 | 2,666,965 | 100.00 | 33,750,246 |
| May-09 | 20 | 1,280 | 148 | 22,903 | 3,825,610 | 191,280 | --- | 22,903 | 3,825,610 | 100.00 | 45,645,722 |
| Jun-09 | 22 | 1,282 | 180 | 27,485 | 4,824,136 | 219,279 | --- | 27,485 | 4,824,136 | 100.00 | 44,325,955 |
| Jul-09 | 23 | 1,282 | 171 | 21,936 | 4,261,429 | 185,280 | --- | 21,936 | 4,261,429 | 100.00 | 48,164,590 |
| Aug-09 | 21 | 1,287 | 148 | 19,443 | 3,649,688 | 173,795 | --- | 19,443 | 3,649,688 | 100.00 | 49,757,998 |
| Sep-09 | 20 | 1,287 | 139 | 19,651 | 3,650,631 | 182,532 | --- | 19,651 | 3,650,631 | 100.00 | 53,538,796 |
| Oct-09 | 20 | 1,291 | 135 | 16,848 | 3,629,688 | 181,484 | --- | 16,848 | 3,629,688 | 100.00 | 50,248,302 |
| Nov-09 | 20 | 1,292 | 132 | 15,740 | 3,244,768 | 162,238 | --- | 15,740 | 3,244,768 | 100.00 | 54,300,880 |
| Dec-09 | 21 | 1,303 | 126 | 15,038 | 2,929,004 | 139,476 | --- | 15,038 | 2,929,004 | 100.00 | 56,996,368 |
| Jan-10 | 19 | 1,338 | 140 | 18,042 | 3,384,426 | 178,128 | --- | 18,042 | 3,384,426 | 100.00 | 57,829,647 |
| Feb-10 | 20 | 1,342 | 113 | 12,354 | 2,451,434 | 122,572 | --- | 12,354 | 2,451,434 | 100.00 | 57,553,054 |
| Mar-10 | 21 | 1,359 | 123 | 13,797 | 2,862,455 | 136,307 | --- | 13,797 | 2,862,455 | 100.00 | 60,091,732 |
| **2009-10** | **244** | **1,359** | **1,682** | **221,553** | **41,380,234** | **169,591** | **68.86** | **221,553** | **41,380,234** | **100.00** | **60,091,732** |
| Apr-10 | 20 | 1,367 | 121 | 14,406 | 2,765,655 | 138,283 | --- | 14,406 | 2,765,655 | 100.00 | 61,178,575 |
| May-10 | 22 | 1,374 | 125 | 13,981 | 2,846,249 | 129,375 | --- | 13,981 | 2,846,249 | 100.00 | 59,325,783 |
| Jun-10 | 22 | 1,388 | 125 | 14,362 | 2,861,092 | 130,050 | --- | 14,362 | 2,861,092 | 100.00 | 62,291,356 |
| Jul-10 | 22 | 1,392 | 122 | 13,942 | 2,785,508 | 126,614 | --- | 13,942 | 2,785,508 | 100.00 | 63,401,199 |
| Aug-10 | 22 | 1,408 | 136 | 15,247 | 3,119,937 | 141,815 | --- | 15,247 | 3,119,937 | 100.00 | 63,934,175 |
| Sep-10 | 21 | 1,412 | 137 | 17,329 | 3,298,687 | 157,080 | --- | 17,329 | 3,298,687 | 100.00 | 69,585,335 |
| **Apr'09-Sep'10** | **129** | **1,412** | **765** | **89,266** | **17,677,127** | **137,032** | **25.40** | **89,266** | **17,677,127** | **100.00** | **69,585,335** |

*Source : NSE*

## Annexure 4-3: Settlement Statistics in CM Segment of NSE

| Month/ Year | No. of Trades (mn.) | Traded Quantity (mn.) | Quantity of Shares Deliverable (mn.) | % of Shares Deliverable to Total Shares Traded | Turnover (₹ mn.) | Value of Shares Deliverable (₹ mn.) | Turnover (US $. mn.) | Value of Shares Deliverable (US$. mn.) | % of Deliverable to Value of Shares Traded | Securities Pay-in (₹ mn.) | Short Delivery (Auctioned quantity) (mn.) | % of Short Delivery to Delivery | Unrectified Bad Delivery (Auctioned quantity) (mn.) | % of Un rectified Bad Delivery to Delivery | Funds Pay-in (₹ mn.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2005-06 | 600 | 81,844 | 22,724 | 27.77 | 15,168,390 | 4,093,525 | 340,022 | 91,762 | 26.99 | 4,079,759 | 89 | 0.39 | 0.00 | 0.00 | 1,314,256 |
| 2006-07 | 786 | 85,051 | 23,907 | 28.11 | 19,400,943 | 5,444,345 | 445,078 | 124,899 | 28.06 | 5,430,475 | 77 | 0.32 | 0.00 | 0.00 | 1,731,877 |
| 2007-08 | 1,165 | 148,123 | 36,797 | 24.84 | 35,199,186 | 9,728,029 | 880,640 | 22,033 | 27.64 | 9,706,179 | 100 | 0.27 | 0.00 | 0.00 | 3,095,432 |
| 2008-09 | 1,364 | 141,893 | 27,527 | 21.59 | 27,494,501 | 6,115,350 | 539,637 | 120,027 | 21.97 | 6,104,977 | 62.52 | 0.20 | – | – | 2,207,040 |
| Apr-09 | 126 | 17,934 | 3,441 | 19.19 | 2,613,099 | 481,486 | 57,889 | 10,666 | 18.43 | 480,717 | 6.83 | 0.2 | 0.00 | 0.00 | 162,686 |
| May-09 | 144 | 21,907 | 4,555 | 20.79 | 3,579,318 | 744,359 | 79,294 | 16,490 | 20.8 | 743,169 | 11.27 | 0.25 | 0.00 | 0.00 | 252,195 |
| Jun-09 | 182 | 28,112 | 5,311 | 18.89 | 4,965,891 | 988,893 | 110,011 | 21,907 | 19.91 | 987,606 | 8.11 | 0.15 | 0.00 | 0.00 | 296,316 |
| Jul-09 | 169 | 21,682 | 3,976 | 18.34 | 4,190,774 | 801,943 | 92,839 | 17,766 | 19.14 | 800,780 | 5.78 | 0.15 | 0.00 | 0.00 | 254,330 |
| Aug-09 | 148 | 19,171 | 3,961 | 20.66 | 3,714,741 | 786,615 | 82,294 | 17,426 | 21.18 | 785,615 | 7.12 | 0.18 | 0.00 | 0.00 | 237,513 |
| Sep-09 | 134 | 19,160 | 4,344 | 22.67 | 3,499,404 | 822,093 | 77,523 | 18,212 | 23.49 | 821,242 | 6.19 | 0.14 | 0.00 | 0.00 | 248,530 |
| Oct-09 | 140 | 17,321 | 4,022 | 23.22 | 3,739,533 | 899,402 | 82,843 | 19,925 | 24.05 | 898,341 | 6.75 | 0.17 | 0.00 | 0.00 | 269,654 |
| Nov-09 | 133 | 16,104 | 3,559 | 22.1 | 3,322,481 | 746,495 | 73,604 | 16,537 | 22.47 | 745,655 | 5.08 | 0.14 | 0.00 | 0.00 | 229,134 |
| Dec-09 | 127 | 15,073 | 3,429 | 22.75 | 2,982,151 | 688,530 | 66,064 | 15,253 | 23.09 | 687,484 | 6.50 | 0.19 | 0.00 | 0.00 | 179,949 |
| Jan-10 | 136 | 17,572 | 4,428 | 25.2 | 3,245,836 | 852,055 | 71,906 | 18,876 | 26.25 | 851,014 | 8.09 | 0.18 | 0.00 | 0.00 | 258,868 |
| Feb-10 | 115 | 12,591 | 2,836 | 22.52 | 2,534,672 | 587,671 | 56,151 | 13,019 | 23.19 | 586,791 | 5.16 | 0.18 | 0.00 | 0.00 | 183,536 |
| Mar-10 | 125 | 13,960 | 3,620 | 25.93 | 2,904,237 | 777,512 | 64,338 | 17,224 | 26.77 | 776,188 | 9.30 | 0.26 | 0.00 | 0.00 | 211,161 |
| **2009-10** | **1,679** | **220,588** | **47,481** | **21.86** | **41,292,136** | **9,177,054** | **914,757** | **203,302** | **22.40** | **9,164,601** | **86.19** | **0.18** | **0** | **0** | **2,783,871** |
| Apr-10 | 120 | 14,072 | 3,896 | 27.69 | 2,733,438 | 747,444 | 60,851 | 16,639 | 27.34 | 747,444 | 6.92 | 0.18 | 0.00 | 0.00 | 193,105 |
| May-10 | 125 | 14,160 | 3,733 | 26.36 | 2,879,308 | 761,223 | 64,099 | 16,946 | 26.44 | 761,223 | 5.16 | 0.14 | 0.00 | 0.00 | 235,415 |
| Jun-10 | 124 | 14,101 | 3,461 | 24.54 | 2,827,478 | 708,010 | 62,945 | 15,762 | 25.04 | 708,010 | 6.00 | 0.17 | 0.00 | 0.00 | 222,920 |
| Jul-10 | 122 | 14,013 | 3,871 | 27.63 | 2,767,341 | 767,535 | 61,606 | 17,087 | 27.74 | 767,535 | 5.97 | 0.15 | 0.00 | 0.00 | 201,454 |
| Aug-10 | 136 | 15,369 | 4,439 | 28.88 | 3,164,313 | 875,209 | 70,443 | 19,484 | 27.66 | 875,209 | 14.65 | 0.33 | 0.00 | 0.00 | 216,752 |
| Sep-10 | 130 | 15,691 | 4,499 | 28.67 | 3,029,842 | 874,714 | 67,450 | 19,473 | 28.87 | 874,714 | 8.78 | 0.2 | 0.00 | 0.00 | 273,162 |
| **April 10 to September 10** | **757** | **87,406** | **23,899** | **27.30** | **17,401,719** | **4,734,134** | **387,394** | **105,390** | **27.18** | **4,734,134** | **47.48** | **0.20** | **0** | **0** | **1,342,807** |

*Source : NSE, Bloomberg*

Annexure 4-4: S&P CNX Nifty Index for September 2010

| Sr. No. | Name of Security | Free Float Market Capitalisation (₹ crore) | Weightage (%) | Beta | $R^2$ | Volatility (%) | Monthly Return (%) | Impact Cost (%) |
|---|---|---|---|---|---|---|---|---|
| 1 | ABB | 4,128.50 | 0.26 | 0.59 | 0.30 | 1.19 | (3.96) | 0.08 |
| 2 | ACC | 8,791.66 | 0.56 | 0.68 | 0.46 | 1.36 | 4.74 | 0.06 |
| 3 | AMBUJACEM | 10,262.04 | 0.66 | 0.75 | 0.44 | 2.37 | 6.58 | 0.08 |
| 4 | AXISBANK | 33,802.45 | 2.16 | 1.13 | 0.66 | 1.11 | (0.95) | 0.06 |
| 5 | BHEL | 38,026.62 | 2.43 | 0.67 | 0.57 | 0.91 | (1.28) | 0.05 |
| 6 | BPCL | 9,836.37 | 0.63 | 0.28 | 0.13 | 2.65 | 18.66 | 0.07 |
| 7 | BHARTIARTL | 39,941.62 | 2.55 | 0.62 | 0.27 | 1.63 | 6.70 | 0.08 |
| 8 | CAIRN | 14,322.07 | 0.91 | 1.07 | 0.63 | 2.17 | (0.54) | 0.07 |
| 9 | CIPLA | 15,387.97 | 0.98 | 0.38 | 0.25 | 1.23 | (7.06) | 0.06 |
| 10 | DLF | 10,948.71 | 0.70 | 1.66 | 0.71 | 1.94 | 0.18 | 0.07 |
| 11 | GAIL | 20,754.39 | 1.33 | 0.57 | 0.36 | 1.38 | 5.37 | 0.08 |
| 12 | HCLTECH | 9,006.25 | 0.58 | 0.99 | 0.48 | 1.73 | (2.46) | 0.07 |
| 13 | HDFCBANK | 74,994.38 | 4.79 | 0.79 | 0.63 | 1.12 | 0.35 | 0.06 |
| 14 | HEROHONDA | 17,096.41 | 1.09 | 0.65 | 0.41 | 1.31 | (1.28) | 0.06 |
| 15 | HINDALCO | 21,626.86 | 1.38 | 1.94 | 0.74 | 1.91 | 3.77 | 0.08 |
| 16 | HINDUNILVR | 27,692.21 | 1.77 | 0.37 | 0.27 | 1.02 | 5.19 | 0.06 |
| 17 | HDFC | 80,762.19 | 5.16 | 0.98 | 0.67 | 1.50 | 5.19 | 0.09 |
| 18 | ITC | 85,365.55 | 5.45 | 0.60 | 0.43 | 1.43 | 5.68 | 0.08 |
| 19 | ICICIBANK | 109,040.86 | 6.96 | 1.57 | 0.81 | 1.95 | 8.05 | 0.06 |
| 20 | IDEA | 5,648.08 | 0.36 | 0.71 | 0.30 | 2.05 | 1.35 | 0.09 |
| 21 | INFOSYSTCH | 130,757.74 | 8.35 | 0.77 | 0.59 | 1.16 | (2.67) | 0.05 |
| 22 | IDFC | 20,346.95 | 1.30 | 1.22 | 0.62 | 1.21 | (4.28) | 0.07 |
| 23 | JPASSOCIAT | 12,517.34 | 0.80 | 1.70 | 0.72 | 1.81 | (7.66) | 0.07 |
| 24 | JINDALSTEL | 26,568.59 | 1.70 | 1.23 | 0.64 | 1.55 | 9.93 | 0.07 |
| 25 | KOTAKBANK | 14,344.85 | 0.92 | 1.25 | 0.68 | 1.50 | 7.43 | 0.07 |
| 26 | LT | 95,899.07 | 6.13 | 0.92 | 0.67 | 1.06 | 1.08 | 0.06 |
| 27 | M&M | 26,713.02 | 1.71 | 1.21 | 0.61 | 1.11 | (5.26) | 0.06 |
| 28 | MARUTI | 16,635.67 | 1.06 | 0.66 | 0.38 | 0.87 | 4.91 | 0.06 |
| 29 | NTPC | 25,044.46 | 1.60 | 0.62 | 0.56 | 0.86 | (1.41) | 0.05 |
| 30 | ONGC | 45,110.69 | 2.88 | 0.57 | 0.40 | 1.32 | 7.81 | 0.07 |
| 31 | POWERGRID | 6,244.41 | 0.40 | 0.50 | 0.43 | 1.57 | 8.37 | 0.07 |
| 32 | PNB | 15,704.54 | 1.00 | 0.77 | 0.58 | 1.52 | 10.26 | 0.06 |

*Contd.*

*Contd.*

| Sr. No. | Name of Security | Free Float Market Capitalisation (₹ crore) | Weightage (%) | Beta | $R^2$ | Volatility (%) | Monthly Return (%) | Impact Cost (%) |
|---|---|---|---|---|---|---|---|---|
| 33 | RANBAXY | 7,457.28 | 0.48 | 0.88 | 0.50 | 1.37 | 9.11 | 0.06 |
| 34 | RELCAPITAL | 8,566.17 | 0.55 | 1.36 | 0.68 | 1.32 | (3.21) | 0.06 |
| 35 | RCOM | 10,396.14 | 0.66 | 1.15 | 0.46 | 1.60 | (12.67) | 0.07 |
| 36 | RELIANCE | 155,482.25 | 9.93 | 1.15 | 0.72 | 0.96 | (8.96) | 0.04 |
| 37 | RELINFRA | 14,050.81 | 0.90 | 1.27 | 0.64 | 1.44 | (9.62) | 0.07 |
| 38 | RPOWER | 5,555.91 | 0.35 | 1.06 | 0.59 | 1.03 | (7.02) | 0.07 |
| 39 | SIEMENS | 10,466.52 | 0.67 | 1.10 | 0.63 | 0.87 | (0.98) | 0.06 |
| 40 | SBIN | 71,283.59 | 4.55 | 1.13 | 0.67 | 1.97 | 10.53 | 0.05 |
| 41 | SAIL | 10,935.23 | 0.70 | 1.41 | 0.71 | 0.89 | (8.48) | 0.06 |
| 42 | STER | 23,960.80 | 1.53 | 1.72 | 0.74 | 1.66 | (13.64) | 0.07 |
| 43 | SUNPHARMA | 13,244.53 | 0.85 | 0.40 | 0.27 | 1.08 | (0.35) | 0.06 |
| 44 | SUZLON | 3,787.81 | 0.24 | 1.18 | 0.47 | 2.04 | (18.14) | 0.08 |
| 45 | TCS | 42,732.42 | 2.73 | 0.80 | 0.51 | 1.42 | 0.47 | 0.06 |
| 46 | TATAMOTORS | 32,229.55 | 2.06 | 1.50 | 0.62 | 2.07 | 19.38 | 0.06 |
| 47 | TATAPOWER | 19,781.69 | 1.26 | 0.72 | 0.54 | 0.81 | (7.46) | 0.05 |
| 48 | TATASTEEL | 31,853.53 | 2.03 | 1.73 | 0.76 | 1.61 | (2.66) | 0.06 |
| 49 | UNITECH | 10,434.16 | 0.67 | 1.86 | 0.70 | 2.33 | (4.44) | 0.08 |
| 50 | WIPRO | 20,083.31 | 1.28 | 0.86 | 0.54 | 1.44 | (2.92) | 0.07 |
| | | **1,565,624** | **100.00** | **1.00** | **--** | **0.77** | **11.62** | **0.06** |

* Beta & $R^2$ are calculated for the period 01-Sep-2009 to 30-Sep-2010
* Beta measures the degree to which any portfolio of stocks is affected as compared to the effect on the market as a whole.
* The coefficient of determination (R2) measures the strength of relationship between two variables the return on a security versus that of the market.
* Volatility is the Std. deviation of the daily returns for the period 01-Sep-2010 to 30-Sep-2010
* Last day of trading was 30-Sep-2010
* Impact Cost for S&P CNX Nifty is for a portfolio of ₹ 50 Lakhs
* Impact Cost for S&P CNX Nifty is the weightage average impact cost

# Debt Market[1]

## Introduction

The debt market in India comprises mainly of two categories – the government securities or the G-Sec markets consisting of central government, state governments securities and the corporate bond market. The government to finance its fiscal deficit floats the fixed income instruments and borrows by issuing G-Secs that are sovereign securities which are issued by the Reserve Bank of India (RBI) on behalf of Government of India. The corporate bond market (also known as non-Gsec market consists of FI (financial institutions) bonds, PSU (public sector units) bonds and corporate bonds/ debentures.

The G-secs are the most dominant category of debt markets and form a major part of the market in terms of outstanding issues, market capitalization and trading value. It sets a 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. Exchange traded interest rate derivatives introduced recently are debt instruments; this market is currently small and would gradually pick up in the years to come.

### Trends

During 2009-10, the government and corporate sector collectively mobilized ₹ 8,070,967 million (US $ 178,799 million) from primary debt market, a rise of 31.77% as compared to the preceding year (Table 5-1). About 77.27% of the resources 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 2009-10 aggregated ₹ 85,780,050 million (US $ 1,900,311 million), 36.78% higher than that in the previous fiscal year.

**Table 5-1: Debt Market: Selected Indicators**

| Issuer / Securities | Amount raised from Primary Market | | Turnover in Secondary Market | | Amount raised from Primary Market | | Turnover in Secondary Market | |
|---|---|---|---|---|---|---|---|---|
| | (₹ mn) | | | | (US $ mn) | | | |
| | 2008-09 | 2009-10 | 2008-09 | 2009-10 | 2008-09 | 2009-10 | 2008-09 | 2009-10 |
| Government | 4,366,880 | 6,236,190 * | 62,254,360 | 84,337,567 * | 85,709 | 138,152 | 1,221,872 | 1,868,355 |
| Corporate/Non Government | 1,758,267 | 1,834,777 | 459,110 | 1,442,484 | 34,510 | 40,646 | 9,011 | 31,956 |
| **Total** | **6,125,147** | **8,070,967** | **62,713,470** | **85,780,050** | **120,219** | **178,799** | **1,230,883** | **1,900,311** |

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

1 This chapter discusses the market design and outcome in the government securities market, both primary and secondary segment. 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

### I. Clearing and Settlement of trades in corporate bonds to be done through National Securities Clearing Corporation or the Indian Clearing Corporation from December 1, 2009

SEBI vide its circular dated October 16, 2009 informed the stock exchanges to undertake the clearing and settlement activity of trades in corporate bonds through the clearing corporations. SEBI had earlier authorized BSE, NSE and FIMMDA to set up and maintain reporting platforms to capture information related to trading in corporate bonds. Subsequently, SEBI authorized BSE and NSE to set up and maintain trading platforms for Corporate Bonds. It had been decided that all trades in corporate bonds between specified entities, namely, mutual funds, foreign institutional investors/ sub-accounts, venture capital funds, foreign venture capital investors, portfolio mangers, and RBI regulated entities as specified by RBI would be cleared and settled through the National Securities Clearing Corporation Limited (NSCCL) or the Indian Clearing Corporation Limited (ICCL) from December 1, 2009. This would be applicable to all corporate bonds traded over the counter (OTC) or on the debt segment of Stock Exchanges. However, this is not applicable to trades in corporate bonds that are traded on the capital market segment/ equity segment of the stock exchanges and are required to be settled through clearing corporations/ clearing houses of stock exchanges. Meanwhile, the Reserve Bank of India (RBI) had allowed both the clearing houses NSCCL and the ICCL to open transitory pooling accounts with the central bank in Mumbai to facilitate settlement of OTC corporate bond transactions in Real-Time Gross Settlement system on a trade-by-trade basis. Accordingly, the clearing and settlement of Corporate Bonds has started off at NSCCL. To facilitate this process the participation registration, settlement schedule, procedure and reports are put together in the circular dated November 23, 2009 placed on the NSE website.

### II. RBI modifies guidelines for Securitization Companies/ Reconstruction Companies (SCs/RCs)

On 21 April 2010, the RBI modified the guidelines issued to SCs/RCs on various aspects to bring in more transparency and market discipline.

### III. Repo in Corporate Debt Securities (Reserve Bank) Directions, 2010 brought out in January 2010 , made effective from March 01, 2010

The Repo in Corporate debt securities (Reserve Bank) Directions, 2010 were released on January 8, 2010 and were brought into effect from March 1, 2010. These direction define the **Corporate Debt Security** as "*non-convertible debt securities, which create or acknowledge indebtedness, including debentures, bonds and such other securities of a company or a body corporate constituted by or under a Central or State Act, whether constituting a charge on the assets of the company or body corporate or not, but does not include debt securities issued by Government or such other persons as may be specified by the Reserve Bank, security receipts and securitized debt instruments*". The regulations also defined the terms security receipts and securitised debt instrument as:

**'Security Receipts'** means a security as defined in clause (zg) of section 2 of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (54 of 2002) c. '**Securitized debt instrument'** means securities of the nature referred to in sub-clause (ie) of clause (h) of section 2 of the Securities Contracts (Regulation) Act, 1956(42 of 1956).

These directions also state the eligible securities for repo in corporate debt securities, eligible participants, tenor, trading, reporting and settlement of trades, prohibition of sale of repoed security, haircut limits, valuation, capital adequacy, disclosure, computation of CRR/SLR and borrowing limit and documentation related information. The details of these have been discussed under the market design of corporate bonds.

### IV. India Infrastructural Finance Company Limited permitted to undertake ready forward contracts in corporate debt securities

Vide RBI circular dated April 16, 2010, the India Infrastructural Finance Company Limited (IIFCL) was permitted to undertake ready forward contracts in corporate debt securities. The entities eligible to enter into ready forward contracts in corporate debt securities is mentioned in the Repo in Corporate Debt Securities (Reserve Bank) Directions, 2010. These regulations were released in January 2010 and were made effective in March 2010. According to these regulations following entities were allowed to enter into ready forward contracts in corporate debt securities:

- Scheduled commercial banks excluding RRBs and LABs,
- primary dealers authorised by RBI,
- NBFCs registered with RBI (other than government companies as defined in section 617 of the Companies Act, 1956),
- All India Financial Institutions—Exim Bank, NABARD, NHB and SIDBI and other regulated entities such as any mutual fund registered with SEBI, any housing finance company registered with National Housing Bank and any insurance company registered with the Insurance Regulatory and Development Authority is governed

### V. Reporting of repo trades in corporate bonds

Repo in Corporate Debt Securities (Reserve Bank) Directions, 2010 issued by RBI on January 08, 2010 had indicated that the participants eligible to undertake repo transaction in corporate debt securities are required to report the repo trades within 15 minutes of the trade on the FIMMDA Reporting Platform and also report the trade to the clearing corporations of the exchanges, i.e., National Securities Clearing Corporation of India Ltd. (NSCCL) or Indian Clearing Corporation Ltd. (ICCL) for settlement.

However, on March 23, 2010, it was clarified by the RBI that the market participants are required to report their repo trades in corporate bonds only to the clearing corporations, i.e., NSCCL and ICCL for settlement until the launch of the Fixed Income Money Market and Derivatives Association (FIMMDA) Reporting Platform which would be notified once the system is ready.

Accordingly after FIMMDA platform was ready to accept repo trades in corporate bonds, the RBI notified all the market participants on July 16, 2010, that they are required to report their repo trades in corporate bonds within 15 minutes of the trade on the FIMMDA platform from August 2, 2010.

### VI. RBI places the draft report of the Internal Group on Introduction of Credit Default Swaps (CDS) for Corporate Bonds

On 4th August 2010, the Reserve Bank of India came out with a draft report on introduction of CDS for corporate bonds for public comments (See Box 5-1) for details.

### VII. Clarification for NBFCs participating in Ready Forward Contract in Corporate Debt securities

On August 11, 2010 it was notified by RBI that the NBFCs registered with RBI (other than Govt companies as defined in Section 617 of the Companies Act, 1956) are eligible to participate in repo transactions in corporate debt securities. Revised guidelines by RBI's IDMD department on uniform accounting for repo / reverse repo transactions were issued on March 23, 2010. It was clarified that the NBFCs should have asset size of ₹ 100 crore and above (i.e. NBFCs-ND-SI) and the risk weights for credit risk for assets that are the collateral for such transactions as well as risk weights for the counterparty credit risk shall be as applicable to the issuer / counterparty in the NBFC (non-deposit accepting or holding) Prudential Norms Directions, 2007 as amended from time to time.

### VIII. Changes in settlement period for repo trades in corporate debt securities and changes in minimum haircut applicable on market value of corporate debt securities

The Second Quarter Review of the Monetary Policy 2010-11announced that the repo trades in corporate debt securities are permitted to be settled on T+0 basis in addition to the existing T+1 and T+2 basis under DvP I (gross basis) framework. The minimum haircut, applicable on the market value of the corporate debt securities prevailing on the rate of trade of 1st leg, which was earlier stipulated as 25 per cent, was revised as under:

| Rating | AAA | AA+ | AA |
|---|---|---|---|
| Minimum haircut | 10% | 12% | 15% |

### IX. Draft Listing Agreement for Securitized Debt Instruments

Securities and Exchange Board of India (SEBI) had notified the Regulations for Public Offer and Listing of Securitized Debt Instruments on May 26, 2008. The Regulations, inter alia, specified initial disclosure requirements for offer documents for public issues of securitized debt instruments and privately placed securitized debt instruments that are proposed to be listed on stock exchanges. Further to the initiative, in order to enable listing of such instruments on stock exchanges, SEBI has prepared a draft Listing Agreement for Securitized Debt Instruments containing continuous disclosure requirements.

**Other than the above cited policy developments, developments relating to Review of Limits for Foreign Institutional Investors' (FIIs) investment in Government Securities and corporate debt have been mentioned in Chapter 7 of FIIs.**

**Box: 5-1 CREDIT DEFAULT SWAPS FOR CORPORATE BONDS**

Introduction of credit derivatives in India was actively examined in the past to provide the participants tools to manage credit risk. Draft guidelines on introduction of CDS were first issued in 2003 and then in 2007. However, taking into account the status of risk management practices then prevailing in the banking system and also the experiences relating to the financial crisis, the issuance of final guidelines was deferred.

The matter was since reviewed and the Second Quarter Review of Monetary Policy of 2009-10 proposed introduction of plain vanilla OTC single-name CDS for corporate bonds for resident entities subject to appropriate safeguards. It was proposed that to begin with, all CDS trades will be required to be reported to a centralised trade reporting platform and in due course they will be brought on to a central clearing platform.

An Internal Group comprising officials from various departments of the Reserve Bank was set up to finalise the operational framework for introduction of CDS in India. The Group has noted that the CDS market should be developed in a calibrated and orderly fashion with focus on real sector linkages and emphasis on creation of robust risk management architecture to deal with various risks as have been evident in the recent financial crisis.

The Internal Group, in consultation with market participants and after taking into account international experience in the working of CDS, has finalised the operational framework for introduction of CDS in India.

**The recommendations of the Internal Group:**

- The CDS shall be permitted only on corporate bonds as reference obligations and the reference entities shall be single legal resident entities.
- While the reference entities are required to be rated, no minimum rating is stipulated. However, keeping in view the need for development of the infrastructure sector, CDS shall be permitted to be written on corporate bonds issued by Special Purpose Vehicle (SPV) of rated infrastructure companies.
- The permitted participants have been categorised into :
  - o **Market Makers:** Participants permitted to undertake both protection buying and protection selling, such as, commercial banks, non-banking financial companies, primary dealers, insurance companies and mutual funds, complying with the eligibility criteria and subject to the approval of their respective regulators;
  - o **Users:** Participants permitted only to hedge their underlying exposures, such as, commercial banks, primary dealers, non-banking financial companies, mutual funds, insurance companies, housing finance companies, provident funds and listed corporates.
- Users cannot purchase CDS without having the underlying exposure and the protection can be bought only to the extent (both in terms of quantum and tenor) of such underlying risk.
- For users, physical settlement is mandatory. Market-makers can opt for any of the three settlement methods (physical, cash or auction settlement), provided the CDS documentation envisages such settlement.
- As CDS markets are exposed to various risks, such as, sudden increases in credit spreads resulting in mark-to-market losses, high incidence of credit events, jump-to-default risk, basis risk, counterparty risks, etc., which are difficult to anticipate or measure accurately, market participants need to take these risks into account and build robust and appropriate risk management system to manage such risks.
- The protection seller shall treat its exposure to the reference entity (on the protection sold) as its credit exposure and aggregate the same with other exposures to the reference entity for the purposes of determining single / group exposure limits. The protection buyer shall replace its original exposure to reference entity with that of the protection seller.

- Standardisation of CDS contract has been proposed in terms of coupon payment dates/ maturity dates and coupons.
- Fixed Income Money Markets and Derivatives Association of India (FIMMDA) in consultation with market participants and market bodies shall coordinate in the matters relating to documentation, disclosure of daily CDS curve for valuation and setting up of determination committees, etc.
- A centralised CDS repository with reporting platform on the lines of the DTCC's Trade Information Warehouse (TIW) would be set up for capturing transactions in CDS and it may be made mandatory for all CDS market-makers to report their CDS trades on the reporting platform within 30 minutes from the deal time.
- While a gradual approach may be adopted for setting up a Central Counter Party (CCP) for guaranteed settlement of CDS transactions, to begin with, a system of non-guaranteed settlement may be set up.

*Source: RBI*

## Market Design of Government Securities

| | |
|---|---|
| **Government Security** | A Government security is a tradable instrument issued by the Central Government or the State Governments. It acknowledges the Government's debt obligation. Such securities are short term (usually called treasury bills, with original maturities of less than one year) or long term (usually called Government bonds or dated securities with original maturity of one year or more). |
| **Types of Securities** | **Treasury Bills (T-bills):** Treasury bills are money market instruments, short term debt instruments issued by the Government of India and are issued in three tenors, such as 91 days, 182 days and 364 days. T-bills are zero coupon securities and pay no interest. They are issued at a discount and redeemed at the face value at maturity.<br>**Cash Management Bills (CMBs)[2]:** The Cash management bills have the generic character of T-bills but are issued for maturities less than 91 days. Like T-bills, they are also issued at a discount and redeemed at face value at maturity. The tenure, notified amount and date of issue of the CMBs depends upon the temporary cash requirement of the Government. The announcement of their auction is made by Reserve Bank of India through a Press Release which would be issued one day prior to the date of auction. The settlement of the auction is on T+1 basis.<br>**Dated Government Securities:** Dated Government securities are long term securities and carry a fixed or floating coupon (interest rate) which is paid on the face value, payable at fixed time periods (usually half-yearly). The tenor of dated securities can be up to 30 years.<br>**State Development Loans (SDL):** State Governments also raise loans from the market. SDLs are dated securities issued through an auction similar to the auctions conducted for dated securities issued by the Central government. Interest is serviced at half yearly intervals and the principal is repaid on the maturity date. Like dated securities issued by the Central Government, SDLs issued by the State Governments qualify for SLR. They are also eligible as collaterals for borrowing through market repo as well as borrowing by eligible entities from the RBI under the Liquidity Adjustment Facility (LAF). |
| **Types of Dated Government Securities** | **Fixed Rate Bonds:** These are bonds on which the coupon rate is fixed for the entire life of the bond. Most Government bonds are issued as fixed rate bonds.<br>**Floating Rate Bonds:** Floating Rate Bonds are securities which do not have a fixed coupon rate. The coupon is re-set at pre-announced intervals (say, every 6 months or 1 year) by adding a spread over a base rate. In the case of most floating rate bonds issued by the Government of India so far, the base rate is the weighted average cut-off yield of the last three 364-day Treasury Bill auctions preceding the coupon re-set date and the spread is decided through the auction. Floating Rate Bonds were first issued in September 1995 in India.<br>**Zero Coupon Bonds –** Zero coupon bonds are bonds with no coupon payments. Like Treasury Bills, they are issued at a discount to the face value. The Government of India issued such securities in the nineties, it has not issued zero coupon bond after that. |

[2] Government of India, in consultation with the Reserve Bank of India decided to issue a new short-term instrument, known as Cash Management Bills (CMBs), to meet the temporary mismatches in the cash flow of the Government. (Press Release of RBI dated August 10, 2009)

**Capital Indexed Bonds –** These are bonds, the principal of which is linked to an accepted index of inflation with a view to protecting the holder from inflation. A capital indexed bond, with the principal hedged against inflation, was issued in December 1997. These bonds matured in 2002. The government is currently working on a fresh issuance of Inflation Indexed Bonds wherein payment of both, the coupon and the principal on the bonds, will be linked to an Inflation Index (Wholesale Price Index). In the proposed structure, the principal will be indexed and the coupon will be calculated on the indexed principal. In order to provide the holders protection against actual inflation, the final WPI will be used for indexation.

**Bonds with Call/ Put Options –** Bonds can also be issued with features of optionality wherein the issuer can have the option to buy-back (call option) or the investor can have the option to sell the bond (put option) to the issuer during the currency of the bond.

The optionality on the bond could be exercised after completion of 5 years tenure from the date of issuance on any coupon date falling thereafter. The Government has the right to buyback the bond (call option) at par value (equal to the face value) while the investor has the right to sell the bond (put option) to the Government at par value at the time of any of the half-yearly coupon dates starting from July 18, 2007.

**Special Securities:** In addition to Treasury Bills and dated securities issued by the Government of India under the market borrowing programme, the Government of India also issues, from time to time, special securities to entities like Oil Marketing Companies, Fertilizer Companies, the Food Corporation of India, etc. as compensation to these companies in lieu of cash subsidies. These securities are usually long dated securities carrying coupon with a spread of about 20-25 basis points over the yield of the dated securities of comparable maturity. These securities are, however, not eligible SLR securities but are eligible as collateral for market repo transactions. The beneficiary oil marketing companies may divest these securities in the secondary market to banks, insurance companies / Primary Dealers, etc., for raising cash.

**Separate Trading of Registered Interest and Principal of Securities (STRIPS):** Steps are being taken to introduce new types of instruments like STRIPS (Separate Trading of Registered Interest and Principal of Securities). Accordingly, guidelines for stripping and reconstitution of Government securities have been issued. STRIPS are instruments wherein each cash flow of the fixed coupon security is converted into a separate tradable Zero Coupon Bond and traded.[3] These cash flows are traded separately as independent securities in the secondary market. STRIPS in Government securities will ensure availability of sovereign zero coupon bonds, which will facilitate the development of a market determined zero coupon yield curve (ZCYC). STRIPS will also provide institutional investors with an additional instrument for their asset- liability management. Further, as STRIPS have zero reinvestment risk, being zero coupon bonds, they can be attractive to retail/ non-institutional investors. The process of stripping/reconstitution of Government securities is carried out at RBI, Public Debt Office (PDO) in the PDO-NDS (Negotiated Dealing System) at the option of the holder at any time from the date of issuance of a Government security till its maturity. All dated Government securities, other than floating rate bonds, having coupon Payment dates on 2nd January and 2nd July, irrespective of the year of maturity are eligible for Stripping/Reconstitution. Eligible Government securities held in the Subsidiary General Ledger (SGL)/Constituent Subsidiary General Ledger (CSGL) accounts maintained at the PDO, RBI, Mumbai. Physical securities are not be eligible for stripping/reconstitution. Minimum amount of securities that needs to be submitted for stripping/reconstitution will be ₹ 1 crore (Face Value) and multiples thereof.

[3] For example, when ₹ 100 of the 8.24%GS2018 is stripped, each cash flow of coupon (₹ 4.12 each half year) will become coupon STRIP and the principal payment (₹ 100 at maturity) will become a principal STRIP.

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| **Issuers of Securities** | In India, the Central Government issues both, treasury bills and bonds or dated securities while the State Governments issue only bonds or dated securities, which are called the State Development Loans (SDLs). Government securities carry practically no risk of default and, hence, are called risk-free gilt-edged instruments. Government of India also issues savings instruments (Savings Bonds, National Saving Certificates (NSCs), etc.) or special securities (oil bonds, Food Corporation of India bonds, fertilizer bonds, power bonds, etc.). |
| **Issuance of Government Securities** | Government securities are issued through auctions conducted by the RBI. Auctions are conducted on the electronic platform called the NDS – Auction platform. Commercial banks, scheduled urban co-operative banks, Primary Dealers, insurance companies and provident funds, who maintain funds account (current account) and securities accounts (SGL account) with RBI, are members of this electronic platform. All members of PDO-NDS can place their bids in the auction through this electronic platform. All non-NDS members including non-scheduled urban co-operative banks can participate in the primary auction through scheduled commercial banks or Primary Dealers. For this purpose, the urban co-operative banks need to open a securities account with a bank / Primary Dealer – such an account is called a Gilt Account. A Gilt Account is a dematerialized account maintained by a scheduled commercial bank or Primary Dealer for its constituent (e.g., a non-scheduled urban co-operative bank).<br><br>The RBI, in consultation with the Government of India, issues an indicative half-yearly auction calendar which contains information about the amount of borrowing, the tenor of security and the likely period during which auctions will be held. A Notification and a Press Communique giving exact particulars of the securities, viz., name, amount, type of issue and procedure of auction are issued by the Government of India about a week prior to the actual date of auction. RBI places the notification and a Press Release on its website (www.rbi.org.in) and also issues an advertisement in leading English and Hindi newspapers. Information about auctions is also available with the select branches of public and private sector banks and the Primary Dealers. |
| **Different types of auctions used for issue of securities** | Prior to introduction of auctions as the method of issuance, the interest rates were administratively fixed by the Government. With the introduction of auctions, the rate of interest (coupon rate) gets fixed through a market based price discovery process.<br><br>**An auction may either be yield based or price based.**<br><br>**Yield Based Auction:** A yield based auction is generally conducted when a new Government security is issued. Investors bid in yield terms up to two decimal places (for example, 8.19 per cent, 8.20 per cent, etc.). Bids are arranged in ascending order and the cut-off yield is arrived at the yield corresponding to the notified amount of the auction. The cut-off yield is taken as the coupon rate for the security. Successful bidders are those who have bid at or below the cut-off yield. Bids which are higher than the cut-off yield are rejected.<br><br>**Price Based Auction:** A price based auction is conducted when Government of India re-issues securities issued earlier.Bidders quote in terms of price per ₹100 of face value of the security (e.g., ₹102.00, ₹101.00, ₹100.00, ₹99.00, etc., per ₹100/-). Bids are arranged in descending order and the successful bidders are those who have bid at or above the cut-off price. Bids which are below the cut-off price are rejected.<br><br>**Multiple Price based:** In a Uniform Price auction, all the successful bidders are required to pay for the allotted quantity of securities at the same rate, i.e., at the auction cut-off rate, irrespective of the rate quoted by them. On the other hand, in a Multiple Price auction, the successful bidders are required to pay for the allotted quantity of securities at the respective price / yield at which they have bid. |

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| **Holding of Government Securities** | The Public Debt Office (PDO) of the Reserve Bank of India, Mumbai acts as the registry and central depository for the Government securities. Government securities may be held by investors either as physical stock or in dematerialized form. From May 20, 2002, it is mandatory for all the RBI regulated entities to hold and transact in Government securities only in dematerialized (SGL) form. Accordingly, UCBs are required to hold all Government securities in demat form.<br>• **Physical form**: Government securities may be held in the form of stock certificates. A stock certificate is registered in the books of PDO. Ownership in stock certificates can not be transferred by way of endorsement and delivery. They are transferred by executing a transfer form as the ownership and transfer details are recorded in the books of PDO. The transfer of a stock certificate is final and valid only when the same is registered in the books of PDO. |
| | • **Demat form:** Holding government securities in the dematerialized or scripless form is the safest and the most convenient alternative as it eliminates the problems relating to custody, viz., loss of security. Besides, transfers and servicing are electronic and hassle free. The holders can maintain their securities in dematerialsed form in either of the two ways:<br>**i. SGL Account:** Reserve Bank of India offers Subsidiary General Ledger Account (SGL) facility to select entities who can maintain their securities in SGL accounts maintained with the Public Debt Offices of the Reserve Bank of India.<br>**ii. Gilt Account**: As the eligibility to open and maintain an SGL account with the RBI is restricted, an investor has the option of opening a Gilt Account with a bank or a Primary Dealer which is eligible to open a Constituents' Subsidiary General Ledger Account (CSGL) with the RBI. Under this arrangement, the bank or the Primary Dealer, as a custodian of the Gilt Account holders, would maintain the holdings of its constituents in a CSGL account (which is also known as SGL II account) with the RBI. The servicing of securities held in the Gilt Accounts is done electronically, facilitating hassle free trading and maintenance of the securities. Receipt of maturity proceeds and periodic interest is also faster as the proceeds are credited to the current account of the custodian bank / PD with the RBI and the custodian (CSGL account holder) immediately passes on the credit to the Gilt Account Holders (GAH).<br>Investors also have the option of holding Government securities in a dematerialized account with a depository (NSDL / CDSL, etc.). This facilitates trading of Government securities on the stock exchanges. |
| **Listing of G-secs on Stock Exchanges** | All Government securities and Treasury bills are deemed to be listed automatically as and when they are issued. |
| **Trading in Government securities** | There is an active secondary market in government securities. The securities can be bought/sold in the secondary market either (i) Over the Counter (OTC) or (ii) through the Negotiated Dealing System (NDS) or (iii) the Negotiated Dealing System-Order Matching (NDS-OM).<br>**(i) Over the Counter (OTC)/ Telephone Market**<br>In this market, a participant, who wants to buy or sell a government security, may contact a bank/ Primary Dealer / financial institution either directly or through a broker registered with SEBI and negotiate for a certain amount of a particular security at a certain price. Such negotiations are usually done on telephone and a deal may be struck if both counterparties agree on the amount and rate. In the case of a buyer, like an urban co-operative bank wishing to buy a security, the bank's dealer (who is authorized by the bank to undertake transactions in Government Securities) may get in touch with other market participants over telephone and obtain quotes.<br>All trades undertaken in OTC market are reported on the secondary market module of the NDS. |

### (ii) Negotiated Dealing System

The Negotiated Dealing System (NDS) for electronic dealing and reporting of transactions in government securities was introduced in February 2002. It facilitates the members to submit electronically, bids or applications for primary issuance of Government Securities when auctions are conducted. NDS also provides an interface to the Securities Settlement System (SSS) of the Public Debt Office, RBI, Mumbai thereby facilitating settlement of transactions in Government Securities (both outright and repos) conducted in the secondary market. Membership to the NDS is restricted to members holding SGL and/or Current Account with the RBI, Mumbai.

### (iii) NDS OM

In August 2005, RBI introduced an anonymous screen based order matching module on NDS, called NDS-OM. This is an order driven electronic system, where the participants can trade anonymously by placing their orders on the system or accepting the orders already placed by other participants. NDS-OM is operated by the Clearing Corporation of India Ltd. (CCIL) on behalf of the RBI Direct access to the NDS-OM system is currently available only to select financial institutions like Commercial Banks, Primary Dealers, Insurance Companies, Mutual Funds, etc. Other participants can access this system through their custodians, i.e., with whom they maintain Gilt Accounts. The custodians place the orders on behalf of their customers like the urban co-operative banks. The advantages of NDS-OM are price transparency and better price discovery.

Gilt Account holders have been given indirect access to NDS through custodian institutions. A member (who has the direct access) can report on the NDS the transaction of a Gilt Account holder in government securities. Similarly, Gilt Account holders have also been given indirect access to NDS-OM through the custodians. However, currently two gilt account holders of the same custodian are not permitted to undertake repo transactions between themselves.

### Stock Exchanges

Facilities are also available for trading in Government securities on stock exchanges (NSE, BSE) which cater to the needs of retail investors. 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 suggests, permits only high value transactions in debt securities.

The trades on the WDM segment can be executed in the Continuous or Negotiated market. In the continuous market, orders entered by the trading members are matched by the trading system. For each order entering the trading system, the system scans for a probable match in the order books. On finding a match, a trade takes place. In case, the order does not find a suitable counter order in the order books, it is added to the order books and is called a passive order. This could later match with any future order entering the order book and result into a trade. This future order, which results in matching of an existing order, is called the active order. In the negotiated market, deals are negotiated outside the exchange between the two counter parties and are reported on the trading system for approval.

### Brokerage Rates

The Exchange has specified the maximum rates of brokerage chargeable by trading members in relation to trades done in securities available on the WDM segment of the Exchange.

| | | |
|---|---|---|
| | **Govt. Of India Securities and T-Bills** | |
| | Order Value upto ₹10 million | 25 ps. per ₹100 |
| | More than 10 million upto 50 million | 15 ps. per ₹100 |
| | More than 50 million upto 100 million | 10 ps per ₹100 |
| | More than 100 million | 5 ps per ₹100 |
| | | |
| | **State Govt. Securities & Institutional Bonds** | |
| | Order Value upto ₹2.5 million | 50 ps. per ₹100 |
| | More than 2.5 million upto 5 million | 30 ps. per ₹100 |
| | More than 5 million upto 10 million | 25 ps per ₹100 |
| | More than 10 million upto 50 million | 15 ps per ₹100 |
| | More than 50 million upto 100 million | 10 ps per ₹100 |
| | More than 100 million | 5 ps per ₹100 |
| | | |
| | **PSU & Floating Rate Bonds** | |
| | Order Value upto ₹10 million | 50 ps. per ₹100 |
| | More than 10 million upto 50 million | 25 ps. per ₹100 |
| | More than 50 million upto 100 million | 15 ps per ₹100 |
| | More than 100 million | 10 ps per ₹100 |
| | | |
| | **Commercial paper and Debentures** | 1% of the order value |
| | The NSE has waived the transaction charges for the WDM segment of the Exchange for the period April 2010 to March 2011. | |
| **Reporting of Government Securities** | Transactions undertaken between market participants in the OTC/telephone market are expected to be reported on the NDS platform within 15 minutes after the deal is put through over telephone. All OTC trades are required to be mandatorily reported on the secondary market module of the NDS for settlement.<br><br>Reporting on NDS is a four stage process wherein the seller of the security has to initiate the reporting followed by confirmation by the buyer. This is further followed by issue of confirmation by the seller's back office on the system and reporting is complete with the last stage wherein the buyer's back office confirms the deal. The system architecture incorporates maker-checker model to preempt individual mistakes as well as misdemeanor.<br><br>Reporting on behalf of entities maintaining gilt accounts with the custodians is done by the respective custodians in the same manner as they do in case of their own trades i.e., proprietary trades. The securities leg of these trades settle in the CSGL account of the custodian. Once the reporting is complete, the NDS system accepts the trade. Information on all such successfully reported trades flow to the clearing house i.e., the CCIL. In the case of NDS-OM, participants place orders (price and quantity) on the system. Participants can modify / cancel their orders. Order could be a bid for purchase or offer for sale of securities. The system, in turn will match the orders based on price and time priority. That is, it matches bids and offers of the same prices with time priority. The NDS-OM system has separate screen for the Central Government, State Government and Treasury bill trading. In addition, there is a screen for odd lot trading for facilitating trading by small participants in smaller lots of less than ₹ 5 crore (i.e., the standard market lot). The NDS-OM platform is an anonymous platform wherein the participants will not know the counterparty to the trade. Once an order is matched, the deal ticket gets generated automatically and the trade details flow to the CCIL. Due to anonymity offered by the system, the pricing is not influenced by the participants' size and standing. | |

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| **Major players in the Government Securities market** | Major players in the Government securities market include **commercial banks** and **primary dealers** besides institutional investors like **insurance companies**. Primary Dealers play an important role as market makers in Government securities market. Other participants include **co-operative banks, regional rural banks, mutual funds, provident and pension funds**. **Foreign Institutional Investors (FIIs)** are allowed to participate in the Government securities market within the quantitative limits prescribed from time to time. Corporates also buy/ sell the government securities to manage their overall portfolio risk. |
| **Settlement of Government Securities** | **Primary Market**<br>Once the allotment process in the primary auction is finalized, the successful participants are advised of the consideration amounts that they need to pay to the Government on settlement day. The settlement cycle for dated security auction is T+1, whereas for that of Treasury bill auction is T+2. On the settlement date, the fund accounts of the participants are debited by their respective consideration amounts and their securities accounts (SGL accounts) are credited with the amount of securities that they were allotted.<br>**Secondary Market**<br>The transactions relating to Government securities are settled through the member's securities / current accounts maintained with the RBI, with delivery of securities and payment of funds being done on a net basis. The Clearing Corporation of India Limited (CCIL) guarantees settlement of trades on the settlement date by becoming a central counter-party to every trade through the process of novation, i.e., it becomes seller to the buyer and buyer to the seller. All outright secondary market transactions in Government Securities are settled on T+1 basis. However, in case of repo transactions in Government securities, the market participants will have the choice of settling the first leg on either T+0 basis or T+1 basis as per their requirement.<br>*'Shut period' means the period for which the securities can not be delivered. During the period under shut, no settlements/ delivery of the security which is under shut will be allowed. The main purpose of having a shut period is to facilitate servicing of the securities viz., finalizing the payment of coupon and redemption proceeds and to avoid any change in ownership of securities during this process. Currently the shut period for the securities held in SGL accounts is one day.*<br>Delivery versus Payment (DvP) is the mode of settlement of securities wherein the transfer of securities and funds happen simultaneously. This ensures that unless the funds are paid, the securities are not delivered and vice versa. DvP settlement eliminates the settlement risk in transactions. There are three types of DvP settlements, viz., DvP I, II and III which are explained below:<br>i. DvP I – The securities and funds legs of the transactions are settled on a gross basis, that is, the settlements occur transaction by transaction without netting the payables and receivables of the participant.<br>ii. DvP II – In this method, the securities are settled on gross basis whereas the funds are settled on a net basis, that is, the funds payable and receivable of all transactions of a party are netted to arrive at the final payable or receivable position which is settled.<br>iii. DvP III – In this method, both the securities and the funds legs are settled on a net basis and only the final net position of all transactions undertaken by a participant is settled.<br>Liquidity requirement in a gross mode is higher than that of a net mode since the payables and receivables are set off against each other in the net mode.<br>**Clearing Corporation of India Limited (CCIL)**<br>The CCIL is the clearing agency for Government securities. It acts as a Central Counter Party (CCP) for all transactions in Government securities by interposing itself between two counterparties. |

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| | In effect, during settlement, the CCP becomes the seller to the buyer and buyer to the seller of the actual transaction. All outright trades undertaken in the OTC market and on the NDS-OM platform are cleared through the CCIL. Once CCIL receives the trade information, it works out participant-wise net obligations on both the securities and the funds leg. The payable / receivable position of the constituents (gilt account holders) is reflected against their respective custodians. CCIL forwards the settlement file containing net position of participants to the RBI where settlement takes place by simultaneous transfer of funds and securities under the 'Delivery versus Payment' system. CCIL also guarantees settlement of all trades in Government securities. That means, during the settlement process, if any participant fails to provide funds/ securities, CCIL will make the same available from its own means. For this purpose, CCIL collects margins from all participants and maintains 'Settlement Guarantee Fund'. |

## Market Design for Corporate Bond Market

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| **Issuers of Corporate Bonds** | Public sector units including public financial institutions and bonds issued by private corporate sector. |
| **General Conditions for issuance of corporate bonds** | No issuer can make any public issue of debt securities if as on the date of filing of draft offer document and final offer document, the issuer or the person in control of the issuer, or its promoter, has been restrained or prohibited or debarred by SEBI from accessing the securities market or dealing in securities and such direction or order is in force.<br>No issuer can make a public issue of debt securities unless following conditions are satisfied[4]:<br>(a) The issuer has to apply to one or more recognized stock exchanges for listing of such securities. If the application is made to more than one recognized stock exchanges, the issuer should choose one of them as the designated stock exchange (having nationwide trading terminals). However, for any subsequent public issue, the issuer may choose a different stock exchange as a designated stock exchange subject to the requirements of SEBI (Issue and Listing of Debt Securities) regulations, 2008.<br>(b) The issuer has to obtain in-principle approval for listing of its debt securities on the recognized stock exchanges where the application for listing has been made;<br>(c) credit rating has to be obtained from at least one credit rating agency registered with SEBI and has to be disclosed in the offer document[5].<br>(d) it has entered into an arrangement with a depository registered with SEBI for dematerialization of the debt securities that are proposed to be issued to the public, in accordance with the Depositories Act,1996 and other relevant regulations.<br>(e) The issuer is required to appoint one or more merchant bankers registered with the Board at least one of whom has to be a lead merchant banker.<br>(f) The issuer is required to appoint one or more debenture trustees in accordance with the provisions of Section 117B of the Companies Act, 1956 (1 of 1956) and Securities and Exchange Board of India (Debenture Trustees) Regulations, 1993.<br>(g) The issuer is not allowed to issue debt securities for providing loan to or acquisition of shares of any person who is part of the same group or who is under the same management. |
| **Price Discovery through Book Building** | The issuer may determine the price of debt securities in consultation with the lead merchant banker and the issue may be at fixed price or the price may be determined through book building process in accordance with the procedure as may be specified by SEBI. |

[4] as on the date of filing of draft offer document and final offer document.

[5] If the credit rating has been obtained from more than one credit rating agencies, all the credit ratings, including the unaccepted ratings, are required to be disclosed in the offer document.

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| **Minimum Subscription** | The issuer can decide the amount of minimum subscription which it seeks to raise by issue of debt securities and disclose the same in the offer document. In the event of non receipt of minimum subscription all application moneys received in the public issue has to be refunded to the applicants. |
| **Debenture Redemption Reserve** | For the redemption of the debt securities issued by a company, the issuer has to create debenture redemption reserve in accordance with the provisions of the Companies Act, 1956 and circulars issued by Central Government in this regard. Where the issuer has defaulted in payment of interest on debt securities or redemption thereof or in creation of security as per the terms of the issue of debt securities, any distribution of dividend would require approval of the debenture trustees. |
| **Listing of Debt Securities** | **Mandatory listing**<br>An issuer desirous of making an offer of debt securities to the public has to apply for listing to one or more recognized stock exchanges in terms of the Companies Act,1956(1 of 1956)[6]. The issuer has to comply with conditions of listing of debt securities as specified in the Listing Agreement with the stock exchange where such debt securities are sought to be listed.<br>**Conditions for listing of debt securities issued on private placement basis**<br>An issuer may list its debt securities issued on private placement basis on a recognized stock exchange subject to the following conditions:<br>(a) the issuer has issued such debt securities in compliance with the provisions of the Companies Act,1956, rules prescribed thereunder and other applicable laws.<br>(b) credit rating has been obtained in respect of such debt securities from at least one credit rating agency registered with SEBI.<br>(c) the debt securities proposed to be listed are in dematerialized form.<br>(d) the prescribed disclosures have to be made.<br>For continuous listing also various conditions have to be abided by.<br>The listing requirements for securities on the WDM segment of NSE are presented in table 5-2. |
| **Trading of Debt securities** | (1) The debt securities issued to the public or on a private placement basis, which are listed in recognized stock exchanges, are traded and cleared and settled in recognized stock exchanges subject to conditions specified by the SEBI.<br>(2) In case of trades of debt securities which have been made over the counter, such trades are required to be reported on a recognized stock exchange having a nation wide trading terminal or such other platform as may be specified by the SEBI. |
| **Clearing and Settlement** | The corporate bonds are cleared and settled by the clearing corporations of stock exchanges i.e. ICCL and NSCCL.<br>All trades in corporate bonds available in demat form which are reported on any of the following platforms provided viz., FIMMDA, NSE-WDM and NSE web site are eligible for settlement through NSCCL. In order to facilitate settlement of corporate bond trades through NSCCL, both buy and sell participants shall be required to explicitly express their intention to settle the corporate bond trades through NSCCL.<br>The trades will be settled at participant level on DVP I basis i.e., on gross basis for securities and funds. The settlements shall be carried out through the bank and DP accounts specified by the participants.<br>On the settlement date, during the pay-in, participants are required to transfer the securities to the Depository account specified by NSCCL and transfer the funds to the bank account specified by NSCCL within the stipulated cut-off time.<br>On successful completion of pay-in of both securities and funds, the securities / funds shall be transferred by NSCCL to the depository / bank account of the counter-party. |

[6] of sub-section (1) of section 73

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| **Regulatory Framework** | SEBI (Issue and Listing of Debt Securities) regulations, 2008. (private placement) for above one year. SEBI is responsible for primary and secondary debt market while RBI is responsible for the market for repo/reverse repo transactions in corporate debt.<br>Issuance of Non-Convertible Debentures (Reserve Bank) Directions, 2010 (for issuance of NCDs of original or initial maturity up to one year).<br>According to the Repo in Corporate Debt Securities (Reserve Bank) Directions 2010, dated 8 January 2010 issued by the RBI, NBFCs registered with the RBI (other than Government companies as defined in Section 617 of the Companies Act 1956) are eligible for participation in repo transactions in corporate debt securities. NBFCs participating in such repo transactions were advised to comply with the Directions and accounting guidelines issued by RBI. |

*Source: SEBI (Issue and Listing of Debt Securities) Regulations, 2008*

**Table 5-2: Eligibility Criteria for Securities on WDM Segment**

| Issuer | Eligibility Criteria for listing | |
|---|---|---|
| | Public Issue /Private Placement | |
| Corporates (Public limited companies and Private limited companies) | • Paid-up capital of ₹10 crores; or<br>• Market capitalisation of ₹ 25 crores<br>(In case of unlisted companies Networth more than ₹ 25 crores)<br>• Credit rating | |
| Public Sector Undertaking, Statutory Corporation established/ constituted under Special Act of Parliament /State Legislature, Local bodies/ authorities, | • Credit rating | |
| Mutual Funds:<br>Units of any SEBI registered Mutual Fund/scheme :<br>• Investment objective to invest predominantly in debt or<br>• Scheme is traded in secondary market as debt instrument | • Qualifies for listing under SEBI's Regulations | |
| Infrastructure companies<br>• Tax exemption and recognition as infrastructure company under related statutes/regulations | • Qualifies for listing under the respective Acts, Rules or Regulations under which the securities are issued.<br>• Credit rating | |
| Financial Institutions u/s. 4A of Companies Act, 1956 including Industrial Development Corporations | **Public Issue** | **Private Placement** |
| | Qualifies for listing under the respective Acts, Rules or Regulations under which the securities are issued. | Credit rating |
| Banks | • Scheduled banks<br>• Networth of ₹50 crores or above<br>• Qualifies for listing under the respective Acts, Rules or Regulations under which the securities are issued. | • Scheduled Banks<br>• Networth of ₹50 crores or above<br>• Credit rating |

*Source: NSE*

## Market Design for Securitised Debt instruments

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|---|---|
| Meaning of Securitised Debt | Securities Contracts (Regulation) Act, 1956 was amended in the year 2007 to include any certificate or instrument (by whatever name called), issued to an investor by any issuer being a special purpose distinct entity which possesses any debt or receivable, including mortgage debt, assigned to such entity, and acknowledging beneficial interest of such investor in such debt or receivable, including mortgage debt, as the case maybe; under the definition of securities.[7]<br>Securitisation involves pooling of financial assets and the issuance of securities that are re-paid from the cash flows generated by these assets.<br>Common assets for securitisation include credit cards, mortgages, auto and consumer loans, student loans, corporate debt, export receivable and offshore remittances. |
| Regulatory Framework | The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002<br>SEBI (Public Offer and Listing of Securitised Debt Instruments) Regulations, 2008 for listing on stock exchanges<br>The Securitisation Companies and Reconstruction Companies (Reserve Bank) Guidelines and Directions, 2003 |
| Eligibility criteria for trustees[8] | According to the SEBI (Public Offer and Listing of Securitised Debt Instruments) Regulations, 2008 no person can make a public offer of securitised debt instruments or seek listing for such securitised debt instruments unless –<br>(a) it is constituted as a special purpose distinct entity;<br>(b) all its trustees are registered with the SEBI under SEBI (Public Offer and Listing of Securitised Debt Instruments) Regulations, 2008 and<br>(c) it complies with all applicable provisions of these regulations and the Act.<br>The requirement of obtaining registration is not applicable for the following persons, who may act as trustees of special purpose distinct entities, namely:-<br>(a) any person registered as a debenture trustee with SEBI.<br>(b) any person registered as a securitisation company or a reconstruction company with the Reserve Bank of India under the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (54 of 2002);<br>(c) the National Housing Bank established by the National Housing Bank Act, 1987 (53 of 1987);<br>(d) the National Bank for Agriculture and Rural Development established by the National Bank for Agriculture and Rural Development Act, 1981 (61 of 1981):<br>However, the aforesaid persons and special purpose distinct entities in respect of which they are trustees are required to comply with all other provisions of SEBI (Public Offer and Listing of Securitised Debt Instruments) Regulations, 2008. However, these regulations are not applicable for the National Housing Bank and the National Bank for Agriculture and Rural Development to the extent of inconsistency with the provisions of their respective Acts. |
| **Launching of schemes** | (1) A special purpose distinct entity may raise funds by making an offer of securitised debt instruments through formulating schemes in accordance with SEBI (Public Offer and Listing of Securitised Debt Instruments) Regulations, 2008.<br>(2) Where there are multiple schemes, the special purpose distinct entity is required to maintain separate and distinct accounts in respect of each such scheme and should not commingle asset pools or realisations of a scheme with those of other schemes. |

7 Prior to 2008, securitised debt was incapable of being listed on stock exchanges, as it was unclear whether it was a "security" as defined in the Securities Contracts (Regulation) Act, 1956 (SCRA). This was put to rest after the government amended the SCRA to include pass-through certificates (PTCs), as the securitisation instruments are technically called. Allowing them to be listed on stock exchanges, thus became the next policy target for regulatory officials

8 trustee of a special purpose distinct entity

| | |
|---|---|
| | (3) A special purpose distinct entity and trustees should ensure that realisations of debts and receivables are held and correctly applied towards redemption of securitised debt instruments issued under the respective schemes or towards payment of returns on such instruments or towards other permissible expenditure of the scheme.<br>(4) The terms of issue of the securitised debt instruments may provide for exercise of a clean -up call option by the special purpose distinct entity, subject to adequate disclosures.<br>(5) No expenses should be charged to the scheme in excess of the allowable expenses as may be specified in the scheme and any such expenditure, if incurred, should be borne by the trustees. |
| **Mandatory Listing** | A special purpose distinct entity desirous of making an offer of securitised debt instruments to the public shall make an application for listing to one or more recognized stock exchanges in terms of sub-section (2) of section 17A of the Securities Contracts (Regulation) Act, 1956 (42 of 1956)Act. |
| **Minimum public offering for listing** | In respect of public offers of securitised debt instruments, the special purpose distinct entity or trustee should satisfy the recognised stock exchange[9] that each scheme of securitised debt instruments was offered to the public for subscription through advertisements in newspapers for a period of not less than 2 days and that applications received in pursuance of the offer were allotted in accordance with these regulations and the disclosures made in the offer document.<br>In case of a private placement of securitised debt instruments, the special purpose distinct entity should ensure that it has obtained credit rating from a registered credit rating agency in respect of its securitised debt instruments.<br>In case of a private placement of securitised debt instruments, the special purpose distinct entity should file listing particulars with the recognised stock exchange along with the application containing such information as may be necessary for any investor in the secondary market to make an informed investment decision in respect of its securitised debt instruments.<br>All credit ratings obtained including unaccepted ratings, if any, should be disclosed in the listing particulars filed with the recognised stock exchange. |
| **Continuous listing conditions** | The special purpose distinct entity or trustee thereof should sumit such information, including financial information relating to the schemes, to the stock exchanges and investors and comply with such other continuing obligations as may be stipulated in the listing agreement. |
| **Trading of securitised debt instruments** | The securitised debt instruments issued to the public or on a private placement basis, which are listed in recognised stock exchanges, shall be traded and such trades shall be cleared and settled in recognised stock exchanges subject to conditions specified by SEBI. |

*Source : SEBI (Public Offer and Listing of SDI) Regulations, 2008.*

## Market Outcome

## Primary Market

### Resource Mobilization

During 2009-10 the central government and state governments borrowed ₹ 4,924,970 million (US $ 109,104 million) and ₹ 1,311,220 million (US $ 29,048 million) respectively. The gross borrowings of the central and state governments taken together increased by 42.81% from ₹ 4,366,880 million (US $ 85,709 million) during 2008-09 to ₹ 6,236,190 million (US 138,152 million) during 2009-10 (Table 5-3). Their net borrowings also increased by 161.09% from ₹ 3,460,840 million (US $ 67,926 million) during 2008-09 to ₹ 9,035,990 million (US $ 200,177 million) during 2009-10.

[9] to which a listing application is made

**Table 5-3: Market Borrowings of Governments**

(Amount in ₹ mn) (Amount in US $ mn)

| Security | | Gross Borrowings | | Net Borrowings | | Gross | Net |
|---|---|---|---|---|---|---|---|
| | | 2008-09 | 2009-10 | 2008-09 | 2009-10 | 2009-10 | |
| 1 | Central Government | 3,185,500 | 4,924,970 | 2,423,170 | 3,943,580 | 109,104 | 87,363 |
| 2 | State Government* | 1,181,380 | 1,311,220 | 1,037,660 | 1,148,830 | 29,048 | 25,450 |
| **Total (1 + 2)** | | **4,366,880** | **6,236,190** | **3,460,840** | **9,035,990** | **138,152** | **200,177** |

*Source: RBI Annual Report, 2009-10*
**Gross and net borrowings include MSS de-sequestering.*

The gross and net amounts raised through dated securities were around 65% and 74% higher in 2009-10 than those raised in the previous year. The Reserve Bank managed the enhanced borrowing programme, keeping in view the twin objectives of minimization of cost over time and balancing of maturity profiles that are consistent with low rollover risk.[10]

The net market borrowing of Central Government amounted to ₹ 3,943,580 million (US $ 87,363 million) in 2009-10 as compared with net borrowings of ₹ 2,423,170 million (US $ 47,560 million) for the year 2008-09.

The Reserve Bank continued with the policy of passive consolidation of dated securities during 2009-10. Out of 108 auctions during the year, 101 securities were reissues of existing securities and seven were new securities.[11]

The issuance calendar for dated securities for the first half of 2010-11 (April-September) released in consultation with the Central Government was scheduled to raise ₹ 2,870,000 million.[12]

The state governments collectively raised ₹ 1,311,220 million (US $ 29,048 million) during 2009-10 as against ₹ 1,81,380 million (US $ 23,187 million) in the preceding fiscal year. The net borrowings of State Governments in 2009-10 amounted to ₹ 1,148,830 million (US $ 25,450 million). (Table 5-3)

## Secondary Market

### Turnover

The aggregate secondary market transactions in debt securities (including government and non-government securities) increased by 36.78% to ₹ 85,780,050 million (US $ 1,900,311 million) in 2009-10 from ₹ 62,713,470 million (US $ 1,683,612 million) in 2008-09. Non-government securities accounted for a meager 1.68% of total turnover in debt market. NSE accounted for about 6.58% of total turnover in debt securities (i.e. in both G-sec and non-G-sec securities) during 2009-10. (Table 5-4)

**Table 5-4: Turnover of Debt Securities**

| Securities | 2008-09 | 2009-10 | 2008-09 | 2009-10 |
|---|---|---|---|---|
| | (₹ mn) | | (US $ mn) | |
| **Government Securities** | **62,254,360** | **84,337,567*** | **1,655,301** | **1,868,355** |
| WDM Segment of NSE | 2,911,124 | 4,207,985 | 82,590 | 93,221 |
| Rest of SGL | 59,343,816 | 80,129,581 | 1,572,710 | 1,775,135 |
| **Non Government Securities** | **459,110** | **1,442,484** | **28,312** | **31,956** |
| CM Segment of NSE | 1,005 | **5,219** | 102 | 116 |
| WDM Segment of NSE | 448,391 | 1,430,174 | 28,070 | 31,683 |
| 'F' Category of BSE | 9,714 | 7,091 | 139 | 157 |
| **Total** | **62,713,470** | **85,780,050** | **1,683,612** | **1,900,311** |

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

[10] RBI Annual Report 2009-10, Chapter VII on Public Debt Management.
[11] RBI Annual Report 2009-10, Chapter VII on Public Debt Management.
[12] RBI annual report, the figure mentioned in the annual report is (₹ 287,000 crore)

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 segment of NSE was ₹ 1,430,174 million (US $ 31,683 million) in 2009-10, higher by 218.96% than that during the preceding year. BSE reported a turnover of ₹ 7,091 million (US $ 157 million) during 2009-10. NSE accounted for 99.51% of total turnover in non-government securities during the year. (Table 5-4)

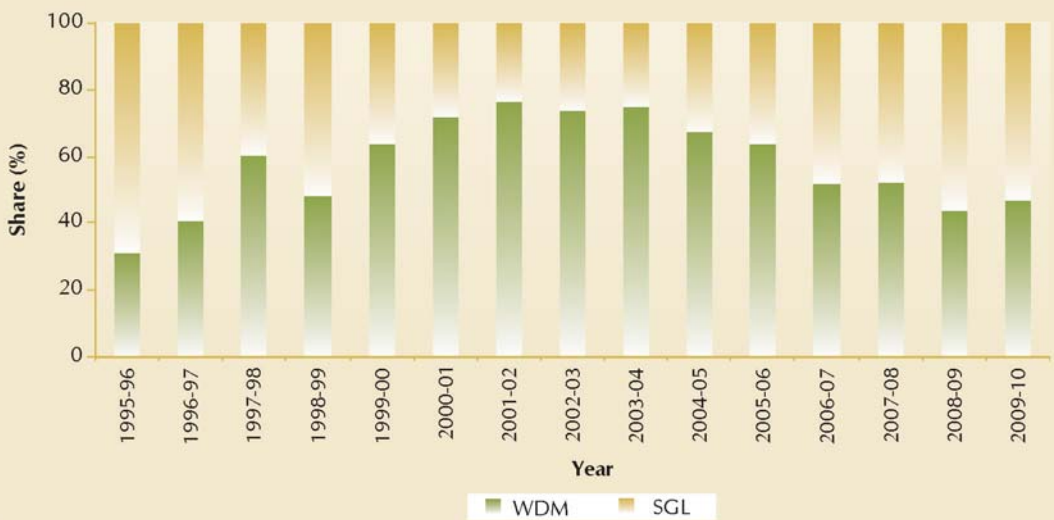
The aggregate turnover in (central and state government dated securities and T-bills) through non-repo SGL transactions touched a level of ₹ 9,018,385 million (US $ 199,787 million) in 2009-10 recording an increase of 35.71% from ₹ 6,645,488 million (US $ 130,432 million) in the previous year (Table 5-5). The monthly turnover in non-repo transactions for the year 2009-10 ranged between ₹ 510,991 million (US $ 11,320) and ₹ 931,260 million (US $ 20,630 million). (Table 5-5)

**Table 5-5: Secondary Market Transactions in Government Securities**

| Month/ Year | SGL Non-Repo Transactions | | | | Share in Non-Repo Turnover (%) | |
|---|---|---|---|---|---|---|
| | GOI Securities | Treasury Bills | Total (1+2) | Total (1+2) | GOI Securities | T-Bills |
| | (₹ mn) | | | (US $ mn) | | |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 2000-01 | 5,120,836 | 600,620 | 5,721,456 | 122,673 | 89.50 | 10.50 |
| 2001-02 | 11,446,342 | 673,316 | 12,119,658 | 248,354 | 94.44 | 5.56 |
| 2002-03 | 13,155,989 | 767,845 | 13,923,834 | 293,133 | 94.49 | 5.51 |
| 2003-04 | 15,813,076 | 1,200,556 | 17,013,632 | 392,110 | 92.94 | 7.06 |
| 2004-05 | 9,897,351 | 2,711,314 | 12,608,665 | 288,198 | 78.50 | 21.50 |
| 2005-06 | 4,986,040 | 2,094,107 | 12,066,187 | 270,482 | 41.32 | 17.36 |
| 2006-07 | 2,747,384 | 1,235,603 | 3,982,988 | 91,374 | 68.98 | 31.02 |
| 2007-08 | 3,541,760 | 1,461,287 | 5,003,047 | 125,170 | 70.79 | 29.21 |
| 2008-09 | 5,427,749 | 1,217,740 | 6,645,488 | 130,432 | 81.68 | 18.32 |
| Apr-09 | 611,609 | 203,000 | 814,609 | 18,046 | 75.08 | 24.92 |
| May-09 | 567,630 | 191,381 | 759,010 | 16,815 | 74.79 | 25.21 |
| Jun-09 | 541,885 | 211,564 | 753,449 | 16,691 | 71.92 | 28.08 |
| Jul-09 | 622,179 | 199,606 | 821,785 | 18,205 | 75.71 | 24.29 |
| Aug-09 | 442,021 | 161,941 | 603,962 | 13,380 | 73.19 | 26.81 |
| Sep-09 | 667,169 | 215,622 | 882,791 | 19,557 | 75.58 | 24.42 |
| Oct-09 | 435,424 | 349,806 | 785,230 | 17,395 | 55.45 | 44.55 |
| Nov-09 | 699,764 | 231,497 | 931,260 | 20,630 | 75.14 | 24.86 |
| Dec-09 | 524,617 | 260,039 | 784,656 | 17,383 | 66.86 | 33.14 |
| Jan-10 | 534,786 | 247,256 | 782,042 | 17,325 | 68.38 | 31.62 |
| Feb-10 | 333,872 | 177,119 | 510,991 | 11,320 | 65.34 | 34.66 |
| Mar-10 | 323,280 | 265,318 | 588,598 | 13,039 | 54.92 | 45.08 |
| **2009-10** | **6,304,237** | **2,714,149** | **9,018,385** | **199,787** | **69.90** | **30.10** |
| Apr-10 | 587,425 | 344,905 | 932,330 | 20,700 | 63.01 | 36.99 |
| May-10 | 801,142 | 235,268 | 1,036,410 | 23,011 | 77.30 | 22.70 |
| Jun-10 | 540,314 | 129,872 | 670,186 | 14,880 | 80.62 | 19.38 |
| Jul-10 | 424,017 | 156,183 | 580,200 | 12,882 | 73.08 | 26.92 |
| Aug-10 | 450,257 | 145,196 | 595,454 | 13,221 | 75.62 | 24.38 |
| Sep-10 | 427,668 | 117,515 | 545,184 | 12,104 | 78.44 | 21.56 |
| **Apr2010-Sep2010** | **3,230,824** | **1,128,939** | **4,359,763** | **96,798** | **74.11** | **25.89** |

*Source : NSE*
**excludes NDS-OM turnover*

Chart 5-1: Share of WDM in Non-Repo Government Transaction




The share of WDM segment of NSE in the total turnover of non-repo SGL transaction witnessed a y-o-y increase in 2009-10. It accounted for a share of 46.76% in 2009-10 as against 43.81% in the preceding year (Table 5-6). The share of WDM in turnover of non-repo dated securities (central and state government securities) also witnessed an increase from 43.16% in 2008-09 to 52.11% in 2009-10. (Chart 5-1) The share of WDM in turnover of non-repo T-bills increased to 45.13% in 2009-10 as compared to 34.34% in the corresponding period.

Table 5-6: Share of WDM in Transactions of Government Securities

| Year | Turnover of Non-Repo Govt Securities | | | Turnover of Non-Repo Central & State Govt Sec. | | | Turnover of Non-Repo T-Bills | | |
|---|---|---|---|---|---|---|---|---|---|
| | On SGL (₹ mn) | On WDM (₹ mn) | Share of WDM (%) | On SGL (₹ mn) | On WDM (₹ mn) | Share of WDM (%) | On SGL (₹ mn) | On WDM (₹ mn) | Share of WDM (%) |
| 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 |
| 2002-03 | 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 | 12,741,190 | 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 |
| 2006-07 | 3,982,988 | 2,053,237 | 51.55 | 2,747,384 | 1,533,697 | 55.82 | 1,235,603 | 519,540 | 42.05 |
| 2007-08 | 5,003,047 | 2,604,088 | 52.05 | 3,541,760 | 1,944,140 | 54.89 | 1,461,287 | 659,948 | 45.16 |
| 2008-09 | 6,645,488 | 2,911,124 | 43.81 | 5,427,749 | 2,342,884 | 43.16 | 1,217,740 | 568,241 | 46.66 |
| Apr-09 | 814,609 | 321,544 | 39.47 | 611,609 | 251,838 | 41.18 | 203,000 | 69,706 | 34.34 |
| May-09 | 759,010 | 309,475 | 40.77 | 567,630 | 247,862 | 43.67 | 191,381 | 61,613 | 32.19 |
| Jun-09 | 753,449 | 368,271 | 48.88 | 541,885 | 289,787 | 53.48 | 211,564 | 78,484 | 37.10 |
| Jul-09 | 821,785 | 394,320 | 47.98 | 622,179 | 336,082 | 54.02 | 199,606 | 58,239 | 29.18 |
| Aug-09 | 603,962 | 269,695 | 44.65 | 442,021 | 207,605 | 46.97 | 161,941 | 62,091 | 38.34 |
| Sep-09 | 882,791 | 464,447 | 52.61 | 667,169 | 383,507 | 57.48 | 215,622 | 80,940 | 37.54 |

*Contd.*

*Contd.*

| Year | Turnover of Non-Repo Govt Securities | | | Turnover of Non-Repo Central & State Govt Sec. | | | Turnover of Non-Repo T-Bills | | |
|---|---|---|---|---|---|---|---|---|---|
| | On SGL (₹ mn) | On WDM (₹ mn) | Share of WDM (%) | On SGL (₹ mn) | On WDM (₹ mn) | Share of WDM (%) | On SGL (₹ mn) | On WDM (₹ mn) | Share of WDM (%) |
| Oct-09 | 785,230 | 324,719 | 41.35 | 435,424 | 238,156 | 54.70 | 349,806 | 86,562 | 24.75 |
| Nov-09 | 931,260 | 495,246 | 53.18 | 699,764 | 420,524 | 60.10 | 231,497 | 74,722 | 32.28 |
| Dec-09 | 784,656 | 307,577 | 39.20 | 524,617 | 244,340 | 46.57 | 260,039 | 63,237 | 24.32 |
| Jan-10 | 782,042 | 418,721 | 53.54 | 534,786 | 313,677 | 58.65 | 247,256 | 105,044 | 42.48 |
| Feb-10 | 510,991 | 250,529 | 49.03 | 333,872 | 180,628 | 54.10 | 177,119 | 69,901 | 39.47 |
| Mar-10 | 588,598 | 292,479 | 49.69 | 323,280 | 171,104 | 52.93 | 265,318 | 121,374 | 45.75 |
| **2009-10** | **9,018,385** | **4,217,022** | **46.76** | **6,304,237** | **3,285,111** | **52.11** | **2,714,149** | **931,911** | **34.34** |
| Apr-10 | 932,330 | 421,687 | 45.23 | 587,425 | 305,313 | 51.97 | 344,905 | 116,373 | 33.74 |
| May-10 | 1,036,410 | 508,708 | 49.08 | 801,142 | 412,567 | 51.50 | 235,268 | 96,140 | 40.86 |
| Jun-10 | 670,186 | 368,482 | 54.98 | 540,314 | 297,271 | 55.02 | 129,872 | 71,211 | 54.83 |
| Jul-10 | 580,200 | 350,272 | 60.37 | 424,017 | 254,405 | 60.00 | 156,183 | 95,866 | 61.38 |
| Aug-10 | 595,454 | 326,224 | 54.79 | 450,257 | 252,271 | 56.03 | 145,196 | 73,954 | 50.93 |
| Sep-10 | 545,184 | 322,223 | 59.10 | 427,668 | 266,284 | 62.26 | 117,515 | 55,940 | 47.60 |
| **Apr2010-Sep2010** | **4,359,763** | **2,297,596** | **52.70** | **3,230,824** | **1,788,111** | **55.35** | **1,128,939** | **509,485** | **45.13** |

*Source: NSE*
*Note : SGL Non-Repo Turnover excludes NDS-OM turnover*

## Settlement of Trades in Government Securities

During 2009-10, 345,607 trades in government securities amounting to ₹ 89,867,190 crore (US$ 1,990,855 million) were settled by CCIL. Out of the total trades, 92.71% of the trades were outright transactions and the rest were repo transations. (Table 5-7).

**Table 5-7: Settlement of Trades in Government Securities**

| Month | Outright Transactions | | Repo Transactions | | Total | | |
|---|---|---|---|---|---|---|---|
| | No. of Trades | Amount (Face Value in ₹ mn) | No. of Trades | Amount (Face Value in ₹ mn) | No. of Trades | Amount (Face Value in ₹ mn) | Amount (Face Value in US $. mn) |
| 2001-02 | 7,131 | 389,190 | 524 | 159,300 | 7,655 | 548,480 | 11,239 |
| 2002-03 | 191,843 | 10,761,470 | 11,672 | 4,682,290 | 203,515 | 15,443,760 | 325,132 |
| 2003-04 | 243,585 | 15,751,330 | 20,972 | 9,431,890 | 264,512 | 25,183,220 | 580,392 |
| 2004-05 | 160,682 | 11,342,221 | 24,364 | 15,579,066 | 185,046 | 26,921,287 | 615,344 |
| 2005-06 | 125,509 | 8,647,514 | 25,673 | 16,945,087 | 151,182 | 25,592,601 | 573,697 |
| 2006-07 | 137,100 | 10,215,357 | 29,008 | 25,565,014 | 166,108 | 35,780,371 | 802,071 |
| 2007-08 | 188,843 | 16,538,512 | 26,612 | 39,487,508 | 215,455 | 56,026,020 | 1,401,702 |
| 2008-09 | 245,964 | 21,602,334 | 24,280 | 40,942,858 | 270,244 | 62,545,192 | 1,227,580 |
| **2009-10** | **316,956** | **29,138,900** | **28,651** | **60,728,290** | **345,607** | **89,867,190** | **1,990,855** |
| **April 10 - Sep 10** | **195,796** | **18,002,650** | **13,338** | **22,024,080** | **209,134** | **40,026,730** | **888,693** |

*Source: CCIL Fact Book*

## Developments in WDM Segment of NSE

During 2009-10, the turnover in the WDM segment of NSE (i.e. of G-secs, T-bills, PSU bonds and others) registered an increase of 68.83% to ₹ 5,638,159 million (US $ 124,904 million) from ₹ 3,359,515 million (US $ 65,937 million) in 2008-09. The average daily turnover also increased from ₹ 14,116 million (US $ 208.30 million) to ₹ 23,591 million (US $ 234.20 million) during the same period. (Annexure 5-1)

Chart 5-2: Business Growth of WDM Segment


The summary statement of business growth of WDM segment is presented in Annexure 5-1 and Chart 5-2. The highest turnover of ₹ 649,987 million (US $ 32,499 million) was witnessed in November 2009 during the fiscal 2009-10. The average daily turnover ranged between ₹ 17,889 million (US $ 396 million) and ₹ 32,499 million (US $ 720 million).

## Securities Profile

The turnover in Government securities increased by 39.93% in 2009-10 as compared to the previous year, and accounted for a turnover of ₹ 3,278,374 million (US $ 72,627 million). Its share in total turnover was 58.15% in the 2009-10 (Table 5-8). The share of T-Bills in WDM turnover accounted for a share of 16.49% during 2009-10 (Chart 5-3).

Table 5-8: Security-wise Distribution of WDM Turnover

| Month/Year | Turnover (in ₹ Mn) | | | | | Turnover ( in percent | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Government Securities | T-Bills | PSU/ Inst. Bonds | Others | Total WDM Turnover | Government Securities | T-Bills | PSU/ Inst. Bonds | Others |
| 1994-95 (June-March) | 30,264 | 26,337 | 8,239 | 2,970 | 67,812 | 44.63 | 38.84 | 12.15 | 4.38 |
| 1995-96 | 77,294 | 22,596 | 11,495 | 7,292 | 118,677 | 65.13 | 19.04 | 9.69 | 6.14 |
| 1996-97 | 273,522 | 109,570 | 27,692 | 11,992 | 422,776 | 64.70 | 25.92 | 6.55 | 2.84 |
| 1997-98 | 847,159 | 188,703 | 40,500 | 36,272 | 1,112,633 | 76.14 | 16.96 | 3.64 | 3.26 |
| 1998-99 | 845,757 | 107,051 | 50,414 | 51,469 | 1,054,691 | 80.19 | 10.15 | 4.78 | 4.88 |
| 1999-00 | 2,828,906 | 110,126 | 48,675 | 54,455 | 3,042,162 | 92.99 | 3.62 | 1.60 | 1.79 |

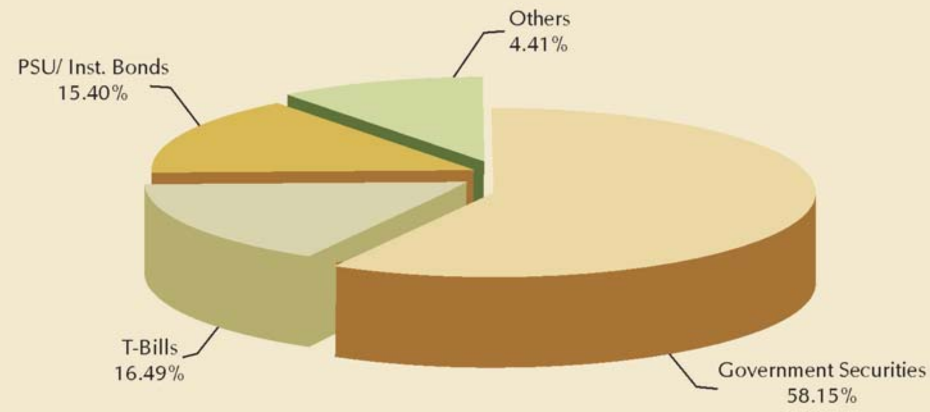
*Contd.*

*Contd.*

| Month/Year | Turnover (in ₹ Mn) | | | | | Turnover ( in percent | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Government Securities | T-Bills | PSU/ Inst. Bonds | Others | Total WDM Turnover | Government Securities | T-Bills | PSU/ Inst. Bonds | Others |
| 2000-01 | 3,909,520 | 231,434 | 78,859 | 66,002 | 4,285,815 | 91.22 | 5.40 | 1.84 | 1.54 |
| 2001-02 | 9,021,049 | 255,742 | 109,874 | 86,194 | 9,471,912 | 95.24 | 2.70 | 1.16 | 0.91 |
| 2002-03 | 10,005,182 | 322,748 | 199,847 | 159,237 | 10,687,014 | 93.62 | 3.02 | 1.87 | 1.49 |
| 2003-04 | 12,187,051 | 556,709 | 271,116 | 146,087 | 13,160,962 | 92.60 | 4.23 | 2.06 | 1.11 |
| 2004-05 | 7,248,302 | 1,248,422 | 178,346 | 197,866 | 8,872,936 | 81.69 | 14.07 | 2.01 | 2.23 |
| 2005-06 | 3,455,629 | 1,052,333 | 121,734 | 125,538 | 4,755,235 | 72.67 | 22.13 | 2.56 | 2.64 |
| 2006-07 | 1,533,697 | 519,541 | 44,178 | 93,648 | 2,191,065 | 70.00 | 23.71 | 2.02 | 4.27 |
| 2007-08 | 1,943,470 | 660,622 | 92,318 | 126,760 | 2,823,170 | 68.84 | 23.40 | 3.27 | 4.49 |
| 2008-09 | 2,342,884 | 568,239 | 300,080 | 148,313 | 3,359,515 | 69.74 | 16.91 | 8.93 | 4.41 |
| Apr-09 | 251,838 | 69,706 | 92,146 | 42,839 | 456,529 | 55.16 | 15.27 | 20.18 | 9.39 |
| May-09 | 247,862 | 61,613 | 63,086 | 30,097 | 402,658 | 61.56 | 15.30 | 15.66 | 7.47 |
| Jun-09 | 289,787 | 78,484 | 52,822 | 24,586 | 445,679 | 65.02 | 17.61 | 11.85 | 5.52 |
| Jul-09 | 336,086 | 58,239 | 77,979 | 39,916 | 512,220 | 65.61 | 11.37 | 15.22 | 7.79 |
| Aug-09 | 200,864 | 59,791 | 75,022 | 46,647 | 382,323 | 52.54 | 15.64 | 19.62 | 12.20 |
| Sep-09 | 383,507 | 80,940 | 78,571 | 43,722 | 586,740 | 65.36 | 13.79 | 13.39 | 7.45 |
| Oct-09 | 238,156 | 86,562 | 62,239 | 50,357 | 437,314 | 54.46 | 19.79 | 14.23 | 11.52 |
| Nov-09 | 420,524 | 74,722 | 79,398 | 75,343 | 649,987 | 64.70 | 11.50 | 12.22 | 11.59 |
| Dec-09 | 244,340 | 63,237 | 45,580 | 22,514 | 375,671 | 65.04 | 16.83 | 12.13 | 5.99 |
| Jan-10 | 313,677 | 105,044 | 70,010 | 81,631 | 570,362 | 55.00 | 18.42 | 12.27 | 14.31 |
| Feb-10 | 180,628 | 69,901 | 63,224 | 34,248 | 348,000 | 51.90 | 20.09 | 18.17 | 9.84 |
| Mar-10 | 171,104 | 121,374 | 108,251 | 69,947 | 470,677 | 36.35 | 25.79 | 23.00 | 14.86 |
| **2009-10** | **3,278,374** | **929,611** | **868,329** | **561,845** | **5,638,159** | **58.15** | **16.49** | **15.40** | **9.97** |
| Apr-10 | 305,313 | 116,373 | 135,159 | 61,396 | 618,241 | 49.38 | 18.82 | 21.86 | 9.93 |
| May-10 | 412,567 | 96,140 | 163,827 | 59,977 | 732,511 | 56.32 | 13.12 | 22.37 | 8.19 |
| Jun-10 | 297,271 | 71,211 | 90,807 | 42,138 | 501,427 | 59.29 | 14.20 | 18.11 | 8.40 |
| Jul-10 | 254,405 | 95,866 | 98,174 | 22,900 | 471,346 | 53.97 | 20.34 | 20.83 | 4.86 |
| Aug-10 | 252,271 | 73,954 | 83,630 | 41,230 | 451,085 | 55.93 | 16.39 | 18.54 | 9.14 |
| Sep-10 | 266,284 | 55,940 | 93,680 | 35,960 | 451,864 | 58.93 | 12.38 | 20.73 | 7.96 |
| **Apr2010-Sep2010** | **1,788,111** | **509,485** | **665,277** | **263,600** | **3,226,473** | **55.42** | **15.79** | **20.62** | **8.17** |

*Source: NSE*

Chart 5-3: Security-wise Distribution of Turnover, 2009-10




The share of top '10' securities has decreased to 35.14% in 2009-10 as compared to 43.05% in 2008-09 (Table 5-10). The share of top '100' securities decreased to 77.89% in 2009-10 as against 83.87% during 2008-09. Top 50 securities accounted for 65.63% of turnover in 2009-10.

## Participant Profile

Indian banks, foreign banks and PDs together accounted for over 48.15% of WDM turnover during 2009-10 and 47.95% of the WDM turnover during April-September 2010 The share of the Indian banks increased from 18.11% in 2008-09 to 19.84% in 2009-10. The trading member's contribution was the highest at 49.23% during 2009-10. (Table 5-9 and Chart 5-4)

Chart 5-4: Participant-wise Distribution of Turnover, 2009-10

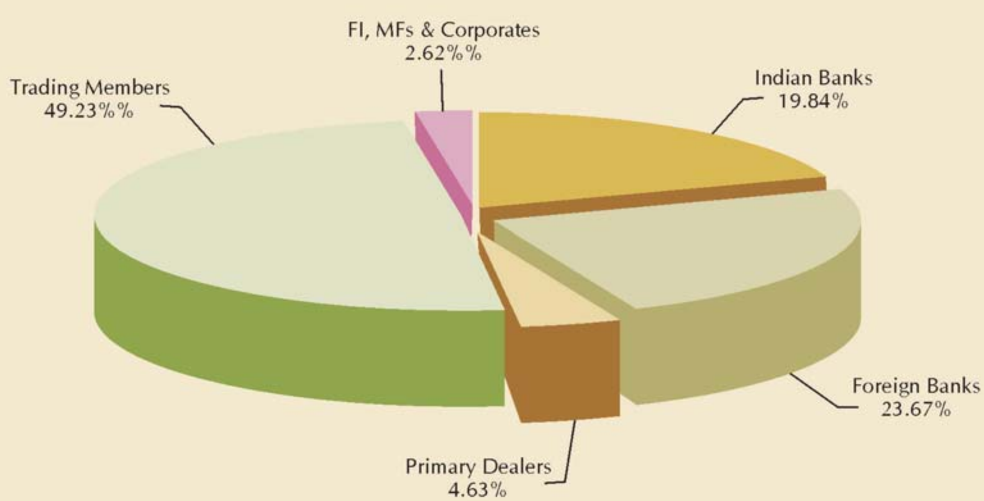


Table 5-9: Participant wise Distribution of WDM Turnover

(In percent)

| Month/Year | Turnover (in ₹mn) | | | | | | Turnover (in percent) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Trading Members | FIs/MFs/ Corporates | Primary Dealers | Indian Banks | Foreign Banks | Total Turnover | Trading Members | FIs/MFs/ Corporates | Primary Dealers | Indian Banks | Foreign Banks |
| 2000-01 | 996,023 | 179,147 | 948,879 | 1,437,462 | 724,303 | 4,285,815 | 23.24 | 4.18 | 22.14 | 33.54 | 16.90 |
| 2001-02 | 2,227,794 | 394,032 | 2,131,180 | 3,466,720 | 1,252,187 | 9,471,912 | 23.52 | 4.16 | 22.50 | 36.60 | 13.22 |
| 2002-03 | 2,651,448 | 402,900 | 2,354,349 | 4,143,355 | 1,134,961 | 10,687,014 | 24.81 | 3.77 | 22.03 | 38.77 | 10.62 |
| 2003-04 | 4,580,015 | 600,140 | 2,241,312 | 4,785,326 | 954,170 | 13,160,962 | 34.80 | 4.56 | 17.03 | 36.36 | 7.25 |
| 2004-05 | 3,013,249 | 456,069 | 1,641,493 | 2,652,121 | 1,110,004 | 8,872,936 | 33.96 | 5.14 | 18.50 | 29.89 | 12.51 |
| 2005-06 | 1,522,151 | 186,405 | 1,040,921 | 1,334,794 | 670,964 | 4,755,235 | 32.01 | 3.92 | 21.89 | 28.07 | 14.11 |
| 2006-07 | 676,601 | 59,159 | 434,269 | 570,334 | 450,702 | 2,191,065 | 30.88 | 2.70 | 19.82 | 26.03 | 20.57 |
| 2007-08 | 1,077,039 | 66,062 | 243,922 | 671,350 | 764,797 | 2,823,170 | 38.15 | 2.34 | 8.64 | 23.78 | 27.09 |
| 2008-09 | 1,500,142 | 114,076 | 221,060 | 608,509 | 915,728 | 3,359,515 | 44.65 | 3.40 | 6.58 | 18.11 | 27.26 |
| Apr-09 | 233,697 | 13,605 | 27,757 | 77,838 | 103,632 | 456,529 | 51.19 | 2.98 | 6.08 | 17.05 | 22.70 |
| May-09 | 191,021 | 12,563 | 19,207 | 76,545 | 103,322 | 402,658 | 47.44 | 3.12 | 4.77 | 19.01 | 25.66 |
| Jun-09 | 199,040 | 13,192 | 23,621 | 82,896 | 126,929 | 445,679 | 44.66 | 2.96 | 5.30 | 18.60 | 28.48 |
| Jul-09 | 218,564 | 12,805 | 27,967 | 127,338 | 125,545 | 512,220 | 42.67 | 2.50 | 5.46 | 24.86 | 24.51 |
| Aug-09 | 184,433 | 9,558 | 18,696 | 86,061 | 83,576 | 382,323 | 48.24 | 2.50 | 4.89 | 22.51 | 21.86 |
| Sep-09 | 238,392 | 16,370 | 24,643 | 158,478 | 148,856 | 586,740 | 40.63 | 2.79 | 4.20 | 27.01 | 25.37 |
| Oct-09 | 238,642 | 10,714 | 17,536 | 69,970 | 100,451 | 437,314 | 54.57 | 2.45 | 4.01 | 16.00 | 22.97 |
| Nov-09 | 315,829 | 18,200 | 33,799 | 135,782 | 146,377 | 649,987 | 48.59 | 2.80 | 5.20 | 20.89 | 22.52 |
| Dec-09 | 205,192 | 13,449 | 20,061 | 84,564 | 52,406 | 375,671 | 54.62 | 3.58 | 5.34 | 22.51 | 13.95 |
| Jan-10 | 316,038 | 8,099 | 11,008 | 89,319 | 145,899 | 570,362 | 55.41 | 1.42 | 1.93 | 15.66 | 25.58 |
| Feb-10 | 168,815 | 7,934 | 12,145 | 72,732 | 86,374 | 348,000 | 48.51 | 2.28 | 3.49 | 20.90 | 24.82 |
| Mar-10 | 266,262 | 11,155 | 24,522 | 57,328 | 111,409 | 470,677 | 56.57 | 2.37 | 5.21 | 12.18 | 23.67 |
| **2009-10** | **2,775,924** | **147,645** | **260,962** | **1,118,852** | **1,334,776** | **5,638,159** | **49.23** | **2.62** | **4.63** | **19.84** | **23.67** |
| Apr-10 | 313,510 | 15,518 | 31,221 | 109,800 | 148,192 | 618,241 | 50.71 | 2.51 | 5.05 | 17.76 | 23.97 |
| May-10 | 341,863 | 22,635 | 20,730 | 124,454 | 222,830 | 732,511 | 46.67 | 3.09 | 2.83 | 16.99 | 30.42 |
| Jun-10 | 236,272 | 18,202 | 22,213 | 88,201 | 136,538 | 501,426 | 47.12 | 3.63 | 4.43 | 17.59 | 27.23 |
| Jul-10 | 238,548 | 13,763 | 23,709 | 83,617 | 111,709 | 471,345 | 50.61 | 2.92 | 5.03 | 17.74 | 23.7 |
| Aug-10 | 230,459 | 10,104 | 27,426 | 70,910 | 112,185 | 451,084 | 51.09 | 2.24 | 6.08 | 15.72 | 24.87 |
| Sep-10 | 224,712 | 13,917 | 20,198 | 46,000 | 147,036 | 451,863 | 49.73 | 3.08 | 4.47 | 10.18 | 32.54 |
| **Apr2010-Sep2010** | **1,585,364** | **94,139** | **145,497** | **522,981** | **878,491** | **3,226,472** | **49.14** | **2.92** | **4.51** | **16.21** | **27.23** |

*Source : NSE*

Top '50' trading members accounted for the total turnover of WDM in 2009-10, which is indicative of the narrow membership structure of WDM segment (Table 5-10). As on June 30, 2010, there were 63 members on the WDM segment.

**Table 5-10: Share of Top 'N' Securities/Trading Members/Participants in Turnover in WDM Segment**

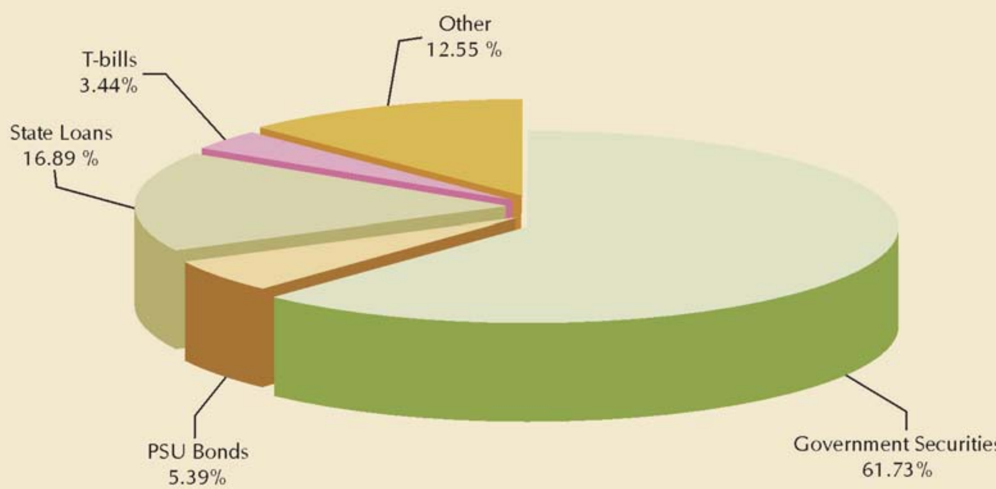
| Year | In Percent | | | | |
|---|---|---|---|---|---|
| | Top 5 | Top 10 | Top 25 | Top 50 | Top 100 |
| **Securities** | | | | | |
| 2000-01 | 42.20 | 58.30 | 80.73 | 89.97 | 95.13 |
| 2001-02 | 51.61 | 68.50 | 88.73 | 94.32 | 97.19 |
| 2002-03 | 43.10 | 65.15 | 86.91 | 92.74 | 96.13 |
| 2003-04 | 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 |
| 2006-07 | 40.90 | 51.29 | 65.82 | 77.15 | 86.91 |
| 2007-08 | 39.65 | 53.31 | 68.35 | 79.64 | 49.55 |
| 2008-09 | 31.31 | 43.05 | 60.42 | 72.45 | 83.87 |
| **2009-10** | **24.19** | **35.14** | **53.05** | **65.63** | **77.89** |
| **Apr2010-Sep2010** | **30.94** | **40.79** | **53.68** | **66.20** | **79.94** |
| **Trading Members** | | | | | |
| 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 | -- |
| 2006-07 | 57.75 | 78.01 | 96.43 | 100.00 | -- |
| 2007-08 | 65.32 | 80.24 | 97.60 | 100.00 | |
| 2008-09 | 69.92 | 82.89 | 98.38 | 100.00 | - |
| **2009-10** | **73.72** | **85.28** | **97.98** | **100.00** | **-** |
| **Apr2010-Sep2010** | **75.18** | **87.11** | **98.83** | **100.00** | **-** |
| **Participants** | | | | | |
| 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 |
| 2006-07 | 25.85 | 40.65 | 59.99 | 68.17 | 69.09 |
| 2007-08 | 28.36 | 40.64 | 55.58 | 61.77 | 61.84 |
| 2008-09 | 24.08 | 38.24 | 51.19 | 55.34 | 55.38 |
| **2009-10** | **23.4** | **36.87** | **47.64** | **50.77** | **50.77** |
| **Apr 2010 - Sep 2010** | **24.56** | **37.93** | **48.77** | **50.84** | **50.84** |

*Source : NSE*

## 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 ₹ 31,659,295 million (US $ 701,358 million) as at end- March 2010, registering a growth of 11.15% over end-March 2009. The market capitalisation at the end of September 2010 was ₹ 33,899,827 million (US $ 752,660 million). The relative shares of different securities in market capitalization maintained the trend of 2007-10 with the Government securities accounting for the highest share of 61.61% of total market capitalisation at the end of March 2010 (Chart 5-5). The growth of market capitalisation of WDM is presented in Table 5-11.

Chart 5-5: Market Capitalisation of WDM Segment at the end of September 2010




## Corporate Bonds

The movement in corporate bond market is shown in Table 5-12. The data on corporate bonds at NSE and BSE includes the trades on the respective trading systems as well as the reporting of trades carried out in the OTC market. The volumes of trades on NSE increased by 206.88% to ₹ 1,519,200 million (US $ 33,655 million) during 2009-10 from ₹ 495,050 million (US $ 9,716 million ) in the previous fiscal. At BSE, volumes during 2009-10 were at ₹ 533,230 million (US $ 11,813) while at FIMMDA it was ₹ 1,959,550 million (US $ 43,506 million).

Table 5-12: Secondary Market Corporate Bond Trades at the Exchanges and OTC

| Month/ Year | BSE | | | NSE | | | FIMMDA | | |
|---|---|---|---|---|---|---|---|---|---|
| | No. of trades | Amount (₹ mn) | Amount (US $ mn) | No. of trades | Amount (₹ mn) | Amount (US $ mn) | No. of trades | Amount (₹ mn) | Amount (US $ mn) |
| 2007-08 | 27,697 | 411,870 | 10,304 | 3,787 | 314,530 | 7,869 | 4,089 | 234,790 | 5,874 |
| 2008-09 | 8,327 | 373,200 | 7,325 | 4,902 | 495,050 | 9,716 | 9,501 | 615,350 | 13,632 |
| **2009-10** | **7,408** | **533,230** | **11,813** | **12,522** | **1,519,200** | **33,655** | **18,300** | **1,959,550** | **43,506** |
| **April 2010-Sep 2010** | **2,611** | **232,690** | **5,166** | **5,159.00** | **92,888** | **2,062.34** | **18,596** | **244,661** | **5,432** |

*Source : SEBI*

*Note : The data on corporate bonds at NSE and BSE includes the trades on the respective trading systems as well as the reporting of trades carried out at OTC*

Table 5-11: Market Capitalisation of WDM Securities

| Month/ Year (end of period) | Market Capitalisation (In ₹. mn) | | | | | | | (In per cent) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Govt. Securities | PSU bonds | State loans | T-bills | Others | Total | Total (US $ mn) | Govt. securities | PSU bonds | State loans | T-bills | Others |
| Mar-00 | 3,198,650 | 393,570 | 394,770 | 153,450 | 799,890 | 4,940,330 | 113,257 | 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 | 124,536 | 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 | 155,081 | 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 | 181,996 | 76.12 | 4.44 | 8.34 | 4.04 | 7.06 |
| Mar-04 | 9,593,017 | 568,319 | 793,403 | 326,920 | 876,979 | 12,158,638 | 280,218 | 78.90 | 4.67 | 6.53 | 2.69 | 7.21 |
| Mar-05 | 10,061,070 | 683,981 | 2,232,082 | 735,018 | 905,193 | 14,617,344 | 334,111 | 68.83 | 4.68 | 15.27 | 5.03 | 6.19 |
| Mar-06 | 10,597,890 | 887,160 | 2,419,270 | 701,860 | 1,069,560 | 15,675,740 | 351,395 | 67.61 | 5.66 | 15.43 | 4.48 | 6.82 |
| Mar-07 | 11,822,777 | 896,275 | 2,498,474 | 1,151,827 | 1,478,652 | 17,848,006 | 409,452 | 66.24 | 5.02 | 14.00 | 6.45 | 8.28 |
| Mar-08 | 13,922,192 | 962,685 | 3,156,607 | 1,115,621 | 2,076,357 | 21,233,463 | 531,235 | 65.57 | 4.53 | 14.87 | 5.25 | 9.77 |
| Apr-08 | 14,376,427 | 985,243 | 3,147,158 | 1,102,799 | 2,074,881 | 21,686,508 | 425,643 | 66.29 | 4.54 | 14.51 | 5.09 | 9.57 |
| May-08 | 14,387,430 | 988,451 | 3,179,717 | 1,264,692 | 2,101,541 | 21,921,831 | 430,262 | 65.63 | 4.51 | 14.50 | 5.77 | 9.59 |
| Jun-08 | 14,340,716 | 1,010,848 | 3,170,955 | 1,330,607 | 2,096,483 | 21,949,609 | 430,807 | 65.33 | 4.61 | 14.45 | 6.06 | 9.55 |
| Jul-08 | 14,243,690 | 1,012,002 | 3,198,269 | 1,334,877 | 2,078,429 | 21,867,267 | 429,191 | 65.14 | 4.63 | 14.63 | 6.10 | 9.50 |
| Aug-08 | 14,553,971 | 1,038,658 | 3,224,469 | 1,337,684 | 2,101,167 | 22,255,949 | 436,819 | 65.39 | 4.67 | 14.49 | 6.01 | 9.44 |
| Sep-08 | 14,715,649 | 1,083,301 | 3,254,749 | 1,351,873 | 2,137,082 | 22,542,655 | 442,447 | 65.28 | 4.81 | 14.44 | 6.00 | 9.48 |
| Oct-08 | 15,358,258 | 1,089,216 | 3,242,175 | 1,416,801 | 2,189,593 | 23,296,043 | 457,233 | 65.93 | 4.68 | 13.92 | 6.08 | 9.40 |
| Nov-08 | 16,219,418 | 1,111,780 | 3,329,232 | 1,461,541 | 2,303,720 | 24,425,692 | 479,405 | 66.40 | 4.55 | 13.63 | 5.98 | 9.43 |
| Dec-08 | 18,082,701 | 1,191,653 | 3,447,210 | 1,418,878 | 2,548,718 | 26,689,159 | 523,830 | 67.75 | 4.46 | 12.92 | 5.32 | 9.55 |
| Jan-09 | 18,481,281 | 1,290,699 | 3,642,041 | 1,451,215 | 2,653,641 | 27,518,876 | 540,115 | 67.16 | 4.69 | 13.23 | 5.27 | 9.64 |
| Feb-09 | 18,686,841 | 1,296,090 | 3,768,197 | 1,443,362 | 2,905,377 | 28,099,867 | 551,518 | 66.50 | 4.61 | 13.41 | 5.14 | 10.34 |
| Mar-09 | 18,499,710 | 1,294,988 | 4,223,616 | 1,476,171 | 2,988,670 | 28,483,155 | 559,041 | 64.95 | 4.55 | 14.83 | 5.18 | 10.49 |
| Apr-09 | 19,595,344 | 1,319,930 | 4,236,884 | 1,615,908 | 3,115,258 | 29,883,325 | 624,260 | 65.57 | 4.42 | 14.18 | 5.41 | 10.42 |
| May-09 | 19,837,401 | 1,351,386 | 4,313,708 | 1,465,311 | 3,116,263 | 30,084,069 | 628,453 | 65.94 | 4.49 | 14.34 | 4.87 | 10.36 |
| Jun-09 | 20,341,627 | 1,365,868 | 4,369,455 | 1,453,911 | 3,228,187 | 30,759,049 | 642,554 | 66.13 | 4.44 | 14.21 | 4.73 | 10.50 |
| Jul-09 | 20,652,545 | 1,387,183 | 4,466,104 | 1,398,162 | 3,273,766 | 31,177,760 | 651,301 | 66.24 | 4.45 | 14.32 | 4.48 | 10.50 |
| Aug-09 | 18,980,031 | 1,445,716 | 4,577,307 | 1,374,919 | 3,326,613 | 29,704,586 | 620,526 | 63.90 | 4.87 | 15.41 | 4.63 | 11.20 |
| Sep-09 | 19,326,811 | 1,456,239 | 4,723,922 | 1,375,805 | 3,361,393 | 30,244,170 | 631,798 | 63.90 | 4.81 | 15.62 | 4.55 | 11.11 |
| Oct-09 | 19,613,493 | 1,513,638 | 4,863,634 | 1,336,147 | 3,400,416 | 30,727,328 | 641,891 | 63.83 | 4.93 | 15.83 | 4.35 | 11.07 |
| Nov-09 | 19,700,020 | 1,535,770 | 4,976,521 | 1,325,380 | 3,454,442 | 30,992,133 | 647,423 | 63.56 | 4.96 | 16.06 | 4.28 | 11.15 |
| Dec-09 | 19,793,385 | 1,559,270 | 5,097,215 | 1,343,883 | 3,503,716 | 31,297,468 | 653,801 | 63.24 | 4.98 | 16.29 | 4.29 | 11.19 |
| Jan-10 | 19,661,397 | 1,618,559 | 5,169,337 | 1,332,243 | 3,600,238 | 31,381,775 | 655,562 | 62.65 | 5.16 | 16.47 | 4.25 | 11.47 |
| Feb-10 | 19,568,620 | 1,635,904 | 5,300,915 | 1,331,862 | 3,696,304 | 31,533,605 | 658,734 | 62.06 | 5.19 | 16.81 | 4.22 | 11.72 |
| **Mar-10** | **19,504,360** | **1,629,786** | **5,369,956** | **1,356,961** | **3,798,232** | **31,659,295** | **661,360** | **61.61** | **5.15** | **16.96** | **4.29** | **12.00** |
| Apr-10 | 19,958,288 | 1,673,024 | 5,410,185 | 1,344,788 | 3,843,681 | 32,229,965 | 715,585 | 61.92 | 5.19 | 16.79 | 4.17 | 11.93 |
| May-10 | 20,114,039 | 1,724,171 | 5,491,132 | 1,545,866 | 3,976,134 | 32,851,342 | 729,381 | 61.23 | 5.25 | 16.72 | 4.71 | 12.10 |
| Jun-10 | 20,195,496 | 1,783,329 | 5,547,306 | 1,296,652 | 4,025,357 | 32,848,140 | 729,310 | 61.48 | 5.43 | 16.89 | 3.95 | 12.25 |
| Jul-10 | 20,044,516 | 1,829,049 | 5,598,098 | 1,148,503 | 4,147,174 | 32,767,340 | 727,516 | 61.17 | 5.58 | 17.08 | 3.51 | 12.66 |
| Aug-10 | 20,594,607 | 1,826,240 | 5,658,171 | 1,204,850 | 4,218,033 | 33,501,901 | 743,826 | 61.47 | 5.45 | 16.89 | 3.60 | 12.59 |
| **Sep-10** | **20,928,033** | **1,825,566** | **5,724,760** | **1,166,958** | **4,254,509** | **33,899,827** | **752,660** | **61.73** | **5.39** | **16.89** | **3.44** | **12.55** |

*Source: NSE*

## Settlement of Trades in Corporate Bonds

During December 2009- March 2010, 9,386 trades in corporate bonds amounting to ₹ 12,548,834 million (USD $ 277,998) were settled by NSCCL and ICCL. (Table 6-8). During April 2010 to September 2010, 18,829 trades amounting to ₹ 2,615561 million (US $ 58,072 million) were settled by NSCCL and ICCL. (Table 5-13)

**Table 5-13: Settlement Statistics of Corporate Bonds**

| Month | NSE | | | BSE | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total No. of Trades Settled | Settled Value ₹ mn | Settled Value US $ mn | Total No. of Trades Settled | Settled Value ₹ mn | Settled Value US $ mn | Total No. of Trades Settled | Settled Value ₹ mn | Settled Value US $ mn |
| Dec-09 | 1,438 | 173,005 | 3,833 | 55 | 4,036 | 89 | 1,493 | 177,041 | 3,922 |
| Jan-10 | 2,230 | 313,969 | 6,955 | 85 | 12,441 | 276 | 2,315 | 326,409 | 7,231 |
| Feb-10 | 2,063 | 269,773 | 5,976 | 85 | 9,499 | 210 | 2,175 | 279,272 | 6,187 |
| Mar-10 | 3,191 | 443,312 | 9,821 | 212 | 28,849 | 639 | 3,403 | 472,161 | 10,460 |
| **Dec 09-Mar10** | **8,922** | **12,000,587** | **265,853** | **437** | **548,247** | **12,145** | **9,386** | **12,548,834** | **277,998** |
| Apr-10 | 3,020 | 437,266 | 9,708 | 150 | 18,678 | 415 | 3,170 | 455,944 | 10,123 |
| May-10 | 3,606 | 479,307 | 10,642 | 145 | 17,813 | 396 | 3,751 | 497,120 | 11,037 |
| Jun-10 | 2,983 | 378,912 | 8,413 | 166 | 22,579 | 501 | 3,149 | 401,491 | 8,914 |
| Jul-10 | 3,300 | 471,810 | 10,475 | 139 | 21,466 | 477 | 3,439 | 493,276 | 10,952 |
| Aug-10 | 2,581 | 371,671 | 8,252 | 117 | 12,193 | 271 | 2,698 | 383,865 | 8,523 |
| Sep-10 | 2,545 | 371,671 | 8,252 | 77 | 5,823 | 129 | 2,622 | 383,865 | 8,523 |
| **Apr 10-Sep 10** | **18,035** | **2,510,638** | **55,742** | **794** | **98,553** | **2,188** | **18,829** | **2,615,561** | **58,072** |

*Source: SEBI website*

## International Comparison in Corporate Bonds

Table 5-14 shows the bond issuance of corporate bonds in various countries. Among the various countries, issuance of corporate bonds in India was the lowest in 2009 while in countries such as Mexico, Venenzula, Russia, Poland and Brazil were among the top bond issuance countries in the same year.

**Table 5-14: Bond Issuance in Emerging Markets (in US dollar)**

| | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|
| Mexico | 9,165 | 6,207 | 6,341 | 4,473 | 15,541 |
| Venenzula | 5,925 | -- | 8,750 | 4,650 | 11,000 |
| Brazil | 17,769 | 12,304 | 9,917 | 6,735 | 10,167 |
| UAE | 5,672 | 9,918 | 9,772 | 3,557 | 13,004 |
| Poland | 11,852 | 4,694 | 4,111 | 3,785 | 10,154 |
| Russia | 15,366 | 20,805 | 30,190 | 22,063 | 10,809 |
| Indonesia | 2,817 | 2,000 | 1,750 | 4,200 | 5,454 |
| Phillipines | 3,900 | 4,623 | 1,000 | 350 | 5,350 |
| **India** | **2,118** | **2,644** | **7,549** | **1,408** | **2,150** |

*Source: IMF, Global Financial Stability Report April 2010*

## 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 5-15). The yields on government and corporate securities showed a upward trend towards the end of first-half of 2009-10.

**Table 5-15: Yields on Government and Corporate Securities from April 2007 to September 2010**

(In percent)

| 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-07 | 7.34 | 8.14 | 8.14 | 8.45 | 9.60 | 10.53 | 10.04 | 10.12 |
| May-07 | 7.30 | 8.02 | 8.17 | 8.39 | 9.72 | 10.30 | 10.00 | 10.04 |
| Jun-07 | 7.02 | 7.90 | 8.23 | 8.49 | 8.63 | 10.11 | 10.08 | 10.30 |
| Jul-07 | 5.24 | 7.26 | 7.86 | 8.17 | 7.46 | 8.78 | 9.65 | 9.52 |
| Aug-07 | 6.73 | 7.69 | 7.90 | 8.30 | 8.78 | 9.42 | 9.57 | 9.69 |
| Sep-07 | 7.10 | 7.68 | 7.83 | 8.34 | 8.74 | 9.36 | 9.97 | 9.91 |
| Oct-07 | 6.97 | 7.72 | 7.87 | 8.40 | 8.42 | 9.17 | 9.58 | 9.62 |
| Nov-07 | 7.47 | 7.77 | 7.90 | 8.28 | 0.00 | 9.09 | 9.45 | 9.58 |
| Dec-07 | 7.58 | 7.79 | 7.87 | 8.16 | 8.69 | 9.04 | 9.39 | 9.45 |
| Jan-08 | 7.11 | 7.48 | 7.60 | 7.88 | 8.94 | 8.98 | 9.06 | 9.22 |
| Feb-08 | 7.15 | 7.45 | 7.53 | 7.78 | 9.71 | 9.17 | 9.24 | 9.37 |
| Mar-08 | 7.24 | 7.55 | 7.69 | 8.20 | 8.54 | 9.45 | 9.38 | 9.47 |
| Apr-08 | 7.10 | 7.85 | 8.00 | 8.46 | 8.82 | 9.53 | 9.49 | 9.65 |
| May-08 | 7.31 | 7.83 | 7.97 | 8.54 | 8.75 | 9.40 | 9.64 | 9.62 |
| Jun-08 | 8.30 | 8.58 | 8.40 | 9.15 | 9.81 | 10.02 | 9.88 | 9.97 |
| Jul-08 | 9.08 | 9.29 | 9.24 | 9.58 | 10.38 | 10.85 | 10.81 | 10.52 |
| Aug-08 | 9.23 | 9.21 | 9.04 | 9.70 | 0.00 | 10.37 | 11.14 | 10.92 |
| Sep-08 | 8.91 | 8.80 | 8.43 | 9.01 | 11.25 | 11.25 | 10.92 | 10.88 |
| Oct-08 | 7.53 | 7.72 | 7.88 | 8.39 | 13.38 | 11.67 | 11.49 | 10.98 |
| Nov-08 | 7.08 | 7.25 | 7.39 | 8.02 | 11.71 | 12.17 | 11.23 | 10.96 |
| Dec-08 | 5.83 | 6.02 | 6.29 | 7.18 | 11.06 | 9.81 | 9.24 | 9.44 |
| Jan-09 | 4.59 | 5.41 | 5.78 | 6.91 | 7.95 | 8.57 | 8.93 | 8.81 |
| Feb-09 | 4.59 | 5.39 | 6.46 | 7.18 | 8.71 | 8.67 | 9.30 | 9.09 |
| Mar-09 | 5.00 | 5.76 | 6.85 | 7.72 | 8.29 | 8.35 | 9.37 | 9.15 |
| Apr-09 | 3.68 | 5.49 | 6.45 | 7.24 | 6.51 | 7.52 | 8.49 | 8.86 |
| May-09 | 3.28 | 5.12 | 6.49 | 7.32 | 6.00 | 7.15 | 8.53 | 8.36 |
| Jun-09 | 3.69 | 5.74 | 6.81 | 7.49 | 5.45 | 7.59 | 8.69 | 8.82 |
| Jul-09 | 3.42 | 5.76 | 6.93 | 7.51 | 4.86 | 7.03 | 8.54 | 9.18 |
| Aug-09 | 3.76 | 6.23 | 7.24 | 7.84 | 5.55 | 7.46 | 8.61 | 9.05 |
| Sep-09 | 3.85 | 6.45 | 7.24 | 7.92 | 5.60 | 7.85 | 8.60 | 8.77 |
| Oct-09 | 3.34 | 6.34 | 7.33 | 8.1 | 5.08 | 7.53 | 8.98 | 8.84 |
| Nov-09 | 3.53 | 5.92 | 7.26 | 7.95 | 6.12 | 7.19 | 8.51 | 8.64 |
| Dec-09 | 3.75 | 6.14 | 7.46 | 7.95 | 5.51 | 7.08 | 8.63 | 8.65 |
| Jan-10 | 3.73 | 5.91 | 7.56 | 7.97 | 5.51 | 7.33 | 8.67 | 8.79 |
| Feb-10 | 3.97 | 6.01 | 7.73 | 8.36 | 6.26 | 7.65 | 8.81 | 8.90 |
| **Mar-10** | **4.29** | **6.23** | **7.71** | **8.32** | **6.09** | **7.43** | **8.86** | **8.92** |
| Apr-10 | 4.03 | 6.20 | 7.77 | 8.36 | 5.86 | 7.30 | 8.72 | 8.82 |
| May-10 | 4.44 | 6.20 | 7.53 | 7.88 | 5.50 | 7.22 | 8.56 | 8.65 |
| Jun-10 | 5.24 | 6.42 | 7.56 | 8.08 | 6.60 | 7.37 | 8.68 | 8.70 |
| Jul-10 | 5.61 | 6.77 | 7.64 | 8.18 | 6.77 | 7.38 | 8.68 | 8.75 |
| Aug-10 | 6.01 | 7.39 | 7.87 | 8.22 | 7.31 | 8.04 | 8.72 | 8.81 |
| **Sep-10** | **6.16** | **7.40** | **7.92** | **8.23** | **7.73** | **7.97** | **8.64** | **8.73** |

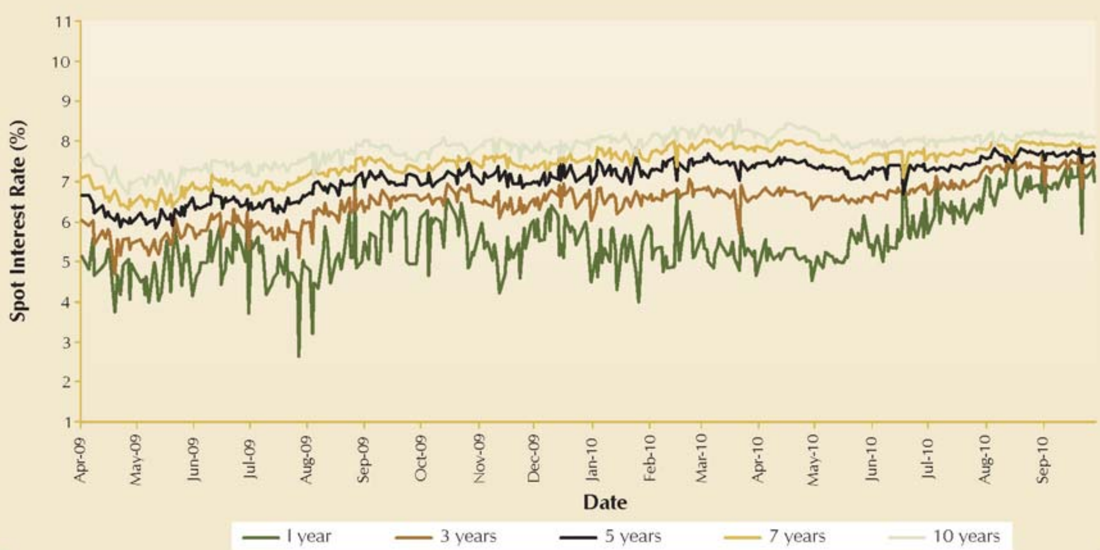
*Source: NSE.*

# WDM Products and Services

## 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 has been successfully tested by using daily WDM trades data. This is being disseminated daily. The ZCYC depicts the relationship between interest rates in the economy and the associated terms to maturity. The estimates of daily ZCYC are available from February 1998. (Chart 5-6) plots the spot interest rates at different maturities for the period April 2009 till September 2010.

Chart 5-6: Zero Coupon Yield Curve, April 2009 to September 2010




### FIMMDA-NSE MIBID /MIBOR[13]

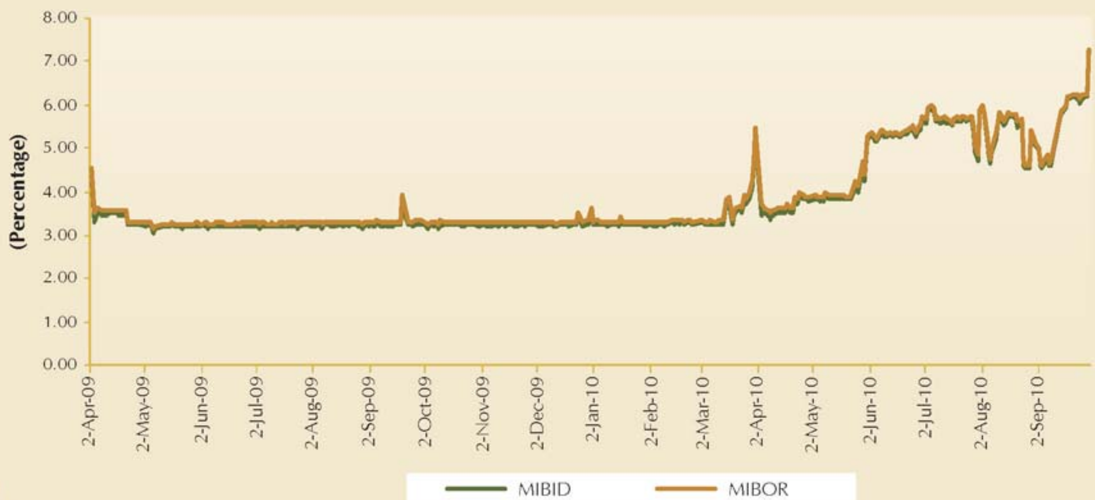
NSE has been computing and disseminating the NSE Mumbai Inter-bank Bid Rate (MIBID) and NSE Mumbai Inter-bank Offer Rate (MIBOR) for the overnight money market from June 15, 1998, the 14-day MIBID/MIBOR from November 10, 1998, the 1 month and 3 month MIBID/MIBOR from December 1, 1998 and the 3 day MIBID/MIBOR from, June 06, 2008 which is calculated and disseminated on every last working day of the week. 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.

FIMMDA-NSE MIBID/MIBOR are based on rates polled by NSE from a representative panel of 32 banks/institutions/ primary dealers. Currently, quotes are polled and processed daily by the Exchange at 0940 (IST) for overnight rate, at 1130 (IST) for the 14 day, 1 month and 3 month rates and 0940 (IST) for 3 day rate as on the last working day of the week. 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 and 3 day rates are disseminated on the last working day of the week to the market at about 0955 (IST). The 14 day, 1 month and 3 month rates at about 1145 (IST).

13 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.

The FIMMDA-NSE MIBID/MIBOR rates for month ends are presented in (Annexure 5-2). The daily FIMMDA-NSE MIBID/MIBOR rates are available at www.nseindia.com. (Chart 5-7) presents overnight FIMMDA-NSE MIBID/MIBOR from April 2008 to June 2009. These rates touched the peak of 7.20% and 7.28%, respectively, on September 30, 2010 and the low of 3.03% and 3.16%, respectively, on May 06, 2009.

Chart 5-7: Overnight NSE FIMMDA MIBID / MIBOR RATES (April 2009 - September 2010)




## 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 June 30, 2009 is depicted in Table 5-16. The VaR for other GOI securities are available at www.nseindia.com.

Table 5-16: 1-day VaR (99%) for GoI Securities traded on NSE-WDM as of Sep 2010

| Security Type | Security Name | Issue Name | VaR (%) | | | | | Clean Price (off NSE-ZCYC) |
|---|---|---|---|---|---|---|---|---|
| | | | Normal | Weighted Normal | Historical Simulation | Weighted Historical Simulation | EVT | |
| GS | CG2011 | 9.39% | 0.6530 | 0.9410 | 0.8290 | 0.7300 | 0.7380 | 101.6670 |
| GS | CG2012 | 6.85% | 0.9000 | 1.3480 | 1.1090 | 2.7120 | 1.0140 | 99.4880 |
| GS | CG2012 | 7.40% | 0.9150 | 1.3700 | 1.1250 | 1.5870 | 1.0260 | 100.2500 |
| GS | CG2014 | 7.32% | 1.1450 | 1.3490 | 1.3360 | 3.4950 | 1.1360 | 98.9960 |

*Contd.*

*Contd.*

| Security Type | Security Name | Issue Name | VaR (%) | | | | | Clean Price (off NSE-ZCYC) |
|---|---|---|---|---|---|---|---|---|
| | | | Normal | Weighted Normal | Historical Simulation | Weighted Historical Simulation | EVT | |
| GS | CG2015 | 7.17% | 1.1860 | 1.2780 | 1.3890 | 1.4680 | 1.1300 | 97.9560 |
| GS | CG2017 | 7.46% | 1.3240 | 1.0820 | 1.3860 | 1.7960 | 1.1100 | 97.5990 |
| GS | CG2017 | 7.99% | 1.2970 | 1.0820 | 1.3860 | 1.2050 | 1.1150 | 100.4480 |
| GS | CG2020 | 7.80% | 1.6070 | 1.0250 | 1.7000 | 1.1550 | 1.3850 | 97.9630 |
| GS | CG2021 | 7.94% | 1.7660 | 1.1590 | 1.9030 | 2.1480 | 1.5860 | 98.3990 |
| GS | CG2022 | 8.08% | 1.9740 | 1.4230 | 2.1940 | 1.5420 | 1.8060 | 98.9260 |
| GS | CG2022 | 8.13% | 1.9950 | 1.4560 | 2.2050 | 1.6170 | 1.8200 | 99.2670 |
| GS | CG2026 | 6.90% | 2.9140 | 2.7900 | 3.4700 | 3.1980 | 2.5830 | 87.4580 |
| GS | CG2027 | 8.24% | 2.9580 | 2.9210 | 3.5050 | 3.0270 | 2.6260 | 98.8190 |
| GS | CG2027 | 8.26% | 3.0640 | 3.0790 | 3.7390 | 3.0410 | 2.7870 | 98.8820 |
| GS | CG2040 | 8.30% | 5.5070 | 6.3190 | 7.7370 | 5.2950 | 5.1040 | 97.4020 |
| TB | 182D | 070111 | 0.3220 | 0.4400 | 0.4130 | 0.3490 | 0.3610 | 98.1440 |

*Source: NSE*

## Bond Index

A widely tracked benchmark for the performance of bonds is the ICICI Securities' (Isec) bond index (i-BEX), which measures the performance of the bond markets by tracking returns on government securities. There are also other indices like NSE's G-Sec Index and 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 2009-10, the PRI of i-BEX and NSE G-Sec Index declined by 2.89% and 7.85% respectively.[14]

The TRI, on the other hand, 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 2009-10, the TRI registered rise of 4.53% and 4.68% 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 5-17).

[14] March 2010 index figures have been compared with March 2009 figures.

Table 5-17: Debt Market Indices

| 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-09 | 5314.32 | 1395.98 | 260.57 | 260.57 | 305.83 | 120.04 |
| May-09 | 5220.20 | 1362.53 | 261.14 | 261.14 | 299.23 | 117.15 |
| Jun-09 | 5204.11 | 1349.98 | 261.74 | 261.74 | 297.20 | 115.92 |
| Jul-09 | 5206.85 | 1342.61 | 263.64 | 263.64 | 298.75 | 115.87 |
| Aug-09 | 5109.85 | 1308.74 | 264.95 | 264.95 | 295.04 | 114.03 |
| Sep-09 | 5183.44 | 1319.61 | 266.11 | 266.11 | 301.26 | 115.81 |
| Oct-09 | 5171.96 | 1308.35 | 267.1 | 267.1 | 300.52 | 114.78 |
| Nov-09 | 5254.14 | 1321.49 | 266.77 | 266.77 | 298.64 | 113.56 |
| Dec-09 | 5240.34 | 1309.69 | 269.23 | 269.23 | 296.79 | 112.13 |
| Jan-10 | 5276.59 | 1310.48 | 269.77 | 269.77 | 300.98 | 113.48 |
| Feb-10 | 5265.66 | 1299.92 | 271.31 | 271.31 | 297.66 | 111.68 |
| **Mar-10** | **5327.81** | **1306.83** | **272.03** | **272.03** | **297.28** | **110.97** |
| Apr-10 | 5352.56 | 1304.81 | 272.09 | 272.09 | 300.72 | 111.54 |
| May-10 | 5416.23 | 1312.71 | 272.78 | 272.78 | 302.97 | 111.84 |
| Jun-10 | 5430.24 | 1307.88 | 272.69 | 272.69 | 301.73 | 110.74 |
| Jul-10 | 5415.82 | 1296.04 | 274.4 | 274.4 | 301.35 | 109.93 |
| Aug-10 | 5414.65 | 1287.48 | 275.45 | 275.45 | 298.88 | 108.94 |
| **Sep-10** | **5468.38** | **1292.18** | **276.62** | **276.62** | **301.26** | **109.29** |

*Source: ICICI Securities and NSE*

## Way Forward

The G-sec market has evolved over the years and expanded given the increasing borrowing requirements of the Government. In contrast, the corporate bond market (which is only 10-15% of the bond market) has languished both in terms of market participation and structure. Non-bank finance companies are the main issuers and very small amount of finance are raised by companies directly. Various reasons for this are pre-dominance of bank loans, limited participation by foreign institutional investors, pension and insurance companies. Due to the limited participation by the institutional participants, even the households lack confidence. The crowding out by government bonds is another reason for slackness in the market. However, with various government and regulators initiatives[15], the corporate bond is gradually gearing up and seems to be promising for financing long term infrastructure projects as bank financing prospects for the infrastructure sector is drying up.

[15] Clearing and settlement on DvP (Delivery versus Payment) III basis, Market making with primary dealers, Enabling Credit Default Swap, Allowing banks to do credit enhancement -Guaranteeing of corporate bonds by banks, Relaxing norms on short selling of Government bonds. Relaxing norms for use of shelf prospectus -requires amendment to Section 60 of Companies Act (MCA), Empowering bond holder under SARFAESI (Department of Financial Services, RBI), creation of a comprehensive bond data base (RBI, SEBI, FIMMDA). Amendment to Section 9 of the Stamp Act to lower stamp duties across states and make them uniform (Department of Revenue).

Annexure 5-1: Business Growth of WDM Segment

| Month/Year | All Trades | | | | | | | Retail Trades | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. of Active Securities | Number of Trades | Turnover (₹ mn.) | Average Daily Turnover (₹ mn.) | Average Trade Size (₹ mn.) | Turnover (US $ mn.) | Average Daily Turnover (US $ mn.) | Number of Trades | Turnover (₹ mn.) | Turnover (US $ mn.) | Share in Total Turnover (%) |
| 2000-01 | 1,038 | 64,470 | 4,285,815 | 14,830 | 66.48 | 91,891 | 318 | 498 | 1,318 | 28.26 | 0.03 |
| 2001-02 | 979 | 144,851 | 9,471,912 | 32,775 | 65.39 | 194,097 | 672 | 378 | 1,094 | 22.42 | 0.01 |
| 2002-03 | 1,123 | 167,778 | 10,687,014 | 35,983 | 63.70 | 224,990 | 758 | 1,252 | 2,995 | 63.05 | 0.03 |
| 2003-04 | 1,078 | 189,518 | 13,160,962 | 44,765 | 69.44 | 303,318 | 1,032 | 1,400 | 3,317 | 76.45 | 0.03 |
| 2004-05 | 1,151 | 124,308 | 8,872,936 | 30,283 | 71.38 | 202,810 | 692 | 1,278 | 4,101 | 93.74 | 0.05 |
| 2005-06 | 897 | 61,891 | 4,755,235 | 17,547 | 76.83 | 106,596 | 393 | 892 | 3,104 | 69.58 | 0.07 |
| 2006-07 | 762 | 19,575 | 2,191,065 | 8,980 | 111.93 | 50,265 | 206 | 399 | 1,015 | 23.29 | 0.05 |
| 2007-08 | 601 | 16,179 | 2,823,170 | 11,380 | 174.50 | 70,632 | 285 | 211 | 490 | 12.26 | 0.02 |
| 2008-09 | 711 | 16,129 | 3,359,515 | 14,116 | 208.30 | 65,937 | 277 | 257 | 635 | 12.47 | 0.02 |
| Apr-09 | 313 | 2,408 | 456,529 | 28,533 | 189.60 | 10,114 | 632 | 14 | 54 | 1.13 | 0.01 |
| May-09 | 270 | 2,089 | 402,658 | 20,133 | 192.80 | 8,920 | 446 | 8 | 36 | 0.75 | 0.01 |
| Jun-09 | 243 | 1,948 | 445,679 | 20,258 | 228.80 | 9,873 | 449 | 26 | 75 | 1.57 | 0.02 |
| Jul-09 | 272 | 2,582 | 512,220 | 22,270 | 198.40 | 11,347 | 493 | 80 | 184 | 3.84 | 0.04 |
| Aug-09 | 274 | 1,583 | 382,323 | 19,116 | 241.50 | 8,470 | 423 | 86 | 230 | 4.80 | 0.06 |
| Sep-09 | 275 | 2,301 | 586,740 | 30,881 | 255.00 | 12,998 | 684 | 266 | 491 | 10.26 | 0.08 |
| Oct-09 | 266 | 1,875 | 437,314 | 23,017 | 233.20 | 9,688 | 510 | 284 | 450 | 9.40 | 0.10 |
| Nov-09 | 279 | 2,564 | 649,987 | 32,499 | 253.50 | 14,399 | 720 | 253 | 464 | 9.69 | 0.07 |
| Dec-09 | 201 | 1,735 | 375,671 | 17,889 | 216.50 | 8,322 | 396 | 382 | 595 | 12.43 | 0.16 |
| Jan-10 | 265 | 1,957 | 570,362 | 28,518 | 291.40 | 12,635 | 632 | 433 | 815 | 17.03 | 0.14 |
| Feb-10 | 260 | 1,455 | 348,000 | 18,316 | 239.20 | 7,709 | 406 | 195 | 393 | 8.21 | 0.11 |
| Mar-10 | 320 | 1,572 | 470,677 | 23,534 | 299.40 | 10,427 | 521 | 208 | 541 | 11.30 | 0.11 |
| **2009-10** | **1,144** | **24,069** | **5,638,159** | **23,591** | **234.20** | **124,904** | **523** | **2,235** | **4,328** | **90.41** | **0.08** |
| Apr-10 | 326 | 1,911 | 618,241 | 32,539 | 323.50 | 13,726 | 722 | 50 | 101 | 2.24 | 0.02 |
| May-10 | 324 | 2,555 | 732,511 | 36,626 | 286.70 | 16,264 | 813 | 43 | 98 | 2.18 | 0.01 |
| Jun-10 | 297 | 2,027 | 501,427 | 22,792 | 247.40 | 11,133 | 506 | 120 | 243 | 5.40 | 0.05 |
| Jul-10 | 239 | 1,618 | 471,346 | 21,425 | 291.30 | 10,465 | 476 | 73 | 144 | 3.20 | 0.03 |
| Aug-10 | 259 | 1,945 | 451,085 | 21,480 | 231.90 | 10,015 | 477 | 237 | 448 | 9.95 | 0.10 |
| Sep-10 | 278 | 2,094 | 451,864 | 22,593 | 215.80 | 10,032 | 502 | 310 | 596 | 13.23 | 0.13 |
| **April - Sep 2010** | **1,723** | **12,150** | **3,226,473** | **157,455** | **1,597** | **71,636** | **3,496** | **833** | **1,630** | **36.19** | **0.13** |

*Source : NSE*

## Annexure 5-2: FIMMDA NSE MIBID/MIBOR Rates

| Month/ Date | OVERNIGHT AT 9.40 a.m. | | 3 DAY 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 | MIBID | MIBOR |
| 29-Apr-09 | 3.24 | 3.31 | 3.25 | 3.31 | 3.43 | 3.87 | 4.06 | 4.42 | 5.18 | 5.64 |
| 30-May-09 | 3.22 | 3.30 | 3.21 | 3.27 | 3.31 | 3.74 | 3.81 | 4.16 | 4.84 | 5.29 |
| 30-Jun-09 | 3.22 | 3.30 | 3.22 | 3.28 | 3.10 | 3.46 | 3.48 | 3.82 | 4.35 | 4.72 |
| 31-Jul-09 | 3.21 | 3.28 | 3.22 | 3.28 | 3.15 | 3.50 | 3.43 | 3.80 | 4.29 | 4.52 |
| 31-Aug-09 | 3.23 | 3.29 | 3.18 | 3.27 | 3.09 | 3.47 | 3.35 | 3.77 | 4.23 | 4.58 |
| 29-Sep-09 | 3.26 | 3.33 | 3.22 | 3.30 | 3.12 | 3.57 | 3.43 | 3.92 | 4.26 | 4.67 |
| 31-Oct-09 | 3.21 | 3.30 | 3.23 | 3.30 | 3.11 | 3.41 | 3.40 | 3.72 | 4.24 | 4.61 |
| 30-Nov-09 | 3.23 | 3.30 | 3.23 | 3.29 | 3.10 | 3.49 | 3.36 | 3.74 | 4.13 | 4.44 |
| 31-Dec-09 | 3.44 | 3.59 | 3.44 | 3.56 | 3.27 | 3.67 | 3.55 | 3.98 | 4.18 | 4.60 |
| 30-Jan-10 | 3.21 | 3.31 | 3.23 | 3.30 | 3.32 | 3.59 | 3.62 | 3.90 | 4.23 | 4.59 |
| 26-Feb-10 | - | - | 3.29 | 3.35 | 3.27 | 3.69 | 3.65 | 4.17 | 4.37 | 4.97 |
| **31-Mar-10** | **5.25** | **5.47** | **5.25** | **5.44** | **3.88** | **4.53** | **4.49** | **5.09** | **5.02** | **5.69** |
| 30-Apr-10 | - | - | 3.81 | 3.89 | 3.85 | 4.14 | 4.13 | 4.46 | 4.62 | 5.01 |
| 31-May-10 | 5.15 | 5.25 | 4.66 | 4.80 | 4.26 | 4.69 | 4.59 | 4.95 | 4.95 | 5.33 |
| 30-Jun-10 | 5.61 | 5.73 | 5.44 | 5.50 | 5.33 | 5.72 | 5.77 | 6.26 | 5.99 | 6.50 |
| 31-Jul-10 | 5.86 | 5.90 | 4.73 | 4.87 | 5.36 | 5.71 | 5.81 | 6.15 | 6.14 | 6.53 |
| 31-Aug-10 | 5.06 | 5.13 | 4.54 | 4.62 | 5.31 | 5.65 | 5.88 | 6.22 | 6.52 | 6.90 |
| **29-Sep-10** | **7.20** | **7.28** | **6.08** | **6.17** | **6.23** | **6.60** | **6.58** | **6.97** | **7.10** | **7.49** |

*Source : NSE*

# Derivatives Market

## Introduction

The emergence and growth of market for derivative instruments can be traced back to the willingness of risk-averse economic agents to guard themselves against uncertainties arising out of fluctuations in asset prices. Derivatives are meant to facilitate hedging of price risk of inventory holding or a financial/commercial transaction over a certain period. By locking-in asset prices, derivative products minimize the impact of fluctuations in asset prices on the profitability and cash flow situation of risk-averse investors and thereby serve as instruments of risk management. By providing investors and issuers with a wider array of tools for managing risks and raising capital, derivatives improve the allocation of credit and the sharing of risk in the global economy, lowering the cost of capital formation and stimulating economic growth. Now that world markets for trade and finance have become more integrated, derivatives have strengthened these important linkages between global markets, increasing market liquidity and efficiency and are seen to be facilitating the flow of trade and finance.

Following the growing instability in the financial markets, the financial derivatives gained prominence in post-1970. In the recent years, the market for financial derivatives has grown both in terms of variety of instruments available, their complexity and turnover. Financial derivatives have changed the world of finance through creation of innovative ways to comprehend measure and manage risks.

India's tryst with derivatives began in the year 2000 when both NSE and BSE commenced trading in equity derivatives. In June 2000, Index futures became the first type of derivative instruments to be launched in the Indian markets followed by index options in June 2001, options in individual stocks in July 2001 and futures in single stock derivatives in November 2001. Since then, equity derivatives have come a long way. New products; expanding list of eligible investors; rising volumes and best of risk management framework for exchange traded derivatives have been the hallmark of the journey of equity derivatives in India so far.

India's experience with the equity derivatives market has been extremely positive. The derivatives turnover on the NSE has surpassed the equity market turnover. The turnover of derivatives on the NSE increased from ₹ 23,654 million in 2000-01 to ₹ 176,636,647 million in 2009-10 and ₹ 124,517,441 million in the first-half of 2010-11. The average daily turnover in this segment of the markets on the NSE was ₹ 723,921 mn in 2009-10 compared to that of ₹ 453,106 mn during 2008-09.

India is one of the most successful developing countries in terms of a vibrant market for exchange-traded derivatives. This reiterates the strengths of the modern development of India's securities markets, which are based on nationwide market access, anonymous electronic trading, and a predominantly retail market. There is an increasing sense that the equity derivatives market is playing a major role in shaping price discovery.

**Table 6-1: Benchmark Indices Contracts & Volume in Futures & Options Segment of NSE for the fiscal 2009-10 and first-half of 2010-11**

| Indices/ Period | No of Contracts | Traded Value (₹ mn) | Traded Value (Us $ mn) | Percent-age of Contracts to total contracts (%) | No of Contracts | Traded Value (₹ mn) | Traded Value (Us $ mn) | Percent-age of Contracts to total contracts (%) |
|---|---|---|---|---|---|---|---|---|
| **Index Futures** | | | | | | | | |
| | **2009-10** | | | | **April 2010-September 2010** | | | |
| NIFTY | 152,074,103 | 34,719,859 | 769,159 | 29.26 | 64,659,242 | 17,274,529 | 384,562 | 18.66 |
| MINIFTY | 18,563,269 | 1,693,892 | 37,525 | 3.57 | 7,363,411 | 783,176 | 17,435 | 2.12 |
| BANKNIFTY | 7,617,163 | 2,901,909 | 64,287 | 1.47 | 7,839,966 | 2,128,945 | 47,394 | 2.26 |
| CNXIT | 44,331 | 22,263 | 493 | 0.01 | 34,061 | 11,818 | 263 | 0.01 |
| JUNIOR | 23 | 15 | 0 | 0.00 | * | - | - | - |
| NFTYMCAP50 | 7,959 | 5,934 | 131 | 0.00 | 534 | 293 | 7 | 0.00 |
| CNX100 | 41 | 14 | 0 | 0.00 | * | - | - | - |
| DEFTY | 0 | - | - | 0.00 | * | - | - | - |
| **Index Options** | | | | | | | | |
| NIFTY | 341,059,380 | 80,194,053 | 1,776,563 | 65.63 | 266,057,782 | 71,662,319 | 1,595,332 | 76.77 |
| MINIFTY | 13 6,123 | 12,863 | 285 | 0.03 | 68,495 | 7,363 | 164 | 0.02 |
| BANKNIFTY | 167,043 | 61,459 | 1,362 | 0.03 | 540,745 | 151,829 | 3,380 | 0.16 |
| CNXIT | 327 | 193 | 4 | 0.00 | 329 | 109 | 2 | 0.00 |
| JUNIOR | 0 | - | - | - | * | - | - | - |
| NFTYMCAP50 | 16,592 | 11,054 | 245 | 0.00 | 0 | - | - | - |
| CNX100 | 58 | 21 | 0 | 0.00 | * | - | - | - |
| DEFTY | 0 | - | - | - | * | - | - | - |
| **Total of all Indices** | **519,686,412** | **119,623,528.80** | **2,650,056** | **100.00** | **346,564,565** | **92,020,380.40** | **2,048,539** | **100.00** |
| Total of Nifty Index Futures and Options | 493,133,483 | 114,913,913 | 2,545,722 | 94.89 | 330,717,024 | 88,936,848 | 1,979,894 | 95.43 |

*Source : NSE*

*:- With effect from 31st July 2009 contracts on DEFTY,CNX100 and Junior have been discontinued.

## Global Derivatives Markets

As the credit crisis took its toll in 2009, major US and European exchanges saw a dramatic decline in derivatives volume. The derivatives volume in interest rate sector was the most hit followed by equity index products. In the Asian exchanges, however, the futures and options contracts that traded actually rose by 24%. India and China led this explosive growth in derivatives trading volume; while currency futures and equity derivatives were the linchpin in India's impressive show, China's derivatives volumes got major boost from the commodity futures. These two big trends just about cancelled each other out and the overall growth trend in Futures and Options was still positive in 2009. The total number of futures and options contracts traded on the 70 exchanges worldwide tracked by the Futures Industry Association went up from 17.68 billion in 2008 to 17.7 billion in 2009, a growth of about 0.1%.

Table 6-2: Global Exchange traded derivatives volume by category

(in millions)

| GLOBAL | Jan-Dec 2009 | Jan-Dec 2008 | (%) Change |
|---|---|---|---|
| Equity Index | 6381.9 | 6488.6 | -1.6 |
| Individual Equity | 5554.0 | 5511.2 | 0.8 |
| Interest Rate | 2467.7 | 3204.8 | -23.0 |
| Agricultural | 927.6 | 894.6 | 3.7 |
| Energy | 655.9 | 580.9 | 12.9 |
| Currency | 984.4 | 597.4 | 64.8 |
| Precious Metal | 151.2 | 157.4 | -3.9 |
| Non-precious metal | 462.5 | 198.7 | 132.8 |
| Other | 114.4 | 44.8 | 155.4 |
| **Total Volume** | **17699.6** | **17678.5** | **0.1** |

*Source: Futures Industry Annual Volume Survey, March 2010.*

Looking at global trends in derivatives volume by category, we find that non-precious metals were the most powerful drivers of increase in volumes of exchange traded derivative contracts in 2009, followed by trading in foreign currency derivatives products which grew at 64.8% (Table 6-2).

The trading volume in interest rate products, on the other hand, continued to slide in 2009 with a decline in volumes by 23% compared to 2008. The year-on-year percentage change in the interest rate category were negative almost everywhere. In 2009, on a y-o-y basis, Eurodollar futures down 26.7%, Euribor futures down 15.6%, 10-year Treasury futures down 26.1%, Euro bund futures fell 29.9%.

Table 6-3: Top 5 exchanges in various derivative contracts

**(in million)**

| **Top 5 exchanges by number of single stock futures contracts traded in 2009** | | | | |
|---|---|---|---|---|
| | | **2009** | **2008** | **% change** |
| 1 | NYSE Liffe Europe | 166 | 124 | 33.9 |
| 2 | **National Stock Exchange India** | **161** | **226** | -28.7 |
| 3 | Eurex | 114 | 130 | -12.6 |
| 4 | Johannesburg Stock Exchange | 89 | 420 | -78.8 |
| 5 | BME Spanish Exchanges | 38 | 46 | -18.9 |
| **Top 5 exchanges by number of single stock options contracts traded in 2009** | | | | |
| | | **2009** | **2008** | **% change** |
| 1 | International Securities Exchange (ISE) | 947 | 990 | -4.3 |
| 2 | Chicago Board Options Exchange (CBOE) | 912 | 934 | -2.3 |
| 3 | Philadelphia Stock Exchange | 578 | 538 | 7.8 |
| 4 | BM&FBOVESPA | 546 | 350 | 56.1 |
| 5 | Eurex | 283 | 349 | -19.0 |

*Contd.*

*Contd.*

| Top 5 exchanges by number of Stock index options contracts traded in 2009 | | | | |
|---|---|---|---|---|
| | | **2009** | **2008** | **% change** |
| 1 | Korea Exchange | 2920 | 2766 | 5.6 |
| 2 | Eurex | 364 | 514 | -29.2 |
| 3 | **National Stock Exchange India** | **321** | **150** | 114.0 |
| 4 | Chicago Board Options Exchange (CBOE) | 222 | 259 | -14.3 |
| 5 | Taifex | 76 | 98 | -22.4 |
| **Top 5 exchanges by number of Stock index futures contracts traded in 2009** | | | | |
| | | **2009** | **2008** | **% change** |
| 1 | CME Group | 703 | 882 | -20.3 |
| 2 | Eurex | 367 | 511 | -28.2 |
| **3** | **National Stock Exchange of India** | **195** | **202** | -3.5 |
| 4 | Osaka Securities Exchange | 130 | 131 | -0.8 |
| 5 | Korea Exchange | 83 | 66 | 25.8 |

*Source: WFE Market Highlights 2009*

In terms of number of single stock futures contracts traded in 2009, NSE held the second position. It was third in terms of number of stock index options contracts traded and third in terms of number of stock index options contracts traded in 2009. These rankings are based on World Federation of Exchanges (WFE) Market Highlights 2009 (Table 6-3).

### Table 6-4: Global Futures and Options Volume

(in million)

| Rank | | Exchange | Volume | | |
|---|---|---|---|---|---|
| **2009** | **2008** | | **Jan-Dec 2009** | **Jan-Dec 2008** | **%change** |
| 1 | 3 | Korea Exchange | 3102.9 | 2865.5 | 8.3 |
| 2 | 2 | Eurex (includes ISE) | 2647.4 | 3172.7 | -16.6 |
| 3 | 1 | CME Group (includes CBOT and Nymex) | 2589.5 | 3277.6 | -21.0 |
| 4 | 4 | NYSE Euronext (includes all EU and US markets) | 1729.9 | 1675.8 | 3.2 |
| 5 | 5 | Chicago Board Options Exchange | 1135.9 | 1194.5 | -4.9 |
| 6 | 6 | BM&F Bovespa | 920.3 | 741.9 | 24.0 |
| 7 | 8 | **National Stock Exchnage of India** | **918.5** | **601.5** | 52.7 |
| 8 | 7 | Nasdaq OMX Group | 814.6 | 722.1 | 12.8 |
| 9 | 11 | Russian Trading systems stock exchange | 474.4 | 238.2 | 99.1 |
| 10 | 16 | Shanghai Futures Exchange | 434.8 | 140.3 | 210.0 |
| 11 | 10 | Dalian Commodity Exchange | 416.8 | 319.1 | 30.6 |
| 12 | 22 | Multi Commodity Exchange of India (includes MCX-SX) | 384.7 | 103.0 | 273.5 |
| 13 | 12 | Intercontinental Exchange (includes US, UK and Canada Markets) | 257.1 | 234.4 | 9.7 |
| 14 | 13 | Zhengzhou Commodity Exchange | 227.1 | 222.6 | 2.0 |
| 15 | 9 | JSE Securities Exchange South Africa | 166.6 | 513.6 | -67.6 |
| 16 | 15 | Osaka Securities Exchange | 166.0 | 163.7 | 1.4 |

*Contd.*

*Contd.*

| Rank | | Exchange | Volume | | |
|---|---|---|---|---|---|
| 2009 | 2008 | | Jan-Dec 2009 | Jan-Dec 2008 | %change |
| 17 | 14 | Boston Options Exchange | 137.7 | 178.7 | -22.9 |
| 18 | 17 | Taiwan Futures Exchange | 135.1 | 136.7 | -1.2 |
| 19 | 19 | London Metal Exchange | 111.9 | 113.2 | -1.2 |
| 20 | 20 | Hong Kong Exchanges & Clearing | 98.5 | 105.0 | -6.2 |
| 21 | 24 | Mercado Espanol de Opciones y Futuros Financieros | 93.0 | 83.4 | 11.5 |
| 22 | 26 | Tokyo  Financial Exchange | 83.6 | 66.9 | 24.9 |
| 23 | 21 | Australian Securities Exchange | 82.2 | 94.8 | -13.3 |
| 24 | 28 | Turkish Derivatives Exchange | 79.4 | 54.5 | 45.8 |
| 25 | 23 | Tel-Aviv Stock Exchange | 70.9 | 92.6 | -23.4 |
| 26 | 27 | Singapore Exchange | 53.1 | 61.8 | -14.1 |
| 27 | 29 | Mercado a Termino de Roasario | 51.5 | 42.2 | 22.0 |
| 28 | 25 | Mexican Derivatives Exchange | 48.8 | 70.1 | -30.4 |
| 29 | 31 | Italian Derivatives Market | 42.6 | 38.9 | 9.4 |
| 30 | 32 | Bourse de Montreal | 34.8 | 38.1 | -8.6 |
| **31** | **34** | **National Commodity & Derivatives Exchange (India)** | **29.9** | **24.6** | 21.3 |
| 32 | 30 | Tokyo Commodity Exchange | 28.8 | 41.0 | -29.8 |
| 33 | 33 | Tokyo Stock Exchange | 26.2 | 32.5 | -19.4 |
| 34 | 18 | Moscow Interbank Currency Exchange | 19.3 | 131.9 | -85.4 |
| 35 | 37 | Warsaw Stock Exchange | 13.8 | 12.6 | 9.9 |
| 36 | 35 | Oslo stock Exchange | 13.5 | 16.1 | -15.9 |
| 37 | 36 | Budapest Stock Exchange | 11.8 | 13.4 | -11.7 |
| 38 | 39 | Athens Derivatives Exchange | 7.9 | 7.2 | 10.2 |
| 39 | 40 | Bursa Malaysia | 6.1 | 6.1 | 0.2 |
| 40 | 43 | European Climate Exchange | 5.1 | 2.8 | 81.1 |
| 41 | - | ELX | 5.0 | 0.0 | NA |
| 42 | 38 | Tokyo Grain Exchange | 4.8 | 8.4 | -42.8 |
| 43 | 42 | Kansas City Board of Trade | 3.8 | 4.0 | -5.1 |
| 44 | 45 | Thailand Futures Exchange | 3.1 | 2.1 | 43.5 |
| 45 | 41 | One Chicago | 3.0 | 4.0 | -25.7 |
| 46 | 44 | Central Japan Commodity Exchanges | 1.8 | 3.3 | -45.9 |
| 47 | 46 | New Zealand Futures Exchange | 1.5 | 1.5 | 2.1 |
| 48 | - | Chicago Climate Exchange | 1.4 | 0.5 | 183.4 |
| 49 | 47 | Minneapolis Grain Exchange | 1.2 | 1.4 | -12.8 |
| 50 | 48 | Wiener Boerse | 0.8 | 1.1 | -32.1 |
| 51 | 49 | Dubai Mercantile Exchange | 0.6 | 0.3 | 66.7 |
| 52 | 51 | Mercado a Termino de Buenos Aires | 0.2 | 0.2 | 20.0 |
| 53 | 50 | Kansai Commodities Exchange | 0.1 | 0.2 | -66.7 |

*Source: Futures Industry Annual Volume Survey, March 2010*
*Notes: # new entrants in the list by way of new exchange or new merged exchange*
*Ranking does not include exchanges that do not report their volume to the FIA*

Table 6-4 gives the rank of various exchanges in terms of number of futures and options traded and/or cleared in 2008 and 2009. NSE improved its ranking in 2009 in terms of traded volumes in futures and options taken together, improving its worldwide ranking from 15th in 2006 to 8th in 2008 and 7th in 2009. The traded volumes in the derivatives segment of the NSE saw an increase of 52.7% in 2009 over the figure in 2008.

## Derivatives Market Survey by WFE-August 2010

The World Federation of Exchanges carried out an annual survey of derivatives markets for the International Options Markets Association (IOMA) derivatives exchanges, covering the markets in its member countries. The survey, covering derivative markets in 69 exchanges, was published in August 2010.

The financial crisis of 2008, which had triggered a marked slowdown of derivatives markets, continued and deepened for certain types of contracts in 2009. Index futures had only started to slow down at the fall of 2008, the year 2009 ended with a negative performance of 16%. The long term interest rate derivatives products have plunged in an even more acute crisis with trading volumes declining by one third and open positions being dramatically reduced. On the contrary, commodity futures continued to grow rapidly in 2009 as in 2008.

| 2009 | | Single stock | Stock index | STIR | LTIR | Currency |
|---|---|---|---|---|---|---|
| Number of contracts traded (millions) | Options | 3374 | 3869 | 397 | 78 | 37 |
| | Futures | 501 | 1928 | 1006 | 896 | 923 |
| Growth rate of contracts traded | Options | 2% | 5% | -9% | -33% | -37% |
| | Futures | -39% | -16% | -21% | -29% | 75% |

*Source : International Options Market Association (IOMA) Report, August 2010.*
*Note: STIR: short term interest rate products*
*LTIR: long term interest rate products*

The main findings of the 2010 IOMA survey are listed below:

- In 2009, the growth rate of trading volumes in stock options was insignificant following a decrease in 2008.
- After having grown more rapidly than other segments of the derivatives market in previous years, the stock futures market observed a negative growth rate of 39% in 2009.
- Index options experienced a slowdown in the growth of traded volumes after several years of rapid growth albeit the y-o-y growth remained positive at 5% in 2009.
- The number of stock index futures traded decreased by 16% in 2009.
- Negative growth rates were observed in all groups of interest rate products for the second consecutive year in 2009. Overall, traded volumes were down 23% with long term interest rate options being the major laggard.
- Currency derivatives surged by 48%, driven by robust volumes in currency futures in India.
- A significant growth in commodity derivatives volume was observed in 2009 led by the two Chinese stock exchanges, such as the Dalian stock exchange and the Shanghai Futures exchange.

## Major Developments in Derivatives Segment

### Launch of currency futures on additional currency pairs

With a view to meet the need of hedging instruments, other than OTC products, to manage exchange risk, the RBI Committee on Fuller Capital Account Convertibility recommended that currency futures may be introduced subject to risks being contained through proper trading mechanism, structure of contracts and regulatory environment. Accordingly, RBI in its Annual Policy Statement for the Year 2007-08 proposed to set up a Working Group on Currency Futures to study the international experience and suggest a suitable framework to operationalise the proposal, in line with the current legal and regulatory framework. This Group submitted its report in April, 2008. Following this, RBI and Securities and Exchange Board of India (SEBI) jointly constituted a Standing Technical Committee to inter-alia evolve norms and oversee implementation of Exchange Traded Currency Derivatives. The Committee submitted its report on May 29, 2008. This report laid down the framework for the launch of Exchange Traded Currency Futures in terms of the eligibility norms for existing and new Exchanges and their Clearing Corporations/Houses, eligibility criteria for members of such Exchanges/Clearing Corporations/Houses, product design, risk management measures, surveillance mechanism and other related issues.

The Regulatory framework for currency futures trading in the country, as laid down by the regulators, provide that persons resident in India are permitted to participate in the currency futures market in India subject to directions contained in the Currency Futures (Reserve Bank of India) Directions, 2008, which have come into force with effect from August 6, 2008.

The eligibility criteria for membership in the currency futures market of a recognized stock exchange have been mandated to be separate from the membership of the equity derivative segment or the cash segment. Banks authorized by the Reserve Bank of India under section-10 of the Foreign Exchange Management Act, 1999 as 'AD Category – I bank' are permitted to become trading and clearing members of the currency futures market of the recognized stock exchanges, on their own account and on behalf of their clients, subject to fulfilling certain minimum prudential requirements pertaining to net worth, non-performing assets etc.

NSE was the first exchange to have received an in-principle approval from SEBI for setting up currency derivative segment. The exchange lunched its currency futures trading platform on 29th August, 2008. While BSE commenced trading in currency futures on 1st October, 2008, Multi-Commodity Exchange of India (MCX) started trading in this product on 7th October, 2008.

In continuation to its decision to permit trading in currency derivatives, SEBI, vide its circular dated January 19, 2010, decided to permit eligible stock exchanges to introduce currency futures on additional currency pairs such as Euro-INR, Pound Sterling-INR and Japanese Yen-INR. Both NSE and MCX launched these currency futures on additional currency pairs on February 01, 2010.

Standardized currency futures have the following features:

a. EURINR, GBPINR and JPYINR futures contracts will have a 12 month trading cycle. A new contract will be introduced after 12 noon on the last trading day of the near month contract.

b. The permitted lot size for EURINR and GBPINR is 1000 Euros and 1000 British Pounds respectively while that for JPYINR is 1,00,000 Japanese Yen.

c. Base price of EURINR, GBPINR and JPYINR futures contracts on the first day shall be the theoretical futures price.

### Relaunch of Interest Rate Futures on Indian Stock Exchanges

An Interest Rate Future (IRF) is a financial derivative with an interest-bearing instrument as the underlying asset. In case of IRF contracts, a borrower and a lender agree to fix the rate at which they will borrow or lend at a future date. As with other futures instruments, such as in commodities, the contract can help protect against rate swings. Interest rate futures are based on an underlying security which is a debt obligation and moves in value as interest rate changes.

IRFs were introduced in India in June 2003 on the NSE through launch of three contracts – a contract based on a notional 10-year coupon bearing bond, a contract based on a notional 10-year zero coupon bond and a contract based on 91-day Treasury bill. All the contracts were valued using the Zero Coupon Yield Curve (ZCYC), a curve which estimates relationship between maturity and interest rate. The contracts design did not provide for physical delivery. However, the product did not meet much success primarily due to the way the product was designed and market microstructure.

The contract traded only for 3 months and then withered out.

A proposal for change in the product design – introducing pricing based on the YTM of a basket of securities in lieu of ZCYC – was made in January 2004 but has not been implemented.

In the background of this experience with the IRF product, amidst an otherwise rapidly evolving financial market, the RBI set up a Working Group on IRF in August, 2007 to, inter-alia, review the experience with the IRF so far, with particular reference to product design issue and make recommendations for activating the IRF. The Group submitted its report in February, 2008, following which an RBI-SEBI Standing Technical Committee on Exchange-Traded Currency and Interest Rate Derivatives was constituted. The Report of this Committee has been made public on 17th June 2009. SEBI has invited eligible exchanges to apply for permission to offer this product on their trading platforms.

National Stock Exchange became the first exchange to receive approval from SEBI to introduce Exchange traded Interest Rate Futures (IRF) contracts for trading on the Currency Derivatives Segment of the exchange. Trading in IRF commenced on August 31, 2009. On its first day of trading, 14,559 contracts being traded at a total value of ₹ 267.31 crores.

**Distinguishing features between the IRFs launched in 2003 and new products launched on August 31, 2009 are:**

| Features of Products launched in June 2003 | Re-launched IRF product (Sept 2009) |
|---|---|
| 1. To be traded on Derivatives Segment | To be Traded on CDS segment |
| 2. Participation of FIIs not allowed | Participation of FIIs allowed |
| 3. Three underlyings-Futures on 10-year notional GoI security with 6% coupon rate; futures on 10-year notional zero-coupon GoI security and futures on 91-day Treasury bill. | Underlying: 10-year 7% notional GoI bond. |
| 4. Contracts were valued using the Zero Coupon Yield Curve (ZCYC). The contracts design did not provide for physical delivery. | These futures contracts would be based on 10-year government bond yield, which should be settled by physical delivery. |
| 5. Cash Settled | Physical delivery – The deliverable grade of securities are GoI securities maturing at least 8 years but not more than 12 years from first day of the delivery month with a minimum total outstanding of ₹ 10,000 crores. |

## Other Policy Developments

### I. Calendar spread margin modified for USD-INR contract

Based on the feedback received from stock exchanges, SEBI has decided to modify the calendar spread margin to be applied on the USD-INR contract. SEBI, vide its circular dated January 19, 2010 has further added, "A currency futures position at one maturity which is hedged by an offsetting position at a different maturity would be treated as a calendar spread. The calendar spread margin shall be at a value of ₹ 400 for a spread of 1 month; ₹ 500 for a spread of 2 months, ₹ 800 for a spread of 3 months and ₹ 1000 for a spread or 4 months or more. The benefit for a calendar spread would continue till expiry of the near month contract."

### II. Standardized lot size for derivative contracts on individual securities

SEBI, in consultation with stock exchanges, has decided to standardize the lot size for derivative contracts on individual securities. The stock exchanges shall ensure that the lot size is same for an underlying traded across exchanges. The Stock Exchanges shall review the lot size once in every 6 months based on the average of the closing price of the underlying for last one month and wherever warranted, revise the lot size by giving an advance notice of at least 2 weeks to the market.

### III. Introduction of derivative contracts on Volatility Index

In continuation to SEBI circular dated January 15, 2008 regarding introduction of volatility index, the capital market regulator, vide its circular dated April 27, 2010, has decided to permit stock exchanges to introduce derivatives contract on volatility index. The introduction of derivatives contracts on volatility index is subject to the condition that the underlying volatility index has a track record of at least one year.

### IV. Introduction of Index options with tenure up to 5 years

Further to SEBI's circular dated January 11, 2008, regarding introduction of index options with tenure up to 3 years, SEBI has decided to permit stock exchanges to introduce option contracts on Sensex and Nifty with tenure up to 5 years. The introduction of such 5-year option contracts will subject to the condition that there are 8 semi annual contracts of the cycle June/December in sequence to 3 serial monthly contracts and 3 quarterly contracts of the cycle March/June/September/December.

### V. Revised exposure margin for exchange traded equity derivatives

In a modification to SEBI's circular on exposure margin, it has decided, vide its circular dated July 7, 2010 that the exposure margin for exchange traded equity derivatives shall be higher of 5% or 1.5 times the standard deviation (of daily logarithmic returns of the stock price). In its earlier circular on October 15, 2008 on the said exposure margin, SEBI had specified that margin shall be higher of 10% or 1.5 times the standard deviation (of daily logarithmic returns of the stock price) of the notional value of the gross open position in single stock futures and gross short open position in stock options in a particular underlying.

### VI. Physical settlement of stock derivatives

In continuation to SEBI's circular dated June 20, 2001 and November 02, 2001 regarding settlement of stock options and stock futures contracts respectively, SEBI, based on the recommendations of the Derivatives Market Review Committee and in consultation with stock exchanges, has decided to provide flexibility to stock exchanges to offer:

a) Cash settlement (settlement by payment of differences) for both stock options and stock futures; or

b) Physical settlement (settlement by delivery of underlying stock) for both stock options and stock futures; or

c) Cash settlement for stock options and physical settlement for stock futures; or

d) Physical settlement for stock options and cash settlement for stock futures.

Vide its circular dated July 15, 2010 SEBI has decided that stock exchanges may introduce physical settlement in a phased manner. On introduction, however, physical settlement for all stock options and/or all stock futures must be completed within six months of its introduction.

### VII. Options on USD-INR spot rate

SEBI, vide its circular dated July 30, 2010 has allowed for the introduction of options on USD-INR spot rate on currency derivatives segment of stock exchanges. Premium styled European call and put options can be introduced on the USD-INR spot rate. The contract would be settled in cash in Indian rupee and the final settlement price would be the Reserve Bank Reference Rate on the date of expiry of the contracts.

### VIII. European style stock options

In continuation of SEBI's circular dated June 20, 2001, on the exercise style of stock option contracts, SEBI, in consultation with stock exchanges, has decided to provide flexibility to stock exchanges to offer either European style or American style stock options. After opting for a particular style of exercise, a stock exchange shall offer options contracts of the same style on all eligible stocks. Further, a stock exchange may change to another style of exercise only after seeking prior approval of SEBI. The contracts specifications, including the risk management framework applicable for American style stock options, shall apply to European style stock options.

## Market Design

Only two exchanges in India have been permitted to trade in equity derivatives contracts, such as the NSE and the BSE. NSE's market share in the total turnover of the derivatives market is a tad-lower than the cent percent mark. Hence, the market design enumerated in this section is the derivative segment of NSE (hereafter referred to as the F&O segment).

The different aspects of market design for F&O segment of the exchanges can be summarized as follows:

<table>
<tr><td>Trading Mechanism</td><td>The futures and options trading system of NSE, called NEAT-F&O trading system, provides a fully automated screen-based, anonymous order driven trading system for derivatives on a nationwide basis and an online monitoring and surveillance mechanism.<br>There are four entities in the trading system:<br>a. Trading members, who are members of NSE, can trade either on their own account or on behalf of their clients including participants.<br>b. Clearing members, who are members of NSCCL, 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.<br>c. Professional clearing members (PCM) are clearing members who are not trading members. Typically, banks and custodians become PCMs and clear and settle trades for their trading members.<br>d. Participants are 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.</td></tr>
<tr><td>Membership</td><td>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. The eligibility criteria for membership on F&O segment has been mentioned in Chapter 4 Secondary Market – Trading. At the end of September 2010, there were 1295 and 1196 registered members in the CM and F&O segment respectively.</td></tr>
<tr><td>Contracts available</td><td>• Index futures and index options contracts on NSE based on Nifty 50 Index, CNX IT Index, Bank Nifty Index and Nifty Midcap 50.<br>• Stock Futures and options, based on 223 individual securities.</td></tr>
<tr><td>Charges</td><td>Transaction charges payable to the exchange by the trading member for the trades executed by him on the F&O segment are fixed at ₹ 2 per lakh of turnover (0.002%) subject to a minimum of ₹ 1,00,000 per year. The transactions in the options sub-segment, however, the transaction charges are levied on the premium value at the rate of 0.05% (each side) instead of on the strike price as levied earlier.<br>NSE has reduced the transaction charges for trades done in the Futures segment from its present level to a slab based structure as given below w.e.f. October 1st, 2009.<br>
<table>
<tr><th>Total Traded Value in a Month</th><th>Revised Transaction Charges (₹ per lakh of Traded Value)</th></tr>
<tr><td>Up to First ₹ 2500 cores</td><td>₹ 1.90 each side</td></tr>
<tr><td>More than ₹ 2500 crores up to ₹ 7500 crores (on incremental volume)</td><td>₹ 1.85 each side</td></tr>
<tr><td>More than ₹ 7500 crores up to ₹ 15000 crores (on incremental volume)</td><td>₹ 1.80 each side</td></tr>
<tr><td>Exceeding ₹15000 crores (on incremental volume)</td><td>₹ 1.75 each side</td></tr>
</table></td></tr>
</table>

*Contd.*

*Contd.*

*Securities Transaction Tax*

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, 2008.

| Taxable securities transaction | Rate (%) | Taxable Value | Payable by |
|---|---|---|---|
| Sale of an option in securities | 0.017 | Option premium | Seller |
| Sale of an option in securities, where option is exercised | 0.125 | Settlement Price | Purchaser |
| Sale of a futures in securities | 0.017 | Price at which such 'futures' is traded | Seller |

Value of taxable securities transaction relating to an "option in securities" shall be the option premium, in case of sale of an option in securities. Value of taxable securities transaction relating to an "option in securities" will be the settlement price, in case of sale of an option in securities, where option is exercised.

**Contribution to Investor Protection Fund**

The trading members contribute to Investor Protection Fund of F&O segment at the rate of Re.1/- per ₹ 100 crore of the traded value (each side) in case of Futures segment and ₹1/- per ₹ 100 crore of the premium amount (each side) in case of Options segment.

**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.
- Index as well as stock options and futures are cash settled i.e. through exchange of cash.

## Risk Management Framework

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:

a. 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.

b. NSCCL charges an upfront initial margin for all the open positions of a Clearing Member. It specifies the initial margin requirements for each futures/options contract on a daily basis. It follows Value-at-Risk (VaR) based margining computed through SPAN. The CM in turn collects the initial margin from the Trading Members (TMs) and their respective clients.

c. The open positions of the members are marked to market based on contract settlement price for each contract at the end of the day. The difference is settled in cash on a T+1 basis.

d. 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 effective deposits. The on-line position monitoring system generates alert messages whenever a CM reaches 70 %, 80 %, 90 % and a disablement message at 100 % of the limit. NSCCL monitors the CMs for Initial Margin violation, Exposure margin violation, while TMs are monitored for Initial Margin violation and position limit violation.

e. 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 limits for the TM clearing and settling through him. NSCCL assists the CM to monitor the intra-day limits set up by a CM and whenever a TM exceeds the limits, it stops that particular TM from further trading.

f. A member is alerted of his position to enable him to adjust his exposure or bring in additional capital. Margin violations result in disablement of trading facility for all TMs of a CM in case of a violation by the CM.

g. A separate settlement guarantee fund for this segment has been created out of deposit 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®[1] (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

### A. Eligibility Criteria for stock selection

The eligibility of a stock / index for trading in Derivatives segment is based upon the criteria laid down by SEBI through various circulars issued from time to time. Based on SEBI guidelines and as a surveillance measure, following criteria has been adopted by NSE for selecting stocks and indices on which Futures & Options contracts would be introduced.

#### 1. Eligibility criteria of stocks

- The stock are to be chosen from amongst the top 500 stocks in terms of average daily market capitalization 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 should be not less than ₹ 5 lakhs. 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 (MWPL) in the stock should not be less than ₹ 100 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 MWPL of open position (in terms of the number of underlying stock) on futures and option contracts on a particular underlying stock shall be 20% of the number of shares held by non-promoters in the relevant underlying security i.e. free-float holding.

#### Continued Eligibility

For an existing F&O stock, the continued eligibility criteria is that market wide position limit in the stock shall not be less than ₹ 60 crores and stock's median quarter-sigma order size over the last six months shall not be less than ₹ 2 lakhs. If an existing security fails to meet the eligibility criteria for three consecutive months, then no fresh month contract shall be issued on that security. However, the existing unexpired contracts may be permitted to trade till expiry and new strikes may also be introduced in the existing contract months. However, the existing unexpired contracts may be permitted to trade till expiry and new strikes may also be introduced in the existing contract months. Further, once the stock is excluded from the F&O list, it shall not be considered for re-inclusion for a period of one year.

#### Re-introduction of dropped stocks

- A stock which is dropped from derivatives trading may become eligible once again. In such instances, the stock is required to fulfill the eligibility criteria for three consecutive months to be re-introduced for derivatives trading.

#### Eligibility criteria of stocks for derivatives trading especially on account of corporate restructuring

The eligibility criteria of stocks for derivatives trading on account of corporate restructuring are as under:

All the following conditions should 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

[1] SPAN ® is a registered trademark of the Chicago Mercantile Exchange (CME) used here under license.

post restructured company/(s)'s (as the case may be) stock (herein referred to as post restructured company) in the underlying market:

a. the Futures and options contracts on the stock of the original (pre restructure) company were traded on any exchange prior to its restructuring;

b. The pre restructured company had a market capitalisation of at least ₹ 1000 crores prior to its restructuring;

c. 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

d. 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 takes 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.

a) 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.

b) 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.

### 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.
- 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.

## B. Margins Requirements

As pointed out above, one of the critical components of risk containment mechanism for F&O segment is the margining system. This is explained below:

- **Initial margin**: Margin in the F&O segment is computed by NSCCL up to 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 based on the margins computed by NSE-SPAN. A CM is required to ensure collection of adequate initial margin from his TMs up-front. The TM is required to collect adequate initial margins up-front 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.

- **Exposure margins**: Clearing members are subject to exposure margins in addition to initial margins.
- **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.

### C. Exposure Monitoring and Position Limit

Another component of the risk management framework for derivatives segment is the stipulation of exposure limits and position limits on trading in different categories of contracts by market participants. These are summarized below:

| | Index Options | Index Futures | Stock Options | Stock Futures |
|---|---|---|---|---|
| Exposure Limit | 33.33 times the liquid net-worth of the member. Liquid net-worth is the total liquid assets deposited with the Exchange/ Clearing Corporation towards initial margin and the capital adequacy, LESS initial margin applicable to the total gross position at any given point of time of all trades cleared through the clearing member. | 33.33 times the liquid net-worth of the member. | Higher of 5% or 1.5 sigma of the notional value of gross open position. | Higher of 5% or 1.5 sigma of the notional value of gross open position. |
| Client Level | The gross open position for each client, across all the derivative contracts on an underlying, should not exceed 1% of 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. | | | |
| Trading Member Level | The trading member position limits in equity index option contracts is higher of ₹ 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. | The trading member position limits in equity index futures contracts is higher of ₹500 crore or 15% of the total open interest in the market in equity index futures contracts. This limit is applicable on open positions in all futures contracts on a particular underlying index. | • For stocks having applicable market-wide position limit (MWPL) of ₹ 500 crores or more, the combined futures and options position limit is 20% of applicable MWPL or ₹ 300 crores, whichever is lower and within which stock futures position cannot exceed 10% of applicable MWPL or ₹ 150 crores, whichever is lower.<br>• For stocks having applicable MWPL less than ₹ 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 ₹ 50 crore whichever is lower. | |

*Contd.*

*Contd.*

| | | | |
|---|---|---|---|
| Market wide | | | 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 should be 20% of the number of shares held by non-promoters in the relevant underlying security i.e. free–float holding. This limit is applicable on all open positions in all futures and option contracts on a particular underlying stock. |

**Position limits for FIIs, Mutual Funds:**

| Index Options | Index Futures | Stock Options | Stock Futures |
|---|---|---|---|
| ₹ 500 Crore 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. | ₹ 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. | • For stocks having applicable market-wide position limit (MWPL) of ₹ 500 crores or more, the combined futures and options position limit is 20% of applicable MWPL or ₹ 300 crores, whichever is lower and within which stock futures position cannot exceed 10% of applicable MWPL or ₹150 crores, whichever is lower. | |
| In addition to the above, FIIs & MFs can take exposure in equity index derivatives subject to the following limits:<br>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.<br>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. | | • For stocks having applicable market-wide position limit (MWPL) less than ₹ 500 crores, the combined futures and options position limit is 20% of applicable MWPL and futures position cannot exceed 20% of applicable MWPL or ₹ 50 crore whichever is lower. | |

## 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 recognising 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:

- Underlying market price.
- Volatility (variability) of underlying instrument, and
- Time to expiration.

As these factors change, the value of options maintained within a 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. It then sets the margin requirement to cover this one-day loss.

The complex calculations (e.g. the pricing of options) in SPAN are executed by NSCCL. The results of these calculations are called risk arrays. Risk arrays, and other necessary data inputs 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 a complex option pricing calculation, which is performed by NSCCL. SPAN has the ability to estimate risk for combined futures and options portfolios, and also re-value the same under various scenarios of changing market conditions.

NSCCL generates six risk parameter files for a day taking into account price and volatilities at various time intervals and are provided on the website of the Exchange.

## Market Design for Currency Futures

The contract specification for US Dollars – Indian Rupee (USDINR), Euro – Indian Rupee (EURINR), Pound – Indian Rupee (GBPINR) and Japanese Yen – Indian Rupee (JYPINR) is summarized in the table below.

| Symbol | USDINR | EURINR | GBPINR | JPYINR |
|---|---|---|---|---|
| **Market Type** | Normal | Normal | Normal | Normal |
| **Instrument Type** | FUTCUR | FUTCUR | FUTCUR | FUTCUR |
| **Unit of trading** | 1 - 1 unit denotes 1000 USD. | 1 - 1 unit denotes 1000 EURO. | 1 - 1 unit denotes 1000 POUND STERLING. | 1 - 1 unit denotes 100000 JAPANESE YEN. |
| **Underlying / Order Quotation** | The exchange rate in Indian Rupees for US Dollars | The exchange rate in Indian Rupees for Euro. | The exchange rate in Indian Rupees for Pound Sterling. | The exchange rate in Indian Rupees for 100 Japanese Yen. |
| **Tick size** | 0.25 paise or INR 0.0025 | | | |
| **Trading hours** | Monday to Friday<br>9:00 a.m. to 5:00 p.m. | | | |
| **Contract trading cycle** | 12 month trading cycle. | | | |
| **Last trading day** | Two working days prior to the last business day of the expiry month at 12 noon. | | | |
| **Final settlement day** | Last working day (excluding Saturdays) of the expiry month. The last working day will be the same as that for Interbank Settlements in Mumbai. | | | |
| **Quantity Freeze** | 10,001 or greater | | | |
| **Base price** | Theoretical price on the 1st day of the contract.<br>On all other days, Daily Settlement Price (DSP) of the contract. | Theoretical price on the 1st day of the contract.<br>On all other days, DSP of the contract. | Theoretical price on the 1st day of the contract.<br>On all other days, DSP of the contract. | Theoretical price on the 1st day of the contract.<br>On all other days, DSP of the contract. |

*Contd.*

*Contd.*

| Symbol | | USDINR | EURINR | GBPINR | JPYINR |
|---|---|---|---|---|---|
| **Price operating range** | **Tenure up to 6 months** | +/-3 % of base price. | | | |
| | **Tenure greater than 6 months** | +/- 5% of base price. | | | |
| **Position limits** | **Clients** | higher of 6% of total open interest or USD 10 million | higher of 6% of total open interest or EURO 5 million | higher of 6% of total open interest or GBP 5 million | higher of 6% of total open interest or JPY 200 million |
| | **Trading Members** | higher of 15% of the total open interest or USD 50 million | higher of 15% of the total open interest or EURO 25 million | higher of 15% of the total open interest or GBP 25 million | higher of 15% of the total open interest or JPY 1000 million |
| | **Banks** | higher of 15% of the total open interest or USD 100 million | higher of 15% of the total open interest or EURO 50 million | higher of 15% of the total open interest or GBP 50 million | higher of 15% of the total open interest or JPY 2000 million |
| **Initial margin** | | SPAN Based Margin | | | |
| **Extreme loss margin** | | 1% of MTM value of gross open position | 0.3% of MTM value of gross open position | 0.5% of MTM value of gross open position | 0.7% of MTM value of gross open position |
| **Calendar spreads** | | ₹ 400 for spread of 1 month | ₹ 700 for spread of 1 month | ₹ 1500 for spread of 1 month | ₹ 600 for spread of 1 month |
| | | ₹ 500 for spread of 2 months | ₹ 1000 for spread of 2 months | ₹ 1800 for spread of 2 months | ₹ 1000 for spread of 2 months |
| | | ₹ 800 for spread of 3 months | ₹1500 for spread of 3 months and more | ₹ 2000 for spread of 3 months and more | ₹ 1500 for spread of 3 months and more |
| | | ₹ 1000 for spread of 4 months and more | | | |
| **Settlement** | | **Daily settlement** : T + 1 | | | |
| | | **Final settlement** : T + 2 | | | |
| **Mode of settlement** | | Cash settled in Indian Rupees | | | |
| **Daily settlement price (DSP)** | | Calculated on the basis of the last half an hour weighted average price. | | | |
| **Final settlement price (FSP)** | | RBI reference rate | RBI reference rate | Exchange rate published by RBI in its Press Release captioned RBI reference Rate for US$ and Euro | Exchange rate published by RBI in its Press Release captioned RBI reference Rate for US$ and Euro |

Currency derivatives have been launched on the NSE in August, 2008. The market design, including the risk management framework for this new product is summarized below:

### Eligibility criteria

The following entities are eligible to apply for membership subject to the regulatory norms and provisions of SEBI and as provided in the Rules, Regulations, Byelaws and Circulars of the Exchange –

a. Individuals;

b. Partnership Firms registered under the Indian Partnership Act, 1932;

c. Corporations, Companies or Institutions or subsidiaries of such Corporations, Companies or Institutions set up for providing financial services;

d. Such other person as may be permitted under the Securities Contracts (Regulation) Rules 1957.

*Professional Clearing Member (PCM)*

The following persons are eligible to become PCMs of NSCCL for Currency Futures Derivatives provided they fulfill the prescribed criteria:

a. SEBI Registered Custodians; and

b. Banks recognised by NSEIL/NSCCL for issuance of bank guarantees

Banks authorized by the Reserve Bank of India under section 10 of the Foreign Exchange Management Act, 1999 as 'AD Category - I bank' are permitted to become trading and clearing members of the currency futures market of the recognized stock exchanges, on their own account and on behalf of their clients, subject to fulfilling the following minimum prudential requirements:

a. Minimum net worth of ₹ 500 crores.

b. Minimum CRAR of 10 per cent.

c. Net NPA should not exceed 3 per cent.

d. Made net profit for last 3 years.

The AD Category - I banks which fulfill the prudential requirements are required to lay down detailed guidelines with the approval of their Boards for trading and clearing of currency futures contracts and management of risks.

AD Category - I banks which do not meet the above minimum prudential requirements and AD Category - I banks which are Urban Co-operative banks or State Co-operative banks can participate in the currency futures market only as clients, subject to approval therefore from the respective regulatory Departments of the Reserve Bank of India.

#### Other applicable eligibility criteria

a. Where the applicant is a partnership firm, the applicant shall identify a Dominant Promoter Group as per the norms of the Exchange at the time of making the application. Any change in the shareholding of the partnership firm including that of the said Dominant Promoter Group or their shareholding interest shall be effected only with the prior permission of NSEIL/SEBI.

b. At any point of time, the applicant has to ensure that at least individual/one partner/one designated director/ compliance officer would have a valid NCFM certification as per the requirements of the Exchange. The above norm would be a continued admittance norm for membership of the Exchange.

c. An applicant must be in a position to pay the membership and other fees, deposits etc, as applicable at the time of admission within three months of intimation to him of admission as a Trading Member or as per the time schedule specified by the Exchange.

d. The trading members and sales persons in the currency futures market must have passed a certification programme which is considered adequate by SEBI.

e. FIIs and NRIs are not allowed to trade in currency futures market.

f. Strict enforcement of "Know your customer" rule and it requires that every client shall be registered with the derivatives broker. The members of the derivatives segment are also required to make their clients aware of the risks involved in derivatives trading by issuing to the client the Risk Disclosure Document and obtain a copy of the same duly signed by the client.

g. The Exchange may specify such standards for investor service and infrastructure with regard to any category of applicants as it may deem necessary, from time to time.

## Position limits

Clearing members are subject to the following position limits:

| Currency Pairs | Client level position limits | Non-bank trading member level limits | Bank trading member level limits |
|---|---|---|---|
| USDINR | higher of 6% of total open interest or USD 10 million | higher of 15% of the total open interest or USD 50 million | higher of 15% of the total open interest or USD 100 million |
| EURINR | higher of 6% of total open interest or EUR 5 million | higher of 15% of the total open interest or EUR 25 million | higher of 15% of the total open interest or EUR 50 million |
| GBPINR | higher of 6% of total open interest or GBP 5 million | higher of 15% of the total open interest or GBP 25 million | higher of 15% of the total open interest or GBP 50 million |
| JPYINR | higher of 6% of total open interest or JPY 200 million | higher of 15% of the total open interest or JPY 1000 million | higher of 15% of the total open interest or JPY 2000 million |

## Margins

NSCCL has developed a comprehensive risk containment mechanism for the Currency derivatives segment. The most critical component of a risk containment mechanism for NSCCL is the online position monitoring and margining system. The actual margining and position monitoring is done on-line, on an intra-day basis. NSCCL uses the SPAN® system for the purpose of margining, which is a portfolio based system.

- *Initial Margins*: NSCCL collects initial margin up-front for all the open positions of a CM based on the margins computed by NSCCL-SPAN®. A CM is in turn required to collect the initial margin from the TMs and his respective clients. Similarly, a TM is required to collect upfront margins from his clients. Initial margin requirements are based on 99% value at risk over a one day time horizon. However, in the case of futures contracts, where it may not be possible to collect mark to market settlement value, before the commencement of trading on the next day, the initial margin is computed over a two-day time horizon, applying the appropriate statistical formula.

- *Extreme Loss margins*: In addition to initial margins, clearing members are subject to extreme loss margins. The applicable extreme loss margin on the mark to market value of the gross open positions is as follows or as may be specified by the relevant authority from time to time.

| USDINR | EURINR | GBPINR | JPYINR |
|---|---|---|---|
| 1% of the value of gross open position | 0.3% of the value of gross open position | 0.5% of the value of gross open position | 0.7% of the value of gross open position |

## Market Design for Interest Rate Futures

### Eligibility Criteria

The following entities are eligible to apply for membership subject to the regulatory norms and provisions of SEBI and as provided in the Rules, Regulations, Byelaws and Circulars of the Exchange:

- Existing members who are registered either in Currency Derivatives Segment or Futures & Options (F&O) Segment shall be eligible to trade in IRF, subject to meeting the Balance Sheet net worth requirement of ₹ 100 lakhs for Trading Membership and ₹ 1000 lakhs in Trading cum Clearing Membership.
- New members interested in participating in IRF would be required to get registered in Currency Derivatives Segment of the Exchange in order to trade in IRF.

The contract specifications of Interest Rate Futures are as follows:

| Symbol | 10YGS7 | |
|---|---|---|
| **Market Type** | Normal | |
| **Instrument Type** | FUTIRD | |
| **Unit of trading** | 1 lot - 1 lot is equal to notional bonds of FV ₹ 2 lacs | |
| **Underlying** | 10 Year Notional Coupon bearing Government of India (GOI) security. (Notional Coupon 7% with semi annual compounding.) | |
| **Tick size** | ₹ 0.0025 | |
| **Trading hours** | Monday to Friday<br>9:00 a.m. to 5:00 p.m. | |
| **Contract trading cycle** | Four fixed quarterly contracts for entire year ending March, June, September and December. | |
| **Last trading day** | Two business days prior to the last working day of the delivery/expiry month. | |
| **Quantity Freeze** | 1251 lots or greater | |
| **Base price** | Theoretical price of the 1st day of the contract. | |
| | On all other days, DSP of the contract. | |
| **Price operating range** | +/- 5% of the base price | |
| **Position limits** | **Clients** | **Trading Members** |
| | 6% of total open interest or ₹ 300 crores whichever is higher | 15% of the total open interest or ₹ 1000 crores whichever is higher |
| **Initial margin** | SPAN Based Margin | |
| **Extreme loss margin** | 0.3% of the value of the gross open positions of the futures contract. | |
| **Settlement** | **Daily settlement MTM**: T + 1 in cash | |
| | **Delivery settlement**: Last business day of the expiry month. | |
| **Daily settlement price** | Closing price or Theoretical price. | |
| **Delivery Settlement** | | |
| **Mode of settlement** | Daily Settlement in Cash | |
| **Deliverable Grade Securities** | GOI securities | |
| **Conversion Factor** | The conversion factor would be equal to the price of the deliverable security (per rupee of principal) on the first calendar day of the delivery month, to yield 7% with semiannual compounding | |
| **Invoice Price** | Daily Settlement price times a conversion factor + Accrued Interest | |
| **Delivery day** | Last business day of the expiry month | |
| **Intent to Deliver** | Two business days prior to the delivery settlement day. | |

## Clearing and Settlement

National Securities Clearing Corporation Limited (NSCCL) is the clearing and settlement agency for all deals executed in Interest Rate Futures. NSCCL acts as legal counter-party to all deals on Interest Rate Futures contract and guarantees settlement.

A Clearing Member (CM) of NSCCL has the responsibility of clearing and settlement of all deals executed by Trading Members (TM) on NSE, who clear and settle such deals through them. A multilateral netting procedure is adopted to determine the net settlement obligations (delivery/receipt positions) of the clearing members. Accordingly, a clearing member would have either pay-in or pay-out obligations for funds and securities separately.

For IRF, settlement is done at two levels: mark-to-market (MTM) settlement which is done on a daily basis and final settlement which happens on any day in the expiry month. Final settlement involves physical delivery of the bond can happen only the expiry dates.

Daily Mark-to-Mark Settlement: The positions in the futures contracts for each member are marked-to-market to the daily settlement price of the futures contracts at the end of each trade day. The profits/ losses are computed as the difference between the trade price or the previous day's settlement price and the current day's settlement price. The CMs who have suffered a loss are required to pay the mark-to-market loss amount to NSCCL which is passed on to the members who have made a profit. This is known as daily mark-to-market settlement.

Daily mark-to-market settlement in respect of admitted deals in Interest rate futures contracts is cash settled by debit/ credit of the clearing accounts of clearing members with the respective clearing bank.

Delivery Settlement: Trades in interest rate futures are physically settled by delivery of Govt. securities in the expiry month. The expiry month of the respective futures contract shall be the delivery month. The delivery settlement day of for Interest Rate Futures contract shall be last business day of the delivery month.

## Margins

Initial Margin: Initial margin is payable on all open positions of Clearing Members, up to client level, and on an upfront basis by Clearing Members in accordance with the margin computation mechanism and/or system. Initial Margin includes SPAN margins and such other additional margins. The minimum initial margin is 2.33% on the first day of Interest Rate Futures trading and 1.6% thereafter will be scaled up by look ahead period as may be specified by the Clearing Corporation from time to time.

Initial margin requirements are based on 99% value at risk over a one day time horizon. However, in the case of futures contracts, where it may not be possible to collect mark to market settlement, before the commencement of trading on the next day, the initial margin is computed over a two day time horizon by applying an appropriate statistical formula.

The risk parameters are updated 6 times in the day, based on the prices/yield at 11:00 a.m., 12:30 p.m., 2:00 p.m., 3:30 p.m., end of the day and beginning of the day. For the purpose of intra-day updation, the yield of the benchmark 10-Year security as published by FIMMDA, from the NDS Order Matching platform are used.

Extreme Loss Margin: Clearing members would be subjected to extreme loss margins in addition to initial margins. The applicable extreme loss margin would be 0.3% of the value of the gross open positions of the futures contract or as may be specified by the relevant authority from time to time.

Delivery margins: Once the positions are intended for delivery and allocation has been done, the following margins are levied:

- Margin equal to VaR on the futures contract on the invoice price plus 5% on the face value of the security to be delivered
- Mark to market loss based on the underlying closing price of the security intended for delivery.

The above margins are levied on both buyer and seller at a client level and aggregated at clearing member level. The margins are levied from the intention day and released on completion of the settlement.

Non-Intent Margins: In cases where the positions are open at end of last trading day and no intention to deliver has been received, the following margins are levied:

- Margin equal to VaR on the futures contract on the invoice price of the costliest to deliver security from the deliverable basket plus 5% on the face value of the open positions
- Mark to market loss based on the underlying closing price of the costliest to deliver security from the deliverable basket.

The above margins are levied on both buyer and seller at a client level and aggregated at clearing member level. The margins are levied from the last trading day till the day of receipt of intention to deliver, following which the margins on delivery positions are levied.

Imposition of additional margins: As a risk containment measure, the Clearing Corporation may require clearing members to make payment of additional margins as may be decided from time to time. This is in addition to the initial margin and extreme loss margin, which are or may have been imposed from time to time.

Settlement of contracts

- The contract will be settled by physical delivery of deliverable grade securities using the electronic book entry system of the existing Depositories, namely, National Securities Depositories Ltd. and Central Depository Services (India) Ltd. and Public Debt Office of the Reserve Bank.
- NSE has constituted a group of market participants to advise the Exchange/Clearing Corporation on the securities which may be included in the deliverable basket. Based on the recommendations of this group, it has been decided that GoI securities maturing at least 8 years but not more than 12 years from the first day of the delivery month with minimum total outstanding stock of ₹ 10,000 crore will be eligible deliverable grade securities.

Interest Rate Futures (RBI) Directions, 2009

The Reserve Bank of India (RBI) issued Interest Rate Futures (Reserve Bank) Directions, 2009, on August 28, 2009, covering the framework for trading of IRFs in recognized exchanges for persons dealing in the instrument. The highlights of the directions are:

- These directions define the Interest Rate futures product; list out the permitted instruments and features of the product.
- Foreign Institutional Investors, registered with Securities and Exchange Board of India, have been permitted to purchase or sell Interest Rate Futures subject to the condition that the total gross long (bought) position in cash and Interest Rate Futures markets taken together does not exceed their individual permissible limit for investment in government securities and the total gross short (sold) position, for the purpose of hedging only, does not exceed their long position in the government securities and in Interest Rate Futures at any point in time.
- No scheduled bank or such other agency falling under the regulatory purview of the Reserve Bank under the Reserve Bank of India Act, 1934, the Banking Regulation Act, 1949 or any other Act or instrument having the force of law is allowed to participate in the Interest Rate Futures market without the permission from the respective regulatory Department of the Reserve Bank.
- The agencies falling under the regulatory purview of any other regulator established by law are not allowed to participate in Interest Rate Futures market except with the permission of their respective regulators and participation of such agencies as members or clients will be in accordance with the guidelines issued by the regulator concerned.

## Market Outcome

### Trading Volumes

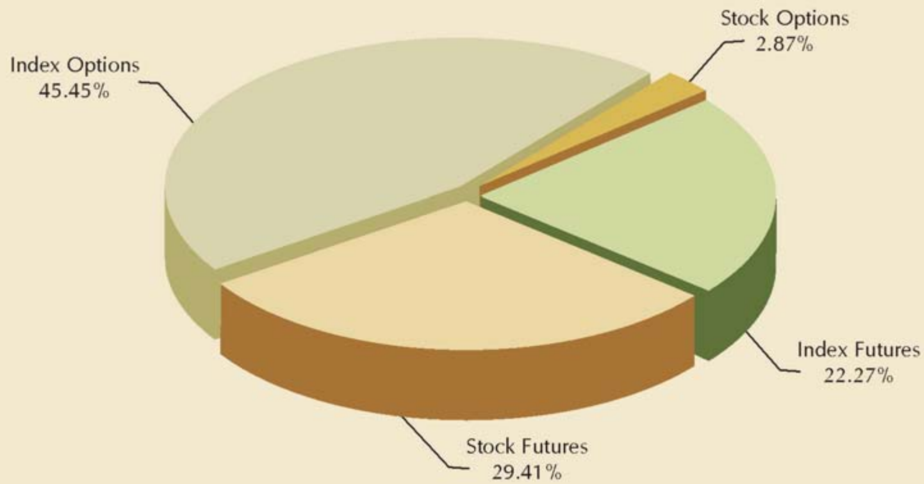
Following a tumultuous growth in turnover in 2008-09, NSE's derivatives market volume bounced back in 2009-10 with a staggering year-on-year growth of 81% (Table 6-5). NSE further strengthened its dominance in the derivatives segment in 2009-10 with a share of 99.998% of the total turnover in this segment. The share of BSE in the total derivative markets turnover fell from 0.11% in 2008-09 to 0.0013% in 2009-10. The total turnover of NSE in the derivative segment jumped by 50% during the first-half of 2010-11 compared to the corresponding period in the previous fiscal.

**Table 6-5: Trade Details of Derivatives Market**

| Month/Year | NSE | | | BSE | | | TOTAL | | |
|---|---|---|---|---|---|---|---|---|---|
| | No. of Contracts Traded | Turnover (₹ mn) | Turnover (US$ million) | No. of Contracts Traded | Turnover (₹ mn) | Turnover (US$ million) | No. of Contracts Traded | Turnover (₹ mn) | Turnover (US$ million) |
| 2003-04 | 56,886,776 | 21,306,492 | 491,046 | 382,258 | 124,520 | 2,870 | 57,269,034 | 21,431,012 | 493,916 |
| 2004-05 | 77,017,185 | 25,470,526 | 582,183 | 531,719 | 161,120 | 3,683 | 77,548,904 | 25,631,646 | 585,866 |
| 2005-06 | 157,619,271 | 48,242,504 | 1,081,428 | 103 | 60 | 1.34 | 157,619,374 | 48,242,564 | 1,081,429 |
| 2006-07 | 216,883,573 | 73,562,714 | 1,687,605 | 1,545,169 | 590,060 | 13,537 | 218,428,742 | 74,152,774 | 1,701,142 |
| 2007-08 | 425,013,200 | 130,904,779 | 3,275,076 | 7,453,371 | 2,423,080 | 60,622 | 432,466,571 | 133,327,859 | 3,335,698 |
| 2008-09 | 657,390,497 | 110,104,822 | 2,161,037 | 515,588 | 122,660 | 2,407 | 657,906,085 | 110,227,482 | 2,163,444 |
| Apr-09 | 56,210,317 | 11,433,625 | 253,293 | 113 | 20 | 0.44 | 56,210,430 | 11,433,645 | 253,293 |
| May-09 | 48,285,515 | 12,272,524 | 271,877 | 393 | 80 | 1.77 | 48,285,908 | 12,272,604 | 271,879 |
| Jun-09 | 52,408,197 | 15,319,804 | 339,384 | 5 | 0 | 0.00 | 52,408,202 | 15,319,804 | 339,384 |
| Jul-09 | 66,827,086 | 15,735,090 | 348,584 | 4 | 0.9 | 0.02 | 66,827,090 | 15,735,091 | 348,584 |
| Aug-09 | 59,670,387 | 14,736,460 | 326,461 | 1 | 0.2 | 0.00 | 59,670,388 | 14,736,460 | 326,461 |
| Sep-09 | 52,501,332 | 13,883,780 | 307,572 | 1 | 0.3 | 0.01 | 52,501,333 | 13,883,780 | 307,572 |
| Oct-09 | 55,709,794 | 15,104,180 | 334,607 | 0 | 0 | 0.00 | 55,709,794 | 15,104,180 | 334,607 |
| Nov-09 | 62,765,075 | 16,618,160 | 368,147 | 1 | 0.3 | 0.01 | 62,765,076 | 16,618,160 | 368,147 |
| Dec-09 | 55,424,003 | 15,249,820 | 337,834 | 147 | 38.3 | 0.85 | 55,424,150 | 15,249,858 | 337,835 |
| Jan-10 | 53,101,821 | 14,902,970 | 330,150 | 7935 | 2097.1 | 46.46 | 53,109,756 | 14,905,067 | 330,196 |
| Feb-10 | 60,429,963 | 15,698,770 | 347,780 | 399 | 96.7 | 2.14 | 60,430,362 | 15,698,867 | 347,782 |
| Mar-10 | 55,960,432 | 15,681,480 | 347,397 | 29 | 7.5 | 0.17 | 55,960,461 | 15,681,488 | 347,397 |
| **2009-10** | **679,293,922** | **176,636,663** | **3,913,085** | **9028** | **2341.3** | **51.867523** | **679,302,950** | **176,639,004** | **3,913,137** |
| Apr-10 | 58,230,570 | 16,716,200 | 372,133 | 54 | 10 | 0.22 | 58,230,624 | 16,716,210 | 372,133 |
| May-10 | 80,960,515 | 21,244,960 | 472,951 | 158 | 40 | 0.89 | 80,960,673 | 21,245,000 | 472,952 |
| Jun-10 | 77,078,089 | 20,355,990 | 453,161 | 93 | 20 | 0.45 | 77,078,182 | 20,356,010 | 453,161 |
| Jul-10 | 67,756,807 | 18,299,100 | 407,371 | 40 | 10 | 0.22 | 67,756,847 | 18,299,110 | 407,371 |
| Aug-10 | 73,712,025 | 20,537,280 | 457,197 | 114 | 30 | 0.67 | 73,712,139 | 20,537,310 | 457,197 |
| Sep-10 | 93,089,649 | 27,363,920 | 609,170 | 122 | 40 | 0.89 | 93,089,771 | 27,363,960 | 609,171 |
| **(April-September 2010)** | **450,827,655** | **124,517,450** | **2,771,982** | **581** | **150** | **3** | **450,828,236** | **124,517,600** | **2,771,986** |

*Source : SEBI*

Chart 6-1: Product-wise distribution of turnover of F&O segment of NSE, 2009-10




Index options was the clear leader in the product-wise turnover of futures and options segment in NSE during 2009-10 (Table 6-6 & Chart 6-1). The turnover in the index options category was 45.45% of the total turnover in the F&O segment of NSE, followed by stock futures and index futures which saw a y-o-y growth of 29.41% and 22.27% respectively. This trend continued in the first-half of 2010-11 with Index options constituting around 58% of the total turnover in this segment. The turnover of index options zoomed by 111% during the first-half of 2010-11 compared to the corresponding period in the previous fiscal.

## Open Interest

Open interest is the total number of open contracts on a security, that is, the number of future contracts or options contracts that have not been exercised, expired or fulfilled by delivery. Hence, we can say that the open interest position at the end of each day represents the net increase or decrease in the number of contracts for that day. 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 8,84,082 contracts on April 15, 2009. The daily open interest for near month index futures at NSE is depicted in Chart 6-2.

### 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 cost of carry is the cost of financing minus the dividend returns. Assuming zero dividends, the only relevant factor is the cost of financing.

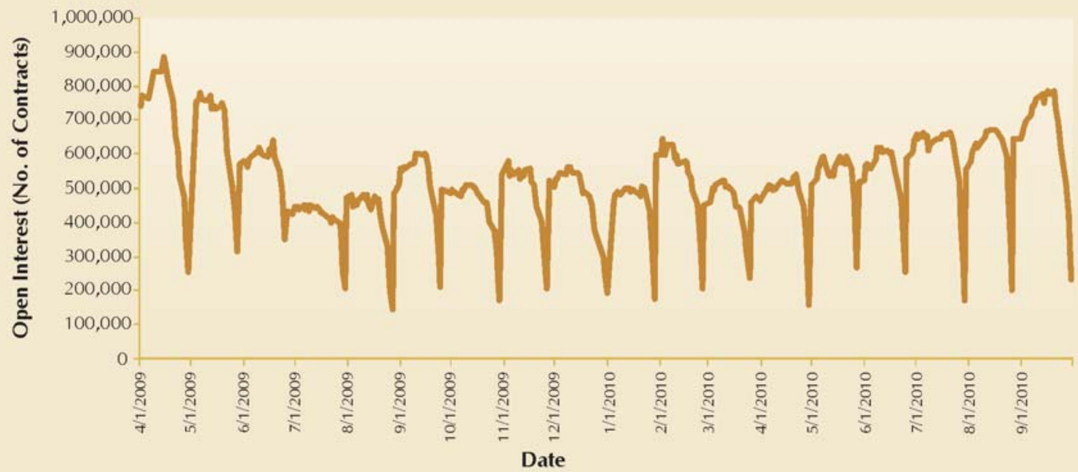
Implied interest rate is the percentage difference between the future value of an index and the spot value, annualized on the basis of the number of days before the expiry of the contract. Cost of carry or implied interest rate plays an important role in determining the price differential between the spot and the futures market. The degree of relative costliness of a future rate can be assessed by comparing the implied rate with the spot rate. 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.

**Table 6-6: Product wise turnover on the derivatives segment of NSE**

| Year | Index Futures | | | Stock Futures | | | Index Options | | | Stock Options | | | Total | | Average Daily Turnover (₹ mn.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. of contracts | Turnover (₹ mn.) | % share in total turnover | No. of contracts | Turnover (₹ mn.) | % share in total turnover | No. of contracts | Notional Turnover (₹mn.) | % share in total turnover | No. of contracts | Notional Turnover (₹ mn) | % share in total turnover | No. of contracts | Turnover (₹ mn) | |
| 2004-05 | 21,635,449 | 7,721,470 | 30.32 | 47,043,066 | 14,840,560 | 58.27 | 3,293,558 | 1,219,430 | 4.79 | 5,045,112 | 1,688,360 | 6.63 | 77,017,185 | 25,469,820 | 101,070 |
| 2005-06 | 58,537,886 | 15,137,550 | 31.38 | 80,905,493 | 27,916,970 | 57.87 | 12,935,116 | 3,384,690 | 7.02 | 5,240,776 | 1,802,530 | 3.74 | 157,619,271 | 48,241,740 | 192,200 |
| 2006-07 | 81,487,424 | 25,395,740 | 34.52 | 104,955,401 | 38,309,670 | 52.08 | 25,157,438 | 7,919,060 | 10.77 | 5,283,310 | 1,937,950 | 2.63 | 216,883,573 | 73,562,420 | 295,430 |
| 2007-08 | 156,598,579 | 38,206,673 | 29.19 | 203,587,952 | 75,485,632 | 57.66 | 55,366,038 | 13,621,109 | 10.41 | 9,460,631 | 3,591,366 | 2.74 | 425,013,200 | 130,904,779 | 521,533 |
| 2008-09 | 210,428,103 | 35,701,114 | 32.42 | 221,577,980 | 34,796,421 | 31.60 | 212,088,444 | 37,315,018 | 33.89 | 13,295,970 | 2,292,268 | 2.08 | 657,390,497 | 110,104,822 | 453,106 |
| Apr-09 | 18,662,382 | 3,017,641 | 26.39 | 9,858,642 | 3,563,831 | 31.17 | 26,881,970 | 4,537,882 | 39.69 | 807,323 | 314,271 | 2.75 | 56,210,317 | 11,433,625 | 672,566 |
| May-09 | 16,617,516 | 3,174,152 | 25.86 | 9,528,178 | 4,481,548 | 36.52 | 21,495,541 | 4,305,147 | 35.08 | 644,280 | 311,679 | 2.54 | 48,285,515 | 12,272,525 | 613,626 |
| Jun-09 | 16,207,959 | 3,469,341 | 22.65 | 11,127,649 | 5,896,575 | 38.49 | 24,189,642 | 5,456,433 | 35.62 | 882,947 | 497,455 | 3.25 | 52,408,197 | 15,319,804 | 696,355 |
| Jul-09 | 18,271,805 | 3,829,237 | 24.34 | 15,500,535 | 4,506,318 | 28.64 | 31,786,743 | 7,012,472 | 44.57 | 1,268,003 | 387,065 | 2.46 | 66,827,086 | 15,735,092 | 684,134 |
| Aug-09 | 16,892,217 | 3,663,120 | 24.86 | 13,113,118 | 4,123,625 | 27.98 | 28,535,857 | 6,587,569 | 44.70 | 1,129,195 | 362,144 | 2.46 | 59,670,387 | 14,736,457 | 701,736 |
| Sep-09 | 13,032,242 | 3,024,249 | 21.78 | 13,157,621 | 4,341,193 | 31.27 | 25,074,041 | 6,090,756 | 43.87 | 1,237,428 | 427,582 | 3.08 | 52,501,332 | 13,883,780 | 694,189 |
| Oct-09 | 13,615,447 | 3,296,097 | 21.82 | 14,044,526 | 4,658,293 | 30.84 | 26,671,252 | 6,695,910 | 44.33 | 1,378,569 | 453,873 | 3.00 | 55,709,794 | 15,104,174 | 755,209 |
| Nov-09 | 15,178,552 | 3,635,228 | 21.88 | 13,260,546 | 4,382,198 | 26.37 | 32,965,274 | 8,164,078 | 49.13 | 1,360,703 | 436,655 | 2.63 | 62,765,075 | 16,618,160 | 830,908 |
| Dec-09 | 13,337,833 | 3,294,962 | 21.61 | 11,307,332 | 3,959,538 | 25.96 | 29,525,940 | 7,566,771 | 49.62 | 1,252,898 | 428,553 | 2.81 | 55,424,003 | 15,249,823 | 726,182 |
| Jan-10 | 12,056,359 | 2,988,492 | 20.05 | 12,546,679 | 4,441,338 | 29.80 | 27,084,605 | 6,958,600 | 46.69 | 1,414,178 | 514,538 | 3.45 | 53,101,821 | 14,902,968 | 784,367 |
| Feb-10 | 13,891,843 | 3,268,708 | 20.82 | 10,725,789 | 3,544,846 | 22.58 | 34,588,704 | 8,472,358 | 53.97 | 1,223,627 | 412,853 | 2.63 | 60,429,963 | 15,698,765 | 784,938 |
| Mar-10 | 10,542,734 | 2,682,661 | 17.11 | 11,420,625 | 4,053,164 | 25.85 | 32,579,954 | 8,431,667 | 53.77 | 1,417,119 | 513,983 | 3.28 | 55,960,432 | 15,681,475 | 746,737 |
| **2009-10** | **178,306,889** | **39,343,887** | **22.27** | **145,591,240** | **51,952,466** | **29.41** | **341,379,523** | **80,279,642** | **45.45** | **14,016,270** | **5,060,652** | **2.87** | **679,293,922** | **176,636,647** | **723,921** |
| Apr-10 | 10,785,388 | 2,795,723 | 16.72 | 11,418,975 | 4,098,443 | 24.52 | 34,076,343 | 9,054,723 | 54.17 | 1,949,864 | 767,311 | 4.59 | 58,230,570 | 16,716,200 | 835,810 |
| May-10 | 16,843,664 | 3,956,127 | 18.62 | 13,886,580 | 4,315,930 | 20.32 | 47,891,402 | 12,174,576 | 57.31 | 2,338,869 | 798,324 | 3.76 | 80,960,515 | 21,244,957 | 1,011,665 |
| Jun-10 | 15,434,326 | 3,722,657 | 18.29 | 14,156,191 | 4,218,432 | 20.72 | 45,209,562 | 11,699,430 | 57.47 | 2,278,010 | 715,472 | 3.51 | 77,078,089 | 20,355,990 | 925,272 |
| Jul-10 | 11,530,614 | 2,894,232 | 15.82 | 14,877,996 | 4,234,219 | 23.14 | 38,889,013 | 10,433,544 | 57.02 | 2,459,184 | 737,105 | 4.03 | 67,756,807 | 18,299,100 | 831,777 |
| Aug-10 | 11,566,700 | 2,991,305 | 14.57 | 16,620,194 | 4,962,667 | 24.16 | 42,436,984 | 11,574,656 | 56.36 | 3,088,147 | 1,008,648 | 4.91 | 73,712,025 | 20,537,276 | 933,513 |
| Sep-10 | 13,736,522 | 3,838,716 | 14.03 | 17,865,765 | 5,555,810 | 20.30 | 58,164,047 | 16,884,692 | 61.70 | 3,323,315 | 1,084,701 | 3.96 | 93,089,649 | 27,363,918 | 1,303,044 |
| **(April-September 10)** | **79,897,214** | **20,198,760** | **16.22** | **88,825,701** | **27,385,501** | **21.99** | **266,667,351** | **71,821,621** | **57.68** | **15,437,389** | **5,111,560** | **4.11** | **450,827,655** | **124,517,441** | **972,793** |

*Source : NSE*

Chart 6-2: Daily Open Interest for Near Month Nifty Futures for April 2009-September 2010




Daily implied interest rate for Nifty 50 futures from April 2009 to September 2010 is presented in chart 6-3. The implied interest rate for near month Nifty 50 futures as on last trading day of the month is presented in table 6-7. The futures prices are available for different contracts at different points of time. Chart 6-4 presents Nifty 50 futures close prices for the near month contracts, and the spot Nifty 50 close values from April 2009 to September 2010. The difference between the future and the spot price is called *basis*. As the time to expiration approaches, the basis gets reduced.

Chart 6-3: Implied Interest Rate for Near Month Nifty Futures (April 1, 2009 to September 30, 2010)

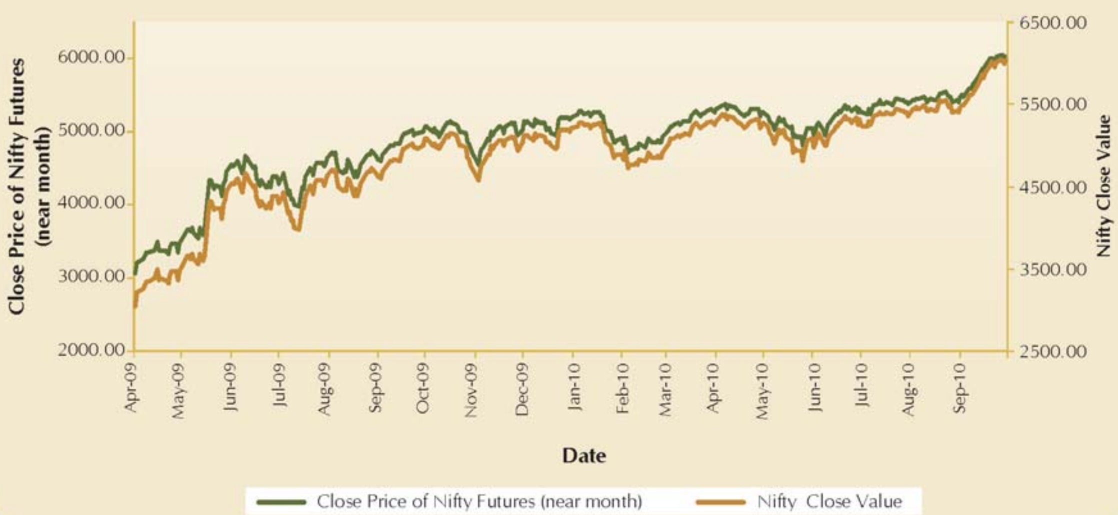


Chart 6-4: Nifty Futures and Spot Price (April 2009-September 2010)

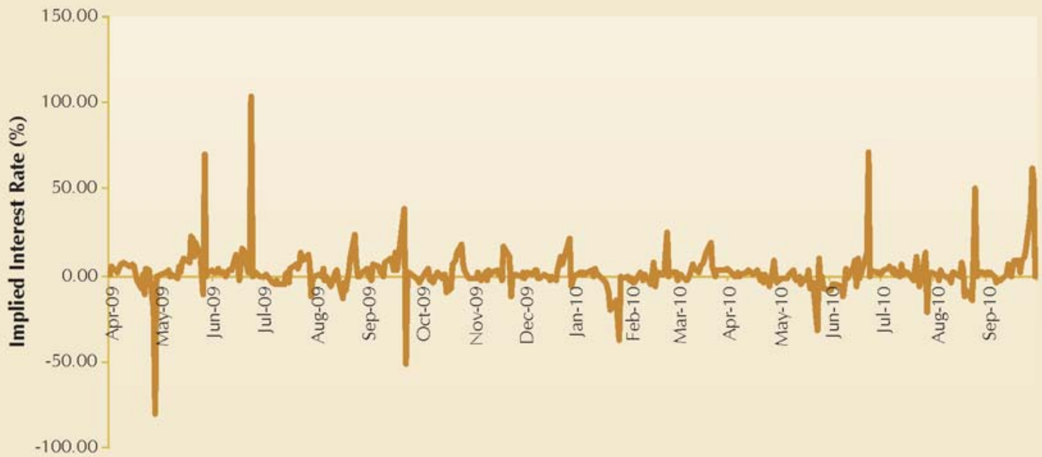



Table 6-7: Implied Interest Rate for Near Month Nifty Futures (April 2009 - September 2010)

| Month | Expiry Date of near month Contract | Closing Future Price | Closing Spot Price | Implied Interest Rate (%) |
|---|---|---|---|---|
| Apr-09 | 29-Apr-2009 | 3473.90 | 3473.95 | 1.81 |
| May-09 | 28-May-2009 | 4453.50 | 4448.95 | 1.38 |
| Jun-09 | 25-Jun-2009 | 4289.75 | 4291.10 | -0.38 |
| Jul-09 | 30-Jul-2009 | 4636.05 | 4636.45 | -0.12 |
| Aug-09 | 27-Aug-2009 | 4673.40 | 4662.10 | 3.68 |
| Sep-09 | 24-Sep-2009 | 5073.55 | 5083.95 | -2.58 |
| Oct-09 | 29-Oct-2009 | 4707.75 | 4711.70 | -1.13 |
| Nov-09 | 26-Nov-2009 | 5029.90 | 5032.70 | -0.66 |
| Dec-09 | 31-Dec-2009 | 5202.30 | 5201.05 | 2.21 |
| Jan-10 | 28-Jan-2010 | 4875.65 | 4882.05 | -1.77 |
| Feb-10 | 25-Feb-2010 | 4930.35 | 4922.30 | 2.21 |
| **Mar-10** | **25-Mar-2010** | **5261.60** | **5249.10** | **2.99** |
| Apr-10 | 29-Apr-2010 | 5262.80 | 5278.00 | -3.90 |
| May-10 | 27-May-2010 | 5056.20 | 5086.30 | -9.03 |
| Jun-10 | 24-Jun-2010 | 5316.25 | 5312.50 | 0.89 |
| Jul-10 | 29-Jul-2010 | 5374.30 | 5367.60 | 1.69 |
| Aug-10 | 26-Aug-2010 | 5403.70 | 5402.40 | 0.29 |
| **Sep-10** | **30-Sep-2010** | **6030.00** | **6029.95** | **7.22** |

*Source: NSE.*

*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*

## 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, and 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 expiry of option. If volatility is high, then the options 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 2009-10, the cash settlement amounted to ₹ 7,69,428 million, compared to that of ₹ 9,18,400 million in 2008-09. During the first-half of 2010-11, the cash settlement amounted to ₹ 3,42,031 million. The detail of the settlement statistics in the F&O segment is presented in table 6-8.

**Table 6-8: Settlement Statistics in F&O Segment**

| Month/Year | (In ₹ mn) | | | | | (In US $ mn) |
|---|---|---|---|---|---|---|
| | Index/Stock Futures | | Index/Stock Options | | Total | Total |
| | MTM Settlement | Final Settlement | Premium Settlement | Exercise Settlement | | |
| 2006-07 | 613,137 | 7,975 | 31,944 | 11,888 | 664,945 | 15,255 |
| 2007-08 | 1,446,547 | 13,121 | 67,602 | 37,923 | 1,565,193 | 39,159 |
| 2008-09 | 751,936 | 14,983 | 109,605 | 41,876 | 918,400 | 18,026 |
| Apr-09 | 48,555 | 2,736 | 9,445 | 4,948 | 65,685 | 1,455 |
| May-09 | 78,178 | 1,412 | 12,892 | 10,689 | 103,171 | 2,286 |
| Jun-09 | 69,607 | 1,575 | 9,158 | 5,730 | 86,070 | 1,907 |
| Jul-09 | 61,088 | 1,086 | 10,659 | 2,178 | 75,011 | 1,662 |
| Aug-09 | 50,224 | 369 | 8,941 | 1,249 | 60,783 | 1,347 |
| Sep-09 | 32,433 | 658 | 8,482 | 2,141 | 43,713 | 968 |
| Oct-09 | 47,059 | 1,803 | 6,967 | 1,406 | 57,235 | 1,268 |
| Nov-09 | 53,129 | 1,486 | 8,703 | 1,739 | 65,057 | 1,441 |
| Dec-09 | 39,551 | 586 | 9,548 | 3,326 | 53,011 | 1,174 |
| Jan-10 | 47,590 | 1,076 | 7,622 | 1,889 | 58,177 | 1,289 |
| Feb-10 | 51,400 | 458 | 7,984 | 1,330 | 61,172 | 1,355 |
| Mar-10 | 27,743 | 708 | 9,711 | 2,183 | 40,345 | 894 |
| **2009-10** | **606,557** | **13,953** | **110,110** | **38,808** | **769,428** | **17,045** |
| Apr-10 | 32,951 | 831 | 7,950 | 1,050 | 42,781 | 952 |
| May-10 | 70,623 | 2,035 | 10,373 | 1,521 | 84,551 | 1,882 |
| Jun-10 | 51,166 | 477 | 9,448 | 2,005 | 63,096 | 1,405 |
| Jul-10 | 33,815 | 569 | 7,959 | 1,329 | 43,672 | 972 |
| Aug-10 | 34,664 | 492 | 9,323 | 1,272 | 45,751 | 1,019 |
| Sep-10 | 41,754 | 1,050 | 16,231 | 3,145 | 62,180 | 1,384 |
| **(April-September 2010)** | **264,973** | **5,453** | **61,284** | **10,322** | **342,031** | **7,614** |

*Source : NSE*

Table 6-9: Business Growth of Currency Futures

| Month/ Year | USDINR | | EURINR | | JPYINR | | GBPINR | | USDINR | EURINR | JPYINR | GBPINR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. of Contracts | Traded Value (Notional) in ₹ mn | No. of Contracts | Traded Value (Notional) in ₹ mn | No. of Contracts | Traded Value (Notional) in ₹ mn | No. of Contracts | Traded Value (Notional) in ₹ mn | Currency Futures Open Interest (No. of contracts) as on last trading day of the respective month | | | |
| Apr-09 | 7,851,502 | 393,857 | | | | | | | 206,620 | | | |
| May-09 | 13,682,468 | 664,315 | | | | | | | 318,203 | | | |
| Jun-09 | 15,724,507 | 753,627 | | | | | | | 267,400 | | | |
| Jul-09 | 19,888,011 | 965,229 | | | | | | | 318,298 | | | |
| Aug-09 | 18,672,623 | 903,957 | | | | | | | 394,756 | | | |
| Sep-09 | 22,251,896 | 1,077,888 | | | | | | | 360,603 | | | |
| Oct-09 | 32,267,958 | 1,508,430 | | | | | | | 447,812 | | | |
| Nov-09 | 33,794,926 | 1,575,541 | | | | | | | 493,018 | | | |
| Dec-09 | 41,004,341 | 1,914,147 | | | | | | | 406,200 | | | |
| Jan-10 | 60,223,714 | 2,767,419 | | | | | | | 615,612 | | | |
| Feb-10 | 49,093,914 | 2,276,337 | 2,888,980 | 184,164 | 53,026 | 2718 | 76,265 | 5533 | 622,656 | 9,930 | 968 | 3,911 |
| Mar-10 | 58,039,720 | 2,642,413 | 2,820,999 | 174,620 | 146,393 | 7273 | 125,740 | 8613 | 407,390 | 11,980 | 1,810 | 6,693 |
| **2009-10** | **372,495,580** | **17,443,161** | **5,709,979** | **358,783** | **199,419** | **9,991** | **202,005** | **14,146** | **4,858,568** | **21,910** | **2,778** | **10,604** |
| Apr-10 | 75,411,437 | 3,359,080 | 1,608,481 | 95,989 | 9,786 | 467 | 55,463 | 3786 | 563,226 | 21,834 | 538 | 5,655 |
| May-10 | 75,021,152 | 3,438,519 | 2,591,211 | 149,680 | 17,842 | 903 | 114,665 | 7696 | 762,391 | 20,192 | 1,542 | 4,029 |
| Jun-10 | 68,341,107 | 3,187,766 | 1,371,201 | 78,212 | 46,094 | 2383 | 79,131 | 5465 | 944,121 | 19,395 | 6,281 | 7,341 |
| Jul-10 | 43,199,013 | 2,028,844 | 1,538,240 | 92,370 | 62,361 | 3343 | 125,240 | 8977 | 826,468 | 22,412 | 3,535 | 5,765 |
| Aug-10 | 41,273,073 | 1,929,224 | 1,190,935 | 71,785 | 79,854 | 4379 | 95,776 | 7003 | 908,783 | 20,866 | 10,667 | 4,106 |
| Sep-10 | 60,535,055 | 2,783,444 | 748,696 | 45,116 | 191,847 | 10522 | 110,876 | 7959 | 800,905 | 23,760 | 14,099 | 4,146 |
| **April-September 2010** | **363,780,837** | **16,726,876** | **9,048,764** | **533,152** | **407,784** | **21,998** | **581,151** | **40,886** | **4,805,894** | **128,459** | **36,662** | **31,042** |

*Source: NSE*
*Note:*
*Currency Futures on Additional Currency Pairs were introduced w.e.f February 01, 2010. (New currency pairs EUR-INR, GBP-INR and JPY-INR futures contracts)*

## Business Growth in Currency Futures Segment

After an impressive start in the latter half of 2008, the Currency futures on the NSE witnessed exponential growth during 2009-10 and continued to flourish in the first-half of 2010-11. Table 6-9 presents the growth in the currency futures volumes and open interest on the NSE. The number of traded contracts and the trading value in this segment has increased by more than ten-times each in 2009-10, compared to that of 2008-09. Similarly, the trading volumes in the currency futures segment grew by around 260% in the first-half of 2010-11 compared to the corresponding period in 2009-10. The average daily trading volume zoomed to ₹ 1,558,053 million in 2009-10 compared to ₹ 11,674 million in 2008-09. During April-September 2010-11, the average daily trading volume whizzed to ₹ 135,335 million.

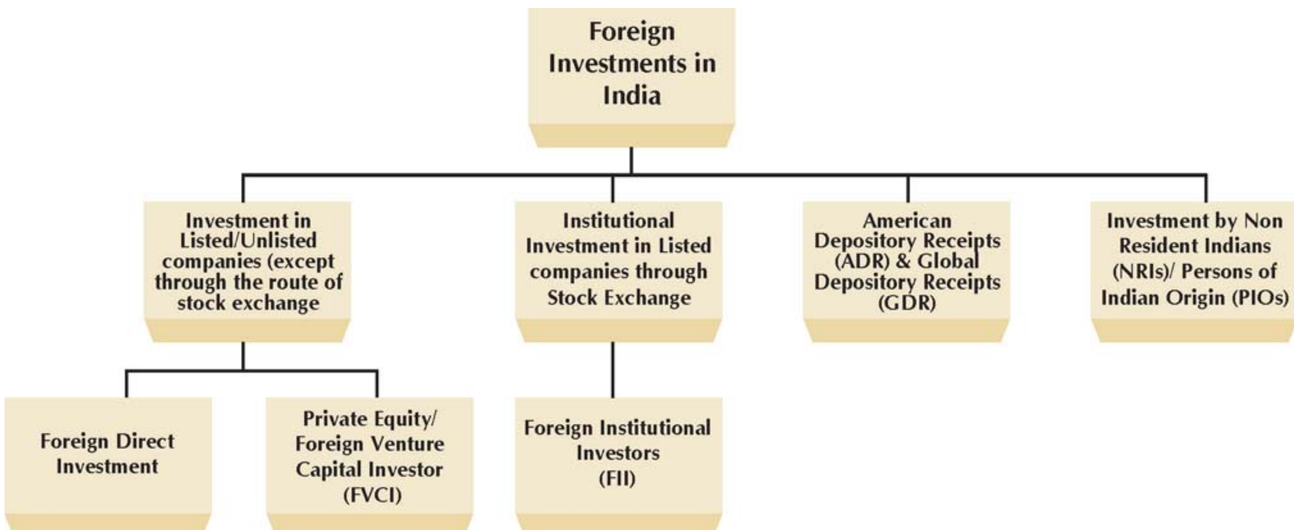
### *Way forward*

For most part of the first decade of this century, except 2008-09, Indian derivatives market experienced rising volumes and thereby setting records almost routinely which was the case in most of the major global derivatives markets. The onset of the US sub-prime crisis in 2008, however, arrested this surge in major US and European exchanges which continued to slide in 2009-10 as well. Albeit the turnover in the global derivatives market remained almost unchanged in 2009, the sharp decline in west and the equivalent surge in the East was amply evident. The remarkable growth in the derivatives market volumes was led by the exchanges in India and China. The turnover in the Indian derivatives market improved significantly in 2009-10 after a dip in 2008-09 following the US sub-prime crisis. The robust turnover in the first-half of 2010-11 vindicated this trend. With the recovery in global markets firmly intact, there is every reason to believe that the derivatives markets world over will be firing on all cylinders again very soon.

# Foreign Investments in India

Foreign investments in the country can take the form of investments in listed companies (i.e FII investments); investments in listed/unlisted companies other than through stock exchanges (i.e Foreign Direct Investment, Private Equity / Foreign Venture Capital Investment route); investments through American Depository Receipts / Global Depository Receipts (ADR/GDR) or investments by Non Resident Indians (NRIs) and Persons of Indian Origin (PIO) in various forms (Chart 7-1).

Chart 7-1: Foreign Investments in India




## Foreign Institutional Investments

### Evolution of policy framework[1]

Until the 1980s, India's development strategy was focused on self-reliance and import-substitution. Current account deficits were financed largely through debt flows and official development assistance. There was a general disinclination towards foreign investment or private commercial flows. Since the initiation of the reform process in the early 1990s, however, India's policy stance has changed substantially, with a focus on harnessing the growing global foreign direct investment (FDI) and portfolio flows. The broad approach to reform in the external sector after the Gulf crisis was delineated in the Report of the High Level Committee on Balance of Payments (Chairman: C. Rangarajan). It recommended, inter alia, a compositional shift in capital flows away from debt to non-debt creating flows; strict regulation of external commercial borrowings, especially short-term debt; discouraging volatile elements of flows from non-resident Indians (NRIs); gradual liberalisation of outflows; and dis-intermediation of Government in the fl ow of external assistance.

[1] Source: Report of Expert Group on Encouraging FII flows and Checking the Vulnerability of Capital Markets to Speculative flows, November, 2005.

After the launch of the reforms in the early 1990s, there was a gradual shift towards capital account convertibility. From September 14, 1992, with suitable restrictions, FIIs and Overseas Corporate Bodies (OCBs) were permitted to invest in financial instruments.[2] The policy framework for permitting FII investment was provided under the Government of India guidelines vide Press Note dated September 14, 1992, which enjoined upon FIIs to obtain an initial registration with SEBI and also RBI's general permission under FERA. Both SEBI's registration and RBI's general permissions under FERA were to hold good for five years and were to be renewed after that period. RBI's general permission under FERA could enable the registered FII to buy, sell and realise capital gains on investments made through initial corpus remitted to India, to invest on all recognised stock exchanges through a designated bank branch, and to appoint domestic custodians for custody of investments held. The Government guidelines of 1992 also provided for eligibility conditions for registration, such as track record, professional competence, financial soundness and other relevant criteria, including registration with a regulatory organisation in the home country. The guidelines were suitably incorporated under the SEBI (FIIs) Regulations, 1995. These regulations continue to maintain the link with the government guidelines through an inserted clause that the investment by FIIs would also be subject to Government guidelines. This linkage has allowed the Government to indicate various investment limits including in specific sectors. With coming into force of the Foreign Exchange Management Act, (FEMA), 1999 in 2000, the Foreign Exchange Management (Transfer or issue of Security by a Person Resident Outside India) Regulations, 2000 were issued to provide the foreign exchange control context where foreign exchange related transactions of FIIs were permitted by RBI. A philosophy of preference for institutional funds, and prohibition on portfolio investments by foreign natural persons has been followed, except in the case of Non-resident Indians, where direct participation by individuals takes place. Right from 1992, FIIs have been allowed to invest in all securities traded on the primary and secondary markets, including shares, debentures and warrants issued by companies which were listed or were to be listed on the Stock Exchanges in India and in schemes floated by domestic mutual funds.

Historical evolution of FII Policy is summarized below:

| Date | Policy Changes |
|---|---|
| **September 1992** | FIIs allowed to invest by the Government Guidelines in all securities in both primary and secondary markets and schemes floated by mutual funds. Single FIIs to invest 5 per cent and all FIIs allowed to invest 24 per cent of a company's issued capital. Broad based funds to have 50 investors with no one holding more than 5 per cent.<br>The objective was to have reputed foreign investors, such as, pension funds, mutual fund or investment trusts and other broad based institutional investors in the capital market. |
| **April 1997** | Aggregated limit for all FIIs increased to 30 per cent subject to special procedure and resolution. The objective was to increase the participation by FIIs. |
| **April 1998** | FIIs permitted to invest in dated Government securities subject to a ceiling. Consistent with the Government policy to limit the short-term debt, a ceiling of US $ 1 billion was assigned which was increased to US $ 1.75 billion in 2004. |
| **June 1998** | Aggregate portfolio investment limit of FIIs and NRIs/PIOs/OCBs enhanced from 5 per cent to 10 per cent and the ceilings made mutually exclusive. Common ceilings would have negated the permission to FIIs. Therefore, separate ceilings were prescribed. |
| **June 1998** | Forward cover allowed in equity. |
| **February 2000** | Foreign firms and high net-worth individuals permitted to invest as sub-accounts of FIIs. Domestic portfolio manager allowed to be registered as FIIs to manage the funds of sub-accounts. The objective was to allow operational flexibility and also give access to domestic asset management capability. |

2 An OCB is a company, partnership firm, society and other corporate body owned directly or indirectly to the extent of at least sixty percent by NRIs and includes overseas trust in which not less that sixty percent beneficial interest is held by NRIs directly or indirectly but irrevocably.

| Date | Policy Changes |
|---|---|
| **March 2001** | FII ceiling under special procedure enhanced to 49 per cent. The objective was to increase FII participation. |
| **September 2001** | FII ceiling under special procedure raised to sectoral cap. |
| **December 2003** | FII dual approval process of SEBI and RBI changed to single approval process of SEBI. The objective was to streamline the registration process and reduce the time taken for registration. |
| **November 2004** | Outstanding corporate debt limit of USD 0.5 billion prescribed. The objective was to limit short term debt flows. |
| **April 2006** | Outstanding corporate debt limit increased to USD 1.5 billion prescribed.<br>The limit on investment in Government securities was enhanced to USD 2 bn. This was an announcement in the Budget of 2006-07. |
| **November, 2006** | FII investment upto 23% permitted in infrastructure companies in the securities markets, viz. stock exchanges, depositories and clearing corporations. This is a decision taken by Government following the mandating of demutualization and corporatization of stock exchanges. |
| **January and October, 2007** | FIIs allowed to invest USD 3.2 billion in Government Securities (limits were raised from USD 2 billion in two phases of USD 0.6 billion each in January and October). |
| **June, 2008** | While reviewing the External Commercial Borrowing policy, the Government increased the cumulative debt investment limits from US $3.2 billion to US $5 billion and US $1.5 billion to US $3 billion for FII investments in Government Securities and Corporate Debt, respectively. |
| **October 2008** | While reviewing the External Commercial Borrowing policy, the Government increased the cumulative debt investment limits from US $3 billion to US $6 billion for FII investments in Corporate Debt. |
| **October 2008** | Removal of regulation for FIIs pertaining to restriction of 70:30 ratio of investment in equity and debt respectively. |
| **October 2008** | Removal of Restrictions on Overseas Derivatives Instruments (ODIs) |
| | Disapproval of FIIs lending shares abroad. |
| **March 2009** | E-bids platform for FIIs |
| **August 2009** | FIIs allowed to participate in interest rate futures |
| **April 2010** | FIIs allowed to offer domestic Government Securities and foreign sovereign securities with AAA rating, as collateral to the recognised stock exchanges in India, in addition to cash, for their transactions in the cash segment of the market. |
| **November 2010** | Investment cap for FIIs increased by US $ 5 billion each in Government securities and corporate bonds to US $ 10 billion and US $ 20 billion respectively. |

As is evident from the above, the evolution of FII policy in India has displayed a steady and cautious approach to liberalisation of a system of quantitative restrictions (QRs). The policy liberalisation has taken the form of (i) relaxation of investment limits for FIIs; (ii) relaxation of eligibility conditions; and (iii) liberalisation of investment instruments accessible for FIIs.

## Policy Developments for Foreign Investments

### I. Allocation of Government debt & corporate debt investment limits to FIIs

SEBI, vide its circular dated November 26, 2010 has made the following decisions:

**A. Increased investment limit for FIIs in Government and Corporate debt:**

In an attempt to enhance FII investment in debt securities, government has increased the current limit of FIl investment in Government Securities by US $ 5 billion raising the cap to US $ 10 billion. Similarly, the current limit of FIl investment in corporate bonds has also been increased by US $ 5 billion raising the cap to US $ 20 billion. This incremental limit shall be invested in corporate bonds with residual maturity of over five years issued by companies in the infrastructure sector. The market regulator SEBI announced this vide its circular dated November 26, 2010.

**B. Time period for utilization of the debt limits:**

In July 2008, some changes pertaining to the methodology for the allocation of debt limit had been specified. In continuation of the same, SEBI has decided that the time period for utilization of the corporate debt limits allocated through bidding process (for both old and long term infra limit) shall be 90 days. However, time period for utilization of the government debt limits allocated through bidding process shall remain 45 days. Moreover, the time period for utilization of the corporate debt limits allocated through first come first serve process shall be 22 working days while that for the government debt limits shall remain unchanged at 11 working days.

Further, it was decided to grant a period of upto 15 working days for replacement of the disposed off/ matured debt instrument/ position for corporate debt while that for Government debt will continue to be at 5 working days.

**C. Government debt long terms:**

SEBI, vide its circular dated February 2009, had decided that no single entity shall be allocated more than ₹ 10,000 crore of the investment limit. In a partial amendment to this, SEBI, vide its circular dated November 26, 2010, has decided that no single entity shall be allocated more than ₹ 2000 crore of the investment limit. Where a singly entity bids on behalf of multiple entities, then such bid would be limited to ₹ 2,000 crore for every such single entity. Further, the minimum amount which can be bid for has been made ₹ 200 crore and the minimum tick size has been made ₹ 100 crore.

**D. Corporate debt – Old limit:**

SEBI has decided that no single entity shall be allocated more than ₹ 600 crore of the investment limit. Where a singly entity bids on behalf of multiple entities, then such bid would be limited to ₹ 600 crore for every such single entity. Further, the minimum amount which can be bid for has been made ₹ 100 crore and the minimum tick size has been made ₹ 50 crore.

**E. Multiple bid order from single entity:**

SEBI has allowed the bidder to bid for more than one entity in the bidding process provided:

a) It provides due authorization to act in that capacity by those entities

b) It provides the stock exchanges, the allocation of the limits interse for the entities it has bid for to exchange with 15 minutes of close of bidding session.

**F. FII investment into 'to be listed' debt securities**

The market regulator has decided that FIIs will be allowed to invest in primary debt issues only if listing is committed to be done within 15 days. If the debt issue could not be listed within 15 days of issue, then the holding of FIIs/sub-accounts if disposed off shall be sold off only to domestic participants/investors until the securities are listed. This is in contrast to the earlier regulations issued in April 2006, wherein FII investments were restricted to only listed debt securities of companies.

### II. Maintenance of Collateral by FIIs for Transactions in the Cash Segment

RBI, vide its circular dated April 12, 2010 has decided, in consultation with the Government of India and the SEBI, to permit the FIIs to offer domestic Government securities and foreign sovereign securities with AAA rating, as collateral to the recognized stock exchanges in India, in addition to cash, for their transactions in the cash segment of the market.

### III. Reporting of Lending of Securities bought in the Indian Market

SEBI, vide its circular dated June 29, 2010 has decided that the FIIs' reporting of lending of securities bought in the Indian market will be done on weekly basis instead of the erstwhile daily submissions. In accordance with this change in periodicity of reports, with effect from July 02, 2010, FIIs are required to submit the reports every Friday. Further, in view of the change in the periodicity of the reporting, PN issuing FIIs are required to submit the following undertaking along with the weekly report:

*"Any fresh short position shall be immediately reported to SEBI"*

### IV. FII participation in Interest Rate Futures

FIIs have been allowed to participate in interest rate futures which were introduced for trading at NSE on August 31, 2009.

### V. Rationalisation of SEBI Fees for FIIs and FVCIs

SEBI has reduced its fees to be charged to FVIs and FIIs. This was effective from July 2009 onwards.

| Intermediaries | Earlier Fees | Revised Fees |
|---|---|---|
| **FVCI** | | |
| Application Fees | US $ 5,000 | US $ 2,500 |
| Registration fees (one time) | US $ 20,000 | US $ 10,000 |
| **FII** | | |
| Registration Fees for every block of 3 years | US $ 10,000 | US $ 5,000 |
| **Sub-accounts** | | |
| Registration Fees for every block of 3 years | US $ 2,000 | US $ 1,000 |

## Market Design – FIIs

| | |
|---|---|
| **Entities eligible to invest under FII route:** | **As FII**:<br>i. an institution established or incorporated outside India as a pension fund, mutual fund, investment trust, insurance company or reinsurance company;<br>ii. an International or Multilateral Organization or an agency thereof or a Foreign Governmental Agency, Sovereign Wealth Fund or a Foreign Central Bank;<br>iii. an asset management company, investment manager or advisor, bank or institutional portfolio manager, established or incorporated outside India and proposing to make investments in India on behalf of broad based funds and its proprietary funds, if any;<br>iv. a Trustee of a trust established outside India, and proposing to make investments in India on behalf of broad based funds and its proprietary funds, if any |

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|---|---|
| | v. university fund, endowments, foundations or charitable trusts or charitable societies. Broad based fund means a fund established or incorporated outside India, which has at least 20 investors with no single individual investor holding more than 49 percent of the shares or units of the fund. If the broad based fund has institutional investor(s), then it is not necessary for the fund to have 20 investors. Further, if the broad based fund has an institutional investor who holds more than 49 percent of the shares or units in the fund, then the institutional investor must itself be a broad based fund.<br>Sub-account means any person resident outside India, on whose behalf investments are proposed to be made in India by a foreign institutional investor and who is registered as a sub-account under the SEBI (FII) Regulations, 1995.<br>The applicant for sub-account can fall into any of the following categories, namely:<br>i broad based fund or portfolio which is broad based, incorporated or established outside India.<br>ii proprietary fund of a registered foreign institutional investor.<br>iii foreign corporate (which has its securities listed on a stock exchange outside India, having asset base of not less than US $ 2 billion and having an average net profit of not less than US $ 50 million.<br>A non-resident Indian shall not be eligible to invest as sub-account. |
| **Investment Restrictions** | An FII can invest only in the following:<br>i. securities in the primary and secondary markets including shares, debentures and warrants of companies, unlisted, listed or to be listed on a recognised stock exchange in India<br>ii. units of schemes floated by domestic mutual funds including Unit Trust of India, whether listed or not listed on a recognised stock exchange; units of scheme floated by a Collective Investment Scheme.<br>iii. dated Government securities and<br>iv. derivatives traded on a recognised stock exchange<br>v. commercial paper<br>vi. security receipts<br>vii. Indian Depository Receipts<br>In case foreign institutional investor or sub-account holds equity shares in a company whose shares are not listed on any recognized stock exchange, and continues to hold the shares after initial public offering and listing thereof, such shares would be subject to lock-in for the same period, if any is applicable to shares held by a foreign direct investor placed in similar position, under the policy of the Central Government relating to foreign direct investment for the time being in force.<br>The total investments in equity and equity related instruments (including fully convertible debentures, convertible portion of partially convertible debentures and tradable warrants) made by a FII in India, whether on his own account or on account of his sub- accounts, should not be less than 70 per cent of the aggregate of all the investments of the Foreign Institutional Investor in India, made on his own account and on account of his sub-accounts.<br>However, this is not applicable to any investment of the FII either on its own account or on behalf of its sub-accounts in debt securities which are unlisted or listed or to be listed on any stock exchange if the prior approval of the SEBI has been obtained for such investments. Further, SEBI while granting approval for the investments may |

| | |
|---|---|
| | impose conditions as are necessary with respect to the maximum amount which can be invested in the debt securities by the foreign institutional investor on its own account or through its sub-accounts. A foreign corporate or individual shall not be eligible to invest through the 100 percent debt route.<br>Investments made by FIIs in security receipts issued by securitization companies or asset reconstruction companies under the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 are not eligible for the investment limits mentioned above. No foreign institutional investor can invest in security receipts on behalf of its sub-accounts.<br>**FII Investment in secondary markets:**<br>SEBI regulations provide that a foreign institutional investor or sub-account can transact in the Indian securities market only on the basis of taking and giving delivery of securities purchased or sold. However, this does not apply to any transactions in derivatives on a recognised stock exchange.<br>Further, SEBI has, in December, 2007 permitted FIIs and sub-accounts can enter into short selling transactions only in accordance with the framework specified by SEBI.<br>No transaction on the stock exchange can be carried forward and the transaction in securities would be only through stock broker who has been granted a certificate by SEBI.<br>They have also been allowed to lend or borrow securities in accordance with the framework specified by SEBI in this regard.<br>The purchase of equity shares of each company by a FII investing on his own account should not exceed 10 percent of the total issued capital of that company. FII investing in equity shares of a company on behalf of his sub-accounts, the investment on behalf of each such sub-account should not exceed 10 percent of the total issued capital of that company. In case of foreign corporate or individuals, each of such sub-account should not invest more than five percent of the total issued capital of the company in which such investment is made.<br>A Foreign institutional investor can issue, or otherwise deal in offshore derivative instruments, directly of indirectly wherein the offshore derivative instruments are issued only to persons who are regulated by an appropriate foreign regulatory authority and the ODIs are issued after compliance with 'know your client' norms. |
| **General Obligations And Responsibilities** | Certain general obligations and responsibilities relating to appointment of domestic custodians, designated bank, investment advice in publicly accessible media etc. have been laid down on the FIIs operating in the country in the SEBI (FII) Regulations, 1995. |
| **Private Placement with FIIs** | SEBI registered FIIs have been permitted to purchase shares/convertible debentures of an Indian company through offer/private placement subject to the ceiling of 10 percent of the paid up capital of the Indian company for individual FII/sub account and 24 percent for all FIIs/sub-accounts put together. Indian company is permitted to issue such shares provided that:<br>i in the case of public offer, the price of shares to be issued is not less than the price at which shares are issued to residents and<br>ii in the case of issue by private placement, the price is not less than the price arrived at in terms of SEBI guidelines or guidelines issued by the erstwhile Controller of Capital issues as applicable. Purchases can also be made of Partially Convertible debentures, Fully Convertible debentures, Rights/Renunciations/Warrants/Units of Domestic Mutual Fund Schemes. |

| | |
|---|---|
| **Risk Management**<br><br>**Forward Cover & Cancellation and Rebooking** | Authorized Dealer Banks can offer forward cover to FIIs to the extent of total inward remittance of liquidated investment. Rebooking of cancelled forward contracts is allowed up to a limit of 2 percent of the market value of the entire investment of FIIs in equity and/or debt in India. The limit for calculating the eligibility for rebooking will be based upon market value of the portfolio as at the beginning of the financial year (April-March). The outstanding contracts have to be duly supported by underlying exposure at all times. The AD Category–I bank has to ensure that (i) that total forward contracts outstanding does not exceed the market value of portfolio and (ii) forward contracts permitted to be rebooked does not exceed 2 percent of the market value as determined at the beginning of the financial year. The monitoring of forward cover is to be done on a fortnightly basis. |
| **FII Position Limits In Derivatives Contracts** | SEBI registered FIIs are allowed to trade in all exchange traded derivative contracts on the stock exchanges in India subject to the position limits as prescribed by SEBI from time to time. These have been listed out in Chapter 7.<br><br>Clearing Corporation monitors the open positions of the FII/sub-accounts of the FII for each underlying security and index, against the position limits specified at the level of FII/sub accounts of FII respectively, at the end of each trading day. |
| **Monitoring of investment position by RBI** | The Reserve Bank of India (RBI) monitors the investment position of FIIs in listed Indian Companies, reported by Custodian/designated AD banks on a daily basis, in Forms LEC (FII).<br><br>**Caution List**<br><br>When the total holdings of FIIs under the Scheme reach the limit of 2 percent below the sectoral cap, RBI issues a notice to all designated branches of AD Category – 1 banks cautioning that any further purchases of shares of the particular Indian company will require prior approval of RBI. RBI gives case-by case approvals to FIIs for purchase of shares of companies included in the Caution List. This is done on a first-come-first served basis.<br><br>**Ban List**<br><br>Once the shareholding by FIIs reaches the overall ceiling/sectoral cap/statutory limit, RBI places the company in the Ban List. Once a company is placed on the Ban List, no FII or NRI can purchase the shares of the company under the Portfolio Investment Scheme. |
| **Margin Requirements** | SEBI registered FIIs/sub-accounts are allowed to keep with the trading member/clearing member amount sufficient to cover the margins prescribed by the exchange/Clearing House and such amounts as may be considered to meet the immediate needs. |
| **Reporting of FII Investments** | An FII may invest in a particular share issue of an Indian Company either under the FDI scheme or the Portfolio Investment Scheme. The AD Category-I banks have to ensure that the FIIs who are purchasing the shares by debit to the Special Non-Resident Rupee Account report these details separately in the Form LEC (FII). |

### Investment by FIIs under Portfolio Investment Scheme

RBI has given general permission to SEBI registered FIIs/sub-accounts to invest under the Portfolio Investment Scheme (PIS).

- Total holding of each FII/sub account under this scheme should not exceed 10% of the total paid up capital or 10% of the paid up value of each series of convertible debentures issued by the Indian company.
- Total holding of all the FIIs/sub-accounts put together should not exceed 24% of the paid up capital or paid up value of each series of convertible debentures. This limit of 24% can be increased to the sectoral cap / statutory limit as applicable to the Indian Company concerned, by passing a resolution of its Board of Directors followed by a special resolution to that effect by its General Body.

- A domestic asset management company or portfolio manager, who is registered with SEBI as an FII for managing the fund of a sub-account can make investments under the Scheme on behalf of:
  - i. A person resident outside India who is a citizen of a foreign state or
  - ii. A body corporate registered outside India.
- However, such investment should be made out of funds raised or collected or brought from outside through normal banking channel. Investments by such entities should not exceed 5% of the total paid up equity capital or 5% of the paid up value of each series of convertible debentures issued by an Indian company, and should also not exceed the overall ceiling specified for FIIs.

## Market Outcome

The monthly trend in FII investments during 2009-10, as depicted in Table7-1, shows that net FII investment remained positive for the entire fiscal year; in contrast to 2008-09 in which net FII inflows were negative for eight months. In March 2010, the net investment of US $ 6,465 million by FIIs was the highest monthly net investment in 2009-10. The total net investment by FIIs in 2009-10 stood at US $ 30,253 million and it continued to flourish in the first-half of 2010-11 at US $ 19,250 million with September 2010 clicking net investment of a mammoth US $ 7,100 million. After witnessing a tumultuous year of investment, these record FII investments have given a boost to the Indian markets during the last year and a half.

**Table 7-1: Trends in FII Investment**

| Period | Purchases (₹ mn.) | Sales (₹ mn.) | Net Investment (₹ mn.) | Net Investment (US $ mn.) | Cumulative Net Investment (US $ mn.) |
|---|---|---|---|---|---|
| 2000-01 | 740,506 | 641,164 | 99,342 | 2,159 | 13,532 |
| 2001-02 | 499,199 | 411,650 | 87,549 | 1,839 | 15,372 |
| 2002-03 | 470,601 | 443,710 | 26,891 | 566 | 15,937 |
| 2003-04 | 1,448,575 | 990,940 | 457,635 | 10,005 | 25,943 |
| 2004-05 | 2,169,530 | 1,710,730 | 458,800 | 9,363 | 36,294 |
| 2005-06 | 3,449,780 | 3,055,120 | 394,660 | 9,863 | 45,657 |
| 2006-07 | 5,205,090 | 4,896,680 | 308,410 | 6,821 | 52,478 |
| 2007-08 | 9,480,196 | 8,389,304 | 1,090,892 | 16,442 | 68,919 |
| 2008-09 | 6,145,810 | 6,603,920 | -458,110 | -9,837 | 59,082 |
| Apr-09 | 497,150 | 407,160 | 89,990 | 1,791 | 60,872 |
| May-09 | 812,660 | 638,610 | 174,060 | 3,577 | 64,449 |
| Jun-09 | 760,730 | 711,740 | 48,980 | 1,059 | 65,508 |
| Jul-09 | 802,120 | 670,300 | 131,820 | 2,727 | 68,235 |
| Aug-09 | 606,740 | 561,510 | 45,230 | 945 | 69,179 |
| Sep-09 | 789,520 | 583,790 | 205,730 | 4,263 | 73,442 |
| Oct-09 | 833,530 | 673,800 | 159,730 | 3,428 | 76,870 |
| Nov-09 | 636,330 | 574,520 | 61,810 | 1,330 | 78,200 |
| Dec-09 | 573,940 | 486,830 | 87,110 | 1,873 | 80,073 |
| Jan-10 | 788,120 | 703,990 | 84,130 | 1,849 | 81,922 |
| Feb-10 | 511,270 | 467,640 | 43,620 | 946 | 82,868 |
| Mar-10 | 852,290 | 557,920 | 294,370 | 6,465 | 89,333 |

*Contd.*

*Contd.*

| Period | Purchases (₹ mn.) | Sales (₹ mn.) | Net Investment (₹ mn.) | Net Investment (US $ mn.) | Cumulative Net Investment (US $ mn.) |
|---|---|---|---|---|---|
| **2009-10** | **8,464,400** | **7,037,810** | **1,426,580** | **30,253** | **89,333** |
| Apr-10 | 743,740 | 619,810 | 123,930 | 2,783 | 92,116 |
| May-10 | 715,690 | 785,550 | -69,860 | -1,505 | 90,611 |
| Jun-10 | 689,760 | 577,270 | 112,490 | 2,424 | 93,035 |
| Jul-10 | 806,710 | 559,470 | 247,240 | 5,285 | 98,320 |
| Aug-10 | 753,960 | 607,100 | 146,860 | 3,163 | 1,01,483 |
| Sep-10 | 928,370 | 601,690 | 326,680 | 7,100 | 1,08,583 |
| **(Apr-Sep 10)** | **4,638,230** | **3,750,890** | **887,340** | **19,250** | **1,08,584** |

*Source: SEBI.*
*Note: This data pertains to all the activities undertaken by FIIs in Indian Securities Market, including trades in Secondary Market, Primary Market & activities involved in right bonus issues, private placement, merger & accusition etc.*

## Number of Foreign Institutional Investors (FIIs)

The net addition in SEBI registered FIIs failed to keep up the momentum seen in 2007-08 and 2008-09 wherein there was addition of 322 and 316 FIIs respectively. There was a net addition of 78 SEBI registered FIIs in 2009-10 which took their total number to 1,713 at end March 2010 compared to that of 1,635 at the end of March 2009 (Table 7-2 and Chart 7-2).

**Table 7-2: SEBI Registered FIIs in India**

| Year | FII at end of March | Net Additons of FIIs during the year |
|---|---|---|
| 1992-93 | 0 | 0 |
| 1993-94 | 3 | 3 |
| 1994-95 | 156 | 153 |
| 1995-96 | 353 | 197 |
| 1996-97 | 439 | 86 |
| 1997-98 | 496 | 57 |
| 1998-99 | 450 | -46 |
| 1999-00 | 506 | 56 |
| 2000-01 | 527 | 21 |
| 2001-02 | 490 | -37 |
| 2002-03 | 502 | 12 |
| 2003-04 | 540 | 38 |
| 2004-05 | 685 | 145 |
| 2005-06 | 882 | 197 |
| 2006-07 | 997 | 115 |
| 2007-08 | 1,319 | 322 |
| 2008-09 | 1,635 | 316 |
| **2009-10** | **1,713** | **78** |

*Source: SEBI*

Chart 7-2: Number of FIIs and Net Investments


## Foreign Institutional Investments- Equity and Debt

FIIs were allowed to invest in the Indian Capital Market from September 1992. Investments by them, however, were first made in January 1993. Till December 1998, investments were related to equity only as the Indian gilts market opened up for FII investment in April 1998. FIIs' investment in debt started from January 1999. Foreign Institutional Investors (FIIs) continued to invest large funds in the Indian securities market. For two consecutive years in 2004-05 and 2005-06, net investment in equity showed year-on-year increase of 10%.

Table 7-3: Net Investments by FIIs in Equity and Debt

(₹ million)

| Year | FIIs | |
|---|---|---|
| | Net Investment in Equity | Net Investment in Debt |
| 2001-02 | 80,670 | 6,850 |
| 2002-03 | 25,280 | 600 |
| 2003-04 | 399,600 | 58,050 |
| 2004-05 | 441,230 | 17,590 |
| 2005-06 | 488,010 | -73,340 |
| 2006-07 | 252,360 | 56,050 |
| 2007-08 | 534,040 | 127,750 |
| 2008-09 | -477,060 | 18,950 |
| Apr-09 | 65,080 | 24,900 |
| May-09 | 201,170 | -27,110 |
| Jun-09 | 38,300 | 10,680 |
| Jul-09 | 110,660 | 21,150 |
| Aug-09 | 49,030 | -3,790 |

*Contd.*

*Contd.*

| Year | FIIs | |
|---|---|---|
| | Net Investment in Equity | Net Investment in Debt |
| Sep-09 | 183,440 | 22,280 |
| Oct-09 | 90,770 | 68,960 |
| Nov-09 | 54,970 | 6,840 |
| Dec-09 | 102,330 | -15,220 |
| Jan-10 | -5,000 | 89,130 |
| Feb-10 | 12,170 | 31,460 |
| Mar-10 | 199,280 | 95,100 |
| **2009-10** | **1,102,200** | **324,380** |
| Apr-10 | 93,610 | 30,320 |
| May-10 | -94,370 | 24,510 |
| Jun-10 | 105,080 | 7410 |
| Jul-10 | 166,170 | 81,070 |
| Aug-10 | 116,880 | 29,990 |
| Sep-10 | 249,790 | 76,900 |
| **(Apr-Sep 10)** | **637,160** | **250,200** |

After experiencing a net outflow of ₹477,070 million in equity instruments in 2008-09, FIIs scaled record equity investment in 2009-10 which stood at ₹ 1,102,200 million. The momentum seems to be continuing in the first-half of 2010-11 with ₹ 637,160 million net FII investments in equities. (Table 7-3)

The net investments by FIIs in the debt segment also bounced back in 2009-10 with a staggering all-time high of ₹ 324,380 million compared to that of ₹ 18,950 in 2008-09. The impressive trend has continued during the April-September period of 2010 with net investments worth ₹ 250,200 million in debt.

## Foreign Institutional Investments in Equity and Derivative

### Equity Market Segment

The gross turnover of FIIs in equity market segment on the Indian stock exchanges (NSE + BSE) accounted for ₹ 12,750,197 million in 2009-10, a year-on-year growth of 10.62%. The total turnover of FIIs in equity market constituted 11.56% of the total turnover on BSE and NSE in 2009-10. (Table 7-4)

**Table 7-4: FII Turnover in Equity Market Segment of NSE and BSE**

| Year | Buy Value (₹ million) | Sell Value (₹ million) | Gross Turnover of FIIs (₹ million) | Total Turnover on Exchanges (₹ million) | %age of FII turnover to Total Turnover on Exchanges |
|---|---|---|---|---|---|
| 2006-07 | 4,550,232 | 4,595,466 | 9,145,698 | 57,946,240 | 15.78 |
| 2007-08 | 8,329,654 | 8,705,790 | 17,035,445 | 102,515,340 | 16.62 |
| 2008-09 | 5,396,976 | 6,129,275 | 11,526,252 | 77,037,880 | 14.96 |
| **2009-10** | **6,568,931** | **6,181,265** | **12,750,197** | **110,336,640** | **11.56** |
| **(April-September 2010)** | **3,482,340** | **3,107,302** | **6,589,643** | **47,110,760** | **13.99** |

## Derivative Market Segment

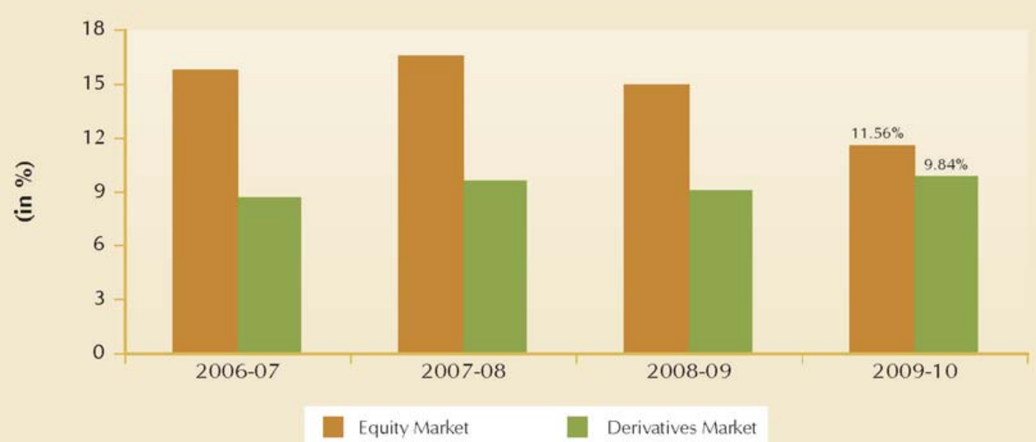
The FII gross turnover in the F&O Segment of NSE during 2009-10 was ₹ 34,772,177 million which was 9.84% of the total derivatives market turnover of ₹ 353,273,291 million at NSE. The share of FIIs' gross turnover increased to 11.09% of the total turnover on NSE during the first-half of 2010-11. (Table 7-5)

**Table 7-5: FII Turnover in F&O Market Segment of NSE**

| | Buy Value (₹ million) | | Sell Value (₹ million) | | Gross No. of contracts traded | Gross Turnover of FIIs | Total Turnover on NSE (₹ million) | %age of FII turnover to Total Turnover on Exchanges |
|---|---|---|---|---|---|---|---|---|
| | No. of contracts | Amount (₹mn) | No. of contracts | Amount (₹mn) | No. of contracts | Amount (₹mn) | Amount (₹mn) | |
| 2006-07 | 20,215,981 | 6,484,665 | 19,659,868 | 6,360,392 | 39,875,849 | 12,845,058 | 47,125,420 | 8.73 |
| 2007-08 | 47,880,785 | 2,633,510 | 46,078,979 | 2,401,616 | 93,959,764 | 25,035,126 | 261,809,560 | 9.56 |
| 2008-09 | 58,338,152 | 10,165,351 | 55,464,681 | 9,680,224 | 113,802,833 | 19,845,575 | 220,209,640 | 9.01 |
| **2009-10** | **68,934,646** | **17,519,697** | **67,561,143** | **17,252,480** | **136,495,789** | **34,772,177** | **353,273,291** | **9.84** |
| **April-September 2010** | **51,967,875** | **14,206,145** | **48,875,597** | **13,414,249** | **100,843,472** | **27,620,394** | **249,034,883** | **11.09** |

*Note:*
*Here the data for FII turnover is only the data of NSE which is reported to SEBI*
*Here data for total turnover on Exchange refers to NSE*

**Chart 7-3: Percentage of FII Turnover in Equity and Derivative Segments of Stock Exchanges**




Note: Here, derivatives segment pertains to only NSE

## Offshore Derivative Instruments (ODIs)

Offshore Derivative Instruments include Participatory Notes, Equity-Linked Notes, Capped Return Note, Investment Note and similar instruments issued by FIIs/Sub Accounts outside India against their underlying investments in India, listed or proposed to be listed on any stock exchange in India.

### Participatory Notes (PNs)

Participatory Notes are the most common type of ODIs. PNs are instruments used by foreign funds not registered in the country for trading in the domestic market. They are a derivative instrument issued against an underlying security that permits the holder to share in the capital appreciation and /income from the underlying security.

As of March 2010, the total value of P-Notes with underlying Indian securities as a percentage of Assets Under Management (AUM) of FIIs decreased to 16.10% from 17.72% in March 2009. Table 7-6 shows the total value of participatory notes versus assets under management of FIIs from March 2004 onwards.

**Table 7-6: Total Value of Participatory Notes (PNs) Vs Assets Under Management of FIIs**

(in ₹ million)

| Month | *Total Value of PNotes with Underlying Indian securities | #Assets Under Management of FIIs | A as % of B |
|---|---|---|---|
| | A | B | C |
| Mar-04 | 3,187,500 | 1,593,970 | 20.00 |
| Mar-05 | 591,320 | 2,362,570 | 25.03 |
| Mar-06 | 1,548,630 | 4,536,360 | 34.14 |
| Mar-07 | 2,428,390 | 5,470,100 | 44.39 |
| Mar-08 | 2,508,520 | 7,367,530 | 34.05 |
| Mar-09 | 694,450 | 3,919,540 | 17.72 |
| Apr-09 | 723,140 | 4,690,930 | 15.42 |
| May-09 | 1,034,700 | 6,244,880 | 16.57 |
| Jun-09 | 978,850 | 6,310,470 | 15.51 |
| Jul-09 | 1,083,450 | 6,925,220 | 15.64 |
| Aug-09 | 1,103,550 | 7,107,920 | 15.53 |
| Sep-09 | 1,291,000 | 7,868,520 | 16.41 |
| Oct-09 | 1,245,750 | 7,554,440 | 16.49 |
| Nov-09 | 1,299,430 | 7,843,400 | 16.57 |
| Dec-09 | 1,686,320 | 8,483,330 | 19.88 |
| Jan-10 | 1,319,380 | 8,148,440 | 16.19 |
| Feb-10 | 1,241,770 | 8,188,940 | 15.16 |
| **Mar-10** | **1,450,370** | **9,008,690** | **16.10** |
| Apr-10 | 1,543,400 | 9,271,940 | 16.65 |
| May-10 | 1,599,270 | 8,833,790 | 18.10 |
| Jun-10 | 1,680,160 | 9,274,680 | 18.12 |
| Jul-10 | 1,657,490 | 9,710,220 | 17.07 |
| Aug-10 | 1,636,570 | 9,991,300 | 16.38 |
| **Sep-10** | **2,009,270** | **11,243,520** | **17.87** |

***Figures compiled based on reports submitted by PN issuing FIIs**
**#Figures compiled based on reports submitted by custodians**

## Share of FIIs in NSE Listed Companies

The FII ownership of shares in various sectors of NSE listed companies is depicted in table 7-7. At the end of March 2010, FIIs held the highest stake of 16.53% in the Finance sector followed by Banking and FMCG of 16.02% and 14.09% respectively. The total percentage of shares held by FIIs across different sectors was 9.58% of the total shares of the companies listed on NSE as at end March 2010 and stood at 10.39% at the end of September 2010.

Table 7-7: FII Share in different sectors of companies listed on NSE

| Sectors | Percentage Share of Foreign institutional Investors at the end of | | | | |
|---|---|---|---|---|---|
| | Mar-07 | Mar-08 | Mar-09 | Mar-10 | Sep-10 |
| Banks | 18.41 | 19.15 | 14.27 | 16.02 | 19.24 |
| Engineering | 11.45 | 10.63 | 7.34 | 8.28 | 9.24 |
| Finance | 18.18 | 17.44 | 13.01 | 16.53 | 22.63 |
| FMCG | 11.91 | 14.07 | 12.72 | 14.09 | 15.73 |
| Information Technology | 14.53 | 16.00 | 12.44 | 11.68 | 10.47 |
| Infrastructure | 7.15 | 8.86 | 7.31 | 8.90 | 8.75 |
| Manufacturing | 9.57 | 9.46 | 7.28 | 8.79 | 8.99 |
| Media & Entertainment | 15.20 | 11.71 | 11.42 | 7.06 | 7.82 |
| Petrochemicals | 5.83 | 4.73 | 4.77 | 6.08 | 6.35 |
| Pharmaceuticals | 11.17 | 10.69 | 7.88 | 8.78 | 9.16 |
| Services | 13.09 | 10.70 | 8.39 | 8.05 | 8.82 |
| Telecommunication | 11.17 | 9.12 | 6.85 | 8.64 | 8.73 |
| Miscellaneous | 8.19 | 9.30 | 8.39 | 8.10 | 10.35 |
| **Total stake of FIIs in all the Sectors** | **10.78** | **10.62** | **8.4** | **9.58** | **10.39** |

*Source: NSE*

### FII Stock Market Indicators

The presence of FIIs in the Indian stock market can be gauged from various indicators like Market Capitalisation ratio (as a percentage of GDP and as a percentage of total M-Cap of NSE) and Value Traded ratio. (Table 7-8)

Table 7-8: FII Market Indicators

| FII Market Indicators | 2006-07 | 2007-08 | 2008-09 | 2009-10 |
|---|---|---|---|---|
| Market Capitalisation Ratio | 13.14% | 15.08% | 6.49% | 12.68% |
| Value Traded Ratio (Traded Value / GDP) | 11.08% | 18.03% | 10.32% | 9.73% |
| Market Capitalisation of FIIs holding (in NSE Listed Companies) to Total Market Capitalisation of NSE | 16.10% | 14.66% | 12.50% | 13.82% |

*Source: NSE, Central Statistical Organisation*

*Note:*
*Value traded ratio of FIIs is computed using cash market turnover of FIIs on NSE+BSE divided by GDP*
*Market Capitalisation ratio of FIIs is computed using Market Capitalisation of FIIs on NSE divided by GDP*

In the year 2009-10, value traded ratio of the FIIs (Traded value of FII / GDP) on NSE was 9.73%. The share of FIIs market capitalisation to the total market capitalization of NSE at end March 2010 was 13.82%. The market capitalization ratio, reflecting the ratio of market capitalization of FIIs to NSE and GDP, jumped to 12.68% in 2009-10 compared to 6.49% in 2008-09.

## Foreign Venture Capital

Venture capital plays a vital role in the development and growth of innovative entrepreneurships. Venture capital financing started in India in 1988, with the formation of Technology Development and Information Company of India Ltd. (TDICI) promoted by ICICI and UTI Bank. At the same time, Gujarat Venture Fund Limited & Andhra Pradesh

Industrial Development Corporation in the early 90s was started by State level Financial Institutions. Thus, venture capital was initially the prerogative of development financial institutions. The mid 90's saw the rise of Foreign Venture Capital Funds which focused on development capital without any sectoral focus and was dependant more on opportunities. After the success, of these funds, there was emergence of a number of India-centric foreign VC firms.

In the absence of an organized venture capital industry, individual investors and development financial institutions have hitherto played the role of venture capitalists in India. Entrepreneurs have largely depended upon private placements, public offerings and lending by financial institutions.

In 1973, a committee on "Development of Small and Medium Enterprises" highlighted the need to foster venture capital as a source of funding new entrepreneurs and technology. Later, a study was undertaken by the World Bank to examine the possibility of developing venture capital in the private sector, based on which Government of India took a policy initiative and announced guidelines for venture capital funds (VCFs) in 1988. Thereafter, Government of India issued guidelines in September 1995 for overseas venture capital investment in India. Further, as a part of its mandate to regulate and to develop the Indian securities markets, SEBI under Sec 12 of SEBI Act 1992 framed SEBI (Venture Capital Funds) Regulations, 1996.

Pursuant to the regulatory framework, some domestic VCFs were registered with SEBI. Some overseas investment has also come through the Mauritius route.

The SEBI committee on Venture Capital was set up in July 1999 to identify the impediments and suggest suitable measures to facilitate the growth of VC activity in India. Also keeping in view the need for a global perspective, it was decided to associate Indian Entrepreneurs from Silicon Valley in the committee headed by KB Chandrasekhar. These guidelines were further amended in April 2000 with the objective of fuelling the growth of VC activities in India. Thereafter, based on recommendations of the K.B. Chandrasekhar Committee, which was set up by SEBI during the year 1999-2000, guidelines for Overseas Venture Capital Investment in India were withdrawn by the Government in September 2000, and SEBI was made the nodal regulator for VCFs to provide a uniform, hassle free, single window regulatory framework. SEBI also notified regulations for foreign venture capital investors. On the pattern of foreign institutional investors (FIIs), Foreign Venture Capital Investors (FVCIs) were also to be registered with SEBI.

The Advisory Committee on Venture Capital, set up under Chairmanship of Dr. Ashok Lahiri, submitted its report to SEBI in the year 2003. It helped SEBI in considering the amendments to the regulations that facilitated the further development of vibrant venture capital industry in India. Thus, the various changes in regulations for FVCIs led to the growth in the registrations FVCIs. Table 7-9 gives the count of FVCI registration from 2000-01 onwards. As of March 2010, the number of FVCIs registered with SEBI was 143.

**Table 7-9: SEBI Registered FVCIs in India**

| Year | FVCI at end of March | Net Additons in FVCIs during the year |
|---|---|---|
| 2000-01 | 1 | |
| 2001-02 | 2 | 1 |
| 2002-03 | 6 | 4 |
| 2003-04 | 9 | 3 |
| 2004-05 | 14 | 5 |
| 2005-06 | 39 | 25 |
| 2006-07 | 78 | 39 |
| 2007-08 | 97 | 19 |
| 2008-09 | 129 | 32 |
| **2009-10** | **143** | **14** |

*Source: SEBI*

## Market Design for Foreign Venture Capital Investor (FVCI)

| | |
|---|---|
| **Foreign Venture Capital Investors** | Foreign Venture Capital Investor means an investor incorporated, established outside India is registered under SEBI (Foreign Venture Capital Investor) Regulations, 2000.<br>A SEBI registered Foreign Venture Capital Investor (FVCI) with specific approval from RBI under FEMA Regulations can invest in Indian Venture Capital Undertaking (IVCU) or Indian Venture Capital Fund (IVCF) or in a Scheme floated by such IVCFs subject to the condition that the VCF should also be registered with SEBI. |
| **FVCI Investments** | A registered FVCI may through the SEBI apply to the RBI for permission to invest in Indian Venture Capital undertaking (IVCU) or in a VCF or in a scheme floated by such VCFs. Permission may be granted by RBI subject to such terms and conditions as necessary. The registered FVCIs permitted by RBI can purchase equity / equity linked instruments / debt / debt instruments, debentures of an IVCU or of a VCF through initial public offer or private placement in units of schemes / funds set up by a VCF. At the time of granting approval, the RBI permits the FVCI to open a Foreign Currency Account and/or a Rupee Account with a designated branch of an AD Category – I bank. Following are the permissible transactions:<br>(i) Crediting inward remittance received through normal banking channels or the sale proceeds (net of taxes) of investments.<br>(ii) Making investment in accordance with the provisions stated by regulations<br>(iii) Transferring funds from the foreign currency account of the FVCI to their own rupee account<br>(iv) Remitting funds from the Foreign currency or rupee account subject to payment of applicable taxes.<br>(v) Meeting local expenses of the FVCI. |
| **Investment Conditions and Restrictions** | The Foreign Venture capital investor has to abide by the following conditions pertaining to investments made by it.<br>i. It has to disclose the investment strategy to SEBI.<br>ii. It can invest its total funds committed in one venture capital fund.<br>iii. FVCU should make investment as enumerated below:<br>i) At least 66.67 percent of the investible funds should be invested in unlisted equity shares or equity linked instruments of venture capital undertakings.<br>ii) Not more than 33.33 percent of the investible funds may be invested by way of<br>• subscription to Initial Public Offer (IPO) of a Venture Capital Undertaken (VCU) whose shares are proposed to be listed.<br>• debt or debt instrument of a VCU in which the FVCI has already made an investment by way of equity.<br>• Preferential allotment of equity shares of a listed company subject to lock-in-period of one year. This condition should be achieved by FVCI by end of the life cycle.<br>• It should disclose the duration of the life cycle of the fund.<br>• Special Purpose Vehicles (SPVs) which are created by a venture capital fund for the purpose of facilitating or promoting investment in accordance with SEBI (FVCI) Regulations 2000.<br>The investment conditions and restrictions stipulated above should be achieved by the venture capital fund by the end of its life cycle. |

| | |
|---|---|
| **General Obligations and Responsibilities** | Certain general obligations and responsibilities relating to maintenance of books and records, power to call for information by SEBI, appointment of designated bank etc. have been laid down on FVCIs by SEBI (Foreign Venture Capital Investor) Regulations, 2000. |
| **Risk Management** | AD Category – I banks can offer forward cover to FVCIs to the extent of total inward remittance. In case the FVCI has made any remittance by liquidating some investments, original cost of the investments has to be deducted from the eligible cover to arrive at the actual cover that can be offered. |
| **Valuation of Investments** | The purchase/sale of shares, debentures and units can be at a price that is mutually acceptable to the buyer and the seller. |
| **Regulations for FVCI** | The FVCIs are governed by SEBI (Foreign Venture Capital Investor) Regulations, 2000 and statutory provisions contained in Foreign Exchange Management (Transfer or issue of security by a person resident outside India) Regulations, 2000 particularly in Schedule 6. |

## Private Equity

In India, the evolution of PE investments can be traced back to the formation of VC Funds in India. PE has now entered the economic mainstream and this segment has particularly gained momentum over the past few years. The concepts of VC and PE are very recent in India as compared to other countries like USA, UK, Europe, Israel etc. where it has been in existence since many years.

## Market Design for Private Equity

| | |
|---|---|
| **Private Equity Players** | **Private equity players** are established investment bankers and typically invest into proven/established businesses. PE funds/players are among the largest sources of funding for enterprises that are relatively secure with an established track record, requiring significantly large funds for expansion and growth. As such, they take reasonably well-defined risks and their exit strategy is usually up to the stage when the company goes public or gets acquired at high value. PE funds are generally seen to attract huge amount of capital from investors, including pension funds, insurance funds, university foundations and individuals. PE investors can be domestic or foreign private equity firms. Domestic PE firms are either established as trusts, or set up as a company. All Private equity (PE) investments from outside the country are either classified as Foreign Institutional Investment (FII) for investments in listed companies or Foreign Direct Investment (FDI) for investment in unlisted companies**.** If a PE investment takes place in an unlisted firm, it falls under India's FDI rules. A PE fund can also buy into listed companies. However, in order to do such investments, the PE fund has to become a registered FII. |
| **Transactions by Private Equity** | After registration as an FII, there are two kinds of transactions that can be entered by a PE Firm.<br>• **PIPE** (Private Investment in Public Equity) **Deals**: In this type of transaction, the company sells shares directly to the PE Fund. Under the FII category, the Private investment in public equity (PIPEs) are large transactions contracted between the PE Fund.<br>• **Ordinary secondary market transactions** (where the PE fund buys shares on the secondary market). These are pure FII transactions.<br>However, these two cases are differentiated by capital control[3]. |
| **Exit strategies of PEs** | There are various forms of exit from an investment by a private equity investor. These are:<br>• **Direct sale** to investors seeking a shareholding in a firm acquired by the fund. The initial public offering (IPO) is a preferred exit option in developed PE markets.<br>• **Post-purchase** listing of the company permitting sale of equity through the stock market.<br>• **Sale to** another private equity firm, referred to as a **secondary buyout**.<br>• **Mergers and acquisitions**. As the Indian economy's growth has kept a steady pace, industry-wide consolidations are an attractive route for a PE investor to make an exit. |

[3] The structure of PE is taken from 'Indian Financial Markets', Ajay Shah, Susan Thomas and Michael Gorham.Pg.46 and Pg.215.

| | |
|---|---|
| **Regulations for Private Equity Investors** | The important statutes that require compliances for private equity investment in India are the Companies Act, 1956, the Foreign Exchange Management Act, 2000 and the Securities and Exchange Board of India Act, 1992 along with the rules and regulation therein. For tax exemption purposes, guidelines are issued by the Central Board of Direct Taxes (CBDT). PIPE deals are also governed by the SEBI Initial Capital Disclosure Requirements (ICDR) Regulations 2009, which deals with the regulations relating to QIBs and Preferential Placement.<br>***Foreign Direct Investments***<br>Most PE funds make FDI under the automatic route, which does not require any prior approval. However, there are certain sectors such as broadcasting, courier services, print media etc, in which investment is allowed with the approval of Foreign Investment Promotion board (FIPB). Further, FDI is prohibited in few sectors like multi-brand retail trading, gambling and betting etc.<br>RBI follows definition of FDI given by IMF wherein PE investments more than 10 percent are treated as FDI.<br>***Foreign institutional investors***<br>Foreign institutional investors (FIIs), including private equity funds so registered, investing in the public markets, have to comply with the SEBI (Foreign Institutional Investors) Regulations, 1995. These limit FII investment in an Indian company to 10 percent of the capital, and limit the aggregate investments of all FIIs and its sub-accounts to 24 percent, the latter limit being amenable to modification subject to sectoral limits. |

## Market Outcome for PE/VC Investments in India

### Growth in PE/VC deals in India[4]

The scenario of PE/VC investments caught momentum in the late 1990s with the growth of Indian IT companies and with the simultaneous global dot-com boom. On the back of global IT boom, Indian IT sector was viewed as a prominent funding opportunity and consequently saw a lot of venture capital coming into the country.

The number of PE/VC investments in India continued to slide for the second consecutive year in 2009. In the year 2009, 260 deals worth US $ 12.05 billion were struck compared to that of 312 and 405 deals in 2008 and 2007 respectively. Albeit the number of PE deals contracted in 2009, the value of all such PE deals saw a y-o-y growth of 13.79%. Till 2009, maximum number of PE deals was struck in the year 2007 with 405 deals worth US $ 19.03 billion. (Table 7-10 and Chart 7-4)

**Table 7-10: Private Equity Deals in India**

| | No. of Deals | Total PE Value (US $ bn) |
|---|---|---|
| 2005 | 124 | 2.03 |
| 2006 | 302 | 7.86 |
| 2007 | 405 | 19.03 |
| 2008 | 312 | 10.59 |
| 2009 | 260 | 12.05 |

*Source: Grant Thornton, Deal Tracker 2010*

4 The market outcome of PE/VC investments is based on the data reported by Grant Thornton in Deal Tracker, 2009 which reports PE/VC deals together.

Chart 7-4: Private Equity Deals


### PE Fundraising/ Investments in BRIC countries

According to the data reported by Emerging Markets Private Equity Association (EMPEA), 2010 among the BRIC economies, China and India remained the most preferred destination for Private equity players in 2009. In the year 2009, the fundraising by private equity in China and India was US $ 6,617 million and US $ 3,999 million respectively. These two Asian countries, however, saw a declined in the PE fund raising by around 50% in 2009. The other two BRIC countries such as Brazil and Russsia also experienced a significant cut in the PE fundraising during 2009[5]. (Table 7-11)

Table 7-11: Private Equity Fund Raising in BRIC Countries

(in US $ mn)

| Year | Brazil | Russia | India | China |
|---|---|---|---|---|
| 2001 | 323 | 375 | 259 | 152 |
| 2002 | 270 | 100 | 142 | 105 |
| 2003 | 230 | 175 | 236 | 213 |
| 2004 | 480 | 200 | 706 | 311 |
| 2005 | 158 | 1,254 | 2,741 | 2,243 |
| 2006 | 2,098 | 222 | 2,884 | 4,279 |
| 2007 | 2,510 | 1,790 | 4,569 | 3,890 |
| 2008 | 3,589 | 880 | 7,710 | 14,461 |
| 2009 | 401 | 455 | 3,999 | 6,617 |

*Source: Emerging Market Private Equity Association.*

In 2009, all the BRIC countries saw a sharp decline in PE investments; Russia was worst hit with a year-on-year decline of 92%. China and India remained leading destinations for PE investments among the BRIC countries in 2009 notwithstanding the sharp y-o-y decline in such investment. (Table 7-12)

[5] The data reported for India may not match here with the earlier section on 'Growth of PE/VC investments in India' because this data source is EMPEA and earlier data source is Grant Thornton which reports data for India only.

**Table 7-12: Private Equity Investments in BRIC Countries**

(in US $ Mn)

| Year | Brazil | Russia | India | China |
|---|---|---|---|---|
| 2001 | 281 | 77 | 320 | 1,575 |
| 2002 | 261 | 127 | 40 | 126 |
| 2003 | 321 | 113 | 456 | 1,667 |
| 2004 | 120 | 240 | 1,272 | 1,389 |
| 2005 | 474 | 240 | 1,377 | 2,991 |
| 2006 | 1,342 | 402 | 5,687 | 8,200 |
| 2007 | 5,285 | 805 | 9,905 | 9,458 |
| 2008 | 3,020 | 2,647 | 7,483 | 8,994 |
| 2009 | 989 | 217 | 4,011 | 6,288 |

*Source: Emerging Markets Private Equity Association.*

### ADRs and GDRs

Foreign investors may also invest in Indian companies through the purchase of American Depositary Receipts (ADRs) and Global Depository Receipts (GDRs). Depository receipts, whether ADRs or GDRs, are basically negotiable instruments denominated in U.S. dollars or another currency representing a publicly-traded issuer's local currency equity shares. They are created when the local currency shares of an Indian company, for example, are delivered to a depository bank's domestic custodian bank, against which the depository issues a depository receipt in U.S. dollars or another currency. Each depository receipt can represent one or more of the underlying shares. Indian companies are very familiar with the issuance of these instruments and have tapped the ADR/GDR market frequently to raise foreign capital. Because ADRs/GDRs represent the underlying shares of the issuing company, their value fluctuates along with the value of the underlying shares.

Foreign investors who wish to have their investment in an Indian company represented by a U.S. dollar denominated instrument can purchase ADRs/GDRs of the Indian issuer.

## Non Resident Indians (NRIs) and Persons of Indian Origin (PIO)

## Market Design

| | |
|---|---|
| **NRIs and PIO** | **Non Resident Indian (NRI)** means a person who has gone out of India or who stays outside India, in either case for or on taking up employment outside India, or for carrying on a business or vocation outside India, or for any other purpose, in such circumstances as would indicate his intention to stay outside India for an uncertain period. Simply, it means a person resident outside India who is a citizen of India or is a Person of Indian Origin.<br>**Person of Indian Origin means any person:**<br>a) who at any time, held an Indian passport; or<br>b) he/she or either of his/her parents or any of his /her grandparents was a citizen of India by virtue of the Constitution of India or the Citizenship Act, 1955(57 of 1955) or<br>c) the person is a spouse of an Indian citizen or a person referred to in clause (a) or (b) above. |

| | |
|---|---|
| **Rupee and Foreign Currency Accounts** | **1) Non-Resident (External) Rupee Accounts (NRE Accounts)**<br>NRIs and PIO, are eligible to open NRE Accounts. These are rupee denominated accounts. The balance in the account is freely repatriable.<br>**2) Ordinary Non-Resident Rupee Accounts (NRO Accounts)**<br>These are Rupee denominated non-repatriable accounts<br>**3) Foreign Currency Non Resident (Banks) Accounts (FCNR (B) Accounts)**<br>NRIs/PIO are permitted to open FCNR (B) Accounts in Canadian Dollars and Australian dollars also besides the existing provision of maintaining such accounts in US dollars, Japanese Yen, Sterling Pounds, Euro. The account may be opened only in the form of term deposit for any of the three maturity periods viz; (a) one year and above but less than two years (ii) two years and above but less than three years and (iii) three years only.<br>Interest income is tax free in the hands of NRI until he maintains a non-resident status or a resident but not ordinarily resident status under the Indian tax laws.<br>FCNR(B) accounts can also be utilized for local disbursements including payment for exports from India, repatriation of funds abroad and for making investments in India, as per foreign investment guidelines. |
| **Portfolio Investments** | Reserve Bank of India has granted general permission to NRIs/PIOs, for undertaking direct investments in Indian companies, under the Automatic Route, purchase of shares under Portfolio Investment Scheme, investment in companies and proprietorship/partnership concerns on non-repatriation basis and for remittances of current income. NRIs/PIOs do not have to seek specific permission for approved activities under these schemes.<br>NRIs are permitted to make portfolio investment in shares/debentures (convertible and non-convertible) of Indian companies (except print media sector), with or without repatriation benefit provided the purchase is made through a stock exchange and also through designated branch of an authorised dealer. NRIs are required to designate only one branch authorised by RBI for this purpose. **For NRIs to invest in Indian stock market, it is mandatory to have a PAN (Permanent Account Number) Card.**<br>NRIs are allowed to invest in shares of listed companies in recognised stock exchanges under the Portfolio Investment Scheme. NRIs can invest through designated Ads on repatriation and non-repatriation basis under the PIS route upto 5 percent of the paid up capital /paid up value of each series of debentures of listed Indian Companies. The aggregate paid-up value of shares / convertible debentures purchased by all NRIs cannot exceed 10 percent of the paid up capital of the company / paid up value of each series of debentures of the company. The aggregate ceilings of 10 percent can be raised to 24 percent, if the general body of the Indian company passes a special resolution to that effect. |
| **Payment of Purchase of Shares / Convertible debentures** | Payment of purchase of shares and/ or debentures on repatriation basis has to be made by way of inward remittance of foreign exchange through normal banking channels or out of funds held in NRE/FCNR (B) account maintained in India. If the shares are purchased on non-repatriation basis, the NRIs can also utilize their funds in NRO account in addition to above. |
| **No Transferability of Shares purchase of stock exchanges is allowed** | Shares purchased by NRIs on the stock exchange under PIS cannot be transferred by way of sale under private arrangement or by way of gift (except by NRIs to their relatives as defined in section 6 of the Companies Act 1956, or to a chariatable trust duly registered under the laws in India) to a person resident in India or outside India without prior approval of the RBI. |

| | |
|---|---|
| **Investment Restrictions for NRIs/PIOs** | Investments in shares or convertible debentures of an Indian Company engaged in following type of activities are not permitted.<br>• Chit Fund or Nidhi Company<br>• Agricultural or Plantation activities<br>• Real Estate Business<br>• Construction of farm houses or<br>Dealing in Transfer of Development Rights (TDRs). |
| **Investments Allowed to NRIs/PIOs** | **NRIs can invest in India as under:**<br>1. Investment under Automatic Route with repatriation benefits<br>2. Investment with Government approval<br>3. Other investments with repatriation benefits<br>4. Investments upto 100% equity without repatriation benefits<br>Other investments by NRIs without repatriation benefits |
| **Investment by NRIs on Non-Repatriation Basis** | NRIs intending to invest on non-repatriation basis should submit the application to a designated branch of an Authorised Dealer (AD). The AD will grant general permission to purchase shares/debentures to NRI subject to the condition that the payment for such investment is received through inward remittance or from the investor's NRE/FCNR/NRO Account. Investment on non-repatriation basis is allowed in the following instruments:<br>• Government dated securities (other than bearer securities)/treasury bills.<br>• Units of domestic mutual funds.<br>• Units of Money Market Mutual Funds in India.<br>• Non-convertible debentures of a company incorporated in India.<br>• The capital of a firm or proprietary concern in India, not engaged in any agricultural or plantation activity or real estate business.<br>• Deposits with a company registered under the Companies Act, 1956 including NBFC registered with RBI, or a body corporate created under an Act of Parliament or State Legislature, a proprietorship concern or a firm out of rupee funds which do not represent inward remittances or transfer from NRE/FCNR(B) Accounts into the NRO Account.<br>• Commercial Paper issued by an Indian company.<br>• Shares and convertible debentures of Indian companies other than under Portfolio Investment Scheme<br>**Securities acquired by NRIs under PI scheme on a non-repatriation basis can be sold without any permission on the floor of a stock exchange. Dividend and interest income is fully repatriable.** |
| **Investment on Repatriation basis** | NRIs intending to invest with repatriation benefits should submit the application to the designated branch of AD. The AD will grant to NRI permission for purchase of shares/ debentures subject to the conditions that -<br>• The payment is received through an inward remittance in foreign exchange or by debit to the investor's NRE/FCNR account.<br>• Investment made by any single NRI investor in equity/preference shares and convertible debentures of any listed Indian company does not exceed 5% of its total paid-up equity or preference capital or 5% of the total paid-up value of each series of convertible debentures issued by it.<br>• NRIs take delivery of the shares/convertible debentures purchased and give delivery of the shares/convertible debentures sold under the Scheme.<br>NRIs can freely sell securities acquired by them with repatriation benefits, without any permission, through a stock exchange. Dividend and interest income is also fully repatriable. |

| | |
|---|---|
| **Investment in the units of domestic mutual funds on non-repatriation/ repatriation basis** | Same procedure as indicated in paragraphs for Investment on Non-Repatriation Basis and Repatriation Basis above is applicable. However, approvals already granted for portfolio investment in shares/debentures of Indian companies will also be valid for purchase of units of domestic mutual funds.<br>No investments can be made through foreign currency. All investments have to in Indian Rupees. A convenient way to invest would be through the NRE Accounts. Mutual Funds Scheme can be gifted to relatives in India by NRIs. If the investment is made on a repatriation basis, the net income or capital gains (after tax) arising out of investment are eligible for repatriation subject to some compliance. If the investment is made on a non-repatriation basis, only the net income, that is, dividend (after tax), arising out of investment is eligible for repatriation.<br>Indexation benefit is made available to NRIs in case mutual fund units are held for more than twelve months. |
| **Investment in exchange trade derivative contracts** | NRIs are allowed to invest in Exchange Trade Derivative Contracts approved by SEBI from time to time of Rupee Funds held in India on non-repatriation basis subject to the limits prescribed by SEBI.<br>Shares purchased by NRIs on the stock exchange under the Portfolio Investment Scheme cannot be transferred by way of sale under private arrangement or by way of gift to a person resident in India or outside India without prior approval of RBI. |
| **Monitoring of Investment Position by RBI** | Reserve Bank of India monitors the investment position of FIIs/NRIs in listed Indian companies reported by Custodian / designated AD banks on a daily basis.<br>The concept of caution list/ban list is same as discussed under the market design for FIIs. |

## NRI Investments

The NRI turnover data at NSE is depicted in table 7-13. NRI turnover at the cash market of NSE registered a year-on-year growth of 106% in 2009-10 and stood at ₹ 103,545 million. In the derivatives market of NSE, total NRI turnover stood at ₹ 42,645 million in 2009-10, a y-o-y growth of 41% over 2008-09.

**Table 7-13: NRI Turnover at NSE**

| Year | Cash Market Gross Turnover (₹ mn) | Derivatives Market Gross Turnover (₹ mn) |
|---|---|---|
| 2007-08 | 85,443.35 | 39,464.26 |
| 2008-09 | 50,161.38 | 30,190.46 |
| **2009-10** | **103,545.90** | **42,645.70** |

*Source: NSE*

## Way Forward

PE has entered the economic mainstream and has gained a lot of momentum over the past few years. Though PE firms have shown their interest in India on the back of robust economic growth and financial opportunities in the country, there is further scope for enhanced investments by them. A main barrier to entry for PE's in India are complex regulatory issues relating to sector investment and ambiguities in the interpretation of tax codes as well as the regulatory costs. Moreover, what aggravates the problem is that there are multiple regulations with little harmonization of guidelines across government agencies and regulators; viz, SEBI, RBI, Central Board of Direct Taxes (CBDT) and Ministry of Company Affairs. The important statutes that require compliances for PE investment in India are the Companies Act, 1956, the Foreign Exchange Management Act, 2000 and the SEBI Act, 1992 along with the rules and regulation therein. For tax purposes, guidelines are issued by the CBDT. PIPE deals are also governed by the SEBI ICDR Regulations, which deals with the regulations relating to QIBs and Preferential Placement. Specifically, PE funds are covered under FVCI (Foreign Venture Capital Investor) regulations as there are no separate guidelines for PE funds. PE needs to be defined as a separate asset class with separate regulations/guidelines. The definition needs to appreciate that PE is long-term capital, unlike a hedge fund where main motives are short-term gains.

With a view to rationalizing the present arrangements relating to foreign portfolio investments by FIIs/ non- resident Indians (NRIs) and other foreign investments like foreign venture capital investor (FVCI) and private equity entities, the Government set up a working group under the Chairmanship of Shri U K Sinha to look at various types of foreign flows, which are taking advantage of arbitrage across the respective stand-alone regulations, and generate recommendations to the Government. The group submitted its report to the Finance Secretary on 30 July 2010. The group examined the structure of regulation and the ways in which practices, institutions, and procedures inflect and shape these policy decisions. It looked at foreign exchange law with regard to listed and unlisted equity, corporate and government securities, and derivatives as well as tax policy related to these matters. The group's report also offers, alongside economic policy contextualizing capital flows in relation to the Indian and global economies, close scrutiny of the structures and incentives created by the law in the main areas of the report's mandate: foreign exchange controls with regard to listed and unlisted equity, corporate and government securities regulation, and derivatives trading. The focus of the group has been to identify procedures and practices which can help avoid uncertainty, delay, or unequal treatment and to recommend measures which could simplify the portfolio investment environment, at the same time laying a strong emphasis on KYC norms. Some of the important recommendations of the Working Group is given in Box 7-1.

**Box 7-1: Report of the Working Group on Foreign Investment**

Some of the recommendations give by the Committee are as follows:

- Create a financial sector appellate tribunal, or extend the authority of the Securities Appellate Tribunal, to hear appeals on all aspects of capital flows management regulations
- Create a single window for registration and clearance of portfolio investment regulations that does not distinguish between investor classes.
    - (a) Qualified depository participants ("DPs"), with global presence through branch network and agency relationships would be legally responsible for enforcing OECD-standard KYC requirements;
    - (b) Such global DPs would have higher capital requirements and would need to pass a detailed "fitness test" administered by SEBI;
    - (c) FIIs, FVCIs and NRIs would be abolished as an investor class.
- Promulgate broader KYC requirements that meet OECD standards of best practices.
- Consistent with Lahiri Committee recommendations, in areas where there are no separate ceilings by an Act of Parliament, QFI investment ceilings should be reckoned over and above prescribed FDI sectoral caps.
- Extend the QFI model, our single window for clearance of portfolio investment regulations, to debt investments as well.
- Extend consumer protection guidelines for investment in foreign securities under the Liberalised Remittance Scheme to investments in debt securities.
- Exempt investment by Indian residents in derivatives trade abroad up to the US $200,000 limit under the Liberalised Remittance Scheme from further regulation. Specifically the ban on taking margin payments should be restated to hold that,when taking margin payments, total liability should not exceed the LRS limit.
- The proposal of the Draft Direct Taxes Code to deem income of FIIs as income from capital gains should be broadened to cover all non-resident investors including private equity funds.
- Harmonize the regulation of futures, forwards and options. There should be a general policy preference to encourage greater trade in exchange-traded, as opposed to over-the-counter derivatives.

# 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.

## 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 widespread. 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 (NCFM)

National Stock Exchange's Certification in Financial Markets (NCFM), is an online testing and certification process. The entire process from generation of question papers to testing, assessing, scores reporting and certifying is fully automated. 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.

NCFM offers a comprehensive range of modules covering many different areas in finance. NCFM currently tests expertise in the modules mentioned below in Table 8-1.

NCFM introduced several new modules in 2010. On January 11, 2010 a module on 'Interest Rate Derivatives: A Beginner's Module' was introduced. This module aims at creating a better understanding of the concepts underlying the money market and giving insights into the operations related to the trading of interest rate derivatives. The 'Investment Analysis and Portfolio Management' module was launched on March 19, 2010 which aims at providing an overview of the various investment instruments in the financial markets with details on evaluating investment opportunities to satisfy risk-return objectives of investors. On May 25, 2010 a module on 'Commercial Banking in India: A Beginner's Module' was launched. This module aims at providing some basic insights into the policies and practices currently followed in the Indian banking system.

## 8-1: NCFM Module Test Details

| Sr. No. | Name of Module | Fees (₹) | Test Duration (in minutes) | No. of Questions | Maximum Marks | Pass Marks (%) | Certificate Validity (in years) |
|---|---|---|---|---|---|---|---|
| 1 | Financial Markets: A Beginners' Module * | 1500 | 120 | 60 | 100 | 50 | 5 |
| 2 | Mutual Funds : A Beginners' Module | 1500 | 120 | 60 | 100 | 50 | 5 |
| 3 | Currency Derivatives: A Beginner's Module | 1500 | 120 | 60 | 100 | 50 | 5 |
| 4 | Equity Derivatives: A Beginner's Module | 1500 | 120 | 60 | 100 | 50 | 5 |
| 5 | Interest Rate Derivatives: A Beginner's Module | 1500 | 120 | 60 | 100 | 50 | 5 |
| 6 | Commercial Banking in India: A Beginner's Module | 1500 | 120 | 60 | 100 | 50 | 5 |
| 7 | Securities Market (Basic) Module | 1500 | 105 | 60 | 100 | 60 | 5 |
| 8 | Capital Market (Dealers) Module * | 1500 | 105 | 60 | 100 | 50 | 5 |
| 9 | Derivatives Market (Dealers) Module * | 1500 | 120 | 60 | 100 | 60 | 3 |
| 10 | FIMMDA-NSE Debt Market (Basic) Module | 1500 | 120 | 60 | 100 | 60 | 5 |
| 11 | Investment Analysis and Portfolio Management Module | 1500 | 120 | 60 | 100 | 60 | 5 |
| 12 | Certified Personal Financial Advisor (CPFA) Examination | 4000 | 120 | 80 | 100 | 60 | 3 |
| 13 | NSDL–Depository Operations Module | 1500 | 75 | 60 | 100 | 60 # | 5 |
| 14 | Commodities Market Module | 1800 | 120 | 60 | 100 | 50 | 3 |
| 15 | Surveillance in Stock Exchanges Module | 1500 | 120 | 50 | 100 | 60 | 5 |
| 16 | Corporate Governance Module | 1500 | 90 | 100 | 100 | 60 | 5 |
| 17 | Compliance Officers (Brokers) Module | 1500 | 120 | 60 | 100 | 60 | 5 |
| 18 | Compliance Officers (Corporates) Module | 1500 | 120 | 60 | 100 | 60 | 5 |
| 19 | Information Security Auditors Module (Part-1) | 2250 | 120 | 90 | 100 | 60 | 2 |
| | Information Security Auditors Module (Part-2) | 2250 | 120 | 90 | 100 | 60 | |
| 20 | Options Trading Strategies Module | 1500 | 120 | 60 | 100 | 60 | 5 |
| 21 | FPSB India Exam 1 to 4** | 2000 per exam | 120 | 75 | 140 | 60 | NA |
| 22 | Examination 5/Advanced Financial Planning ** | 5000 | 240 | 30 | 100 | 50 | NA |
| 23 | Equity Research Module ## | 1500 | 120 | 65 | 100 | 55 | 2 |
| 24 | Issue Management Module ## | 1500 | 120 | 80 | 100 | 55 | 2 |
| 25 | Market Risk Module ## | 1500 | 120 | 50 | 100 | 55 | 2 |
| 26 | Financial Modeling Module ### | 1000 | 150 | 50 | 75 | 50 | NA |

* Candidates have the option to take the tests in English, Gujarati or Hindi languages.

\# Candidates securing 80% or more marks in NSDL-Depository Operations Module ONLY will be certified as 'Trainers'.

** Following are the modules of Financial Planning Standards Board India (Certified Financial Planner Certification)

- FPSB India Exam 1 to 4 i.e. (i) Risk Analysis & Insurance Planning (ii) Retirement Planning & Employee Benefits (iii) Investment Planning and (iv) Tax Planning & Estate Planning
- Examination 5/Advanced Financial Planning

\#\# Modules of Finitiatives Learning India Pvt. Ltd. (FLIP)

\#\#\# Module of IMS Proschool

The curriculum for each of the modules (except Modules of Financial Planning Standards Board India, Finitiatives Learning India Pvt. Ltd. and IMS Proschool) is available on our website: www.nseindia.com > NCFM > Curriculum & Study Material.

## NSE Certified Market Professional (NCMP)

NSE Certified Market Professional (NCMP) certificates are issued to those candidates who have cleared NCFM modules as prescribed by the exchange. This certification was launched on August 17, 2009 as per the below given eligibility criteria. This hierarchy of certifications is aimed at enabling the candidates to better demonstrate their domain knowledge relating to financial markets. Thus, a candidate clearing 3 – 4 modules would be given "NCMP Level 1" certificate and so on. Currently there are 14 modules qualifying for the NCMP certification which are available on the NSE website.

- NCMP Level 1: 3 – 4 modules
- NCMP Level 2: 5 – 6 modules
- NCMP Level 3: 7 – 8 modules
- NCMP Level 4: 9 or more modules

## CBSE – NSE joint certification in Financial Markets

CBSE and NSE introduced a joint certification in Financial Markets for Std. XI and XII. The course, titled "Financial Markets Management (FMM)" had been introduced by CBSE for academic year 2007 - 2008. The course comprises of various subjects, such as Languages, Economics, Business Studies, Accounting for Business etc. Besides these, two financial market related subjects, "Introduction to Financial Markets – I" and "Introduction to Financial Markets – II" are taught in Std. XI and XII respectively. Students opting for the course are required to take the NCFM on-line tests in "Financial Markets: A Beginners Module" in Std. XI and both "Capital Markets (Dealers) Module and Derivatives Markets (Dealers) Module", in Std. XII. The course is in its second year and over 1500 students are enrolled for the course. This is the first such attempt to introduce financial literacy in a formal way in schools.

The course has completed three years till 2009-10 during which period 92 schools have opted for CBSE – NSE certification and 1664 candidates have successfully qualified for the CBSE-NSE joint certification in Financial Markets.

## NSE-Manipal Education Training Programs on Stock Markets

NSE has joined hands with Manipal Education, one of India's premier educational institutions, to impart training with the aim of improving the participants' understanding of how the stock markets function. These programs are designed to cater to people interested in a career in stock markets and other related financial services and also to those who wish to learn about the functioning of the securities markets. It provides relevant tools and techniques that give an in-depth understanding of the various facets of the stock market. Several training programs are currently being offered over multiple days in a month across various cities in India.

## NSE Certified Capital Market Professional (NCCMP)

NSE, in collaboration with reputed colleges and institutes in India, has been offering a short-term course called NSE Certified Capital Market Professional (NCCMP) since August 2009, in the campuses of the respective colleges/institutes. The aim of the NCCMP Program is to develop skills and competency in securities markets. It is a 100 hours program, spanning over 3–4 months and covering theoretical and practical training in subjects related to capital markets. Successful candidates are awarded joint certification from NSE and the concerned college. NCCMP covers an array of subjects pertaining to the capital markets, such as equity markets, debt markets, derivatives, macroeconomics, technical analysis and fundamental analysis.

## Basic Financial Literacy Course

NSE has joined hands with Maharashtra Knowledge Corporation Ltd. (MKCL) to launch a course in basic financial literacy. The aim of the course is to educate learners on simple concepts of personal finance. The course covers in a simple language topics such as income, taxation, expenditure, savings & investment avenues, borrowing, managing risk, budgeting etc. Participants would also learn about various financial institutions and in what ways they can benefit from these institutions. The course helps participants to become aware of different products through which they can meet their financial needs and learn about the benefits of prudent financial behavior. The course comprises of 14 modules of approximately 60 minutes each. At the end of the course, there would be an online examination and successful candidates will be provided with an NSE-MKCL certification in basic financial literacy.

## Research Initiative

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 on the various segments of securities markets. During the year 2010 three research papers were completed under the NSE Research Initiative. While the completed papers are available on the NSE website, we present here non-technical abstracts of these papers.

**1. Determinants and the Stability of Dividends in India**

*By Dr. Manoj Subhash Kamat and Dr. Manasvi Manoj Kamat*

This paper improves on earlier research on stability and determinants of dividend policies by using a more advanced estimation methodology, a larger and more representative sample of panel data (PD), and different proxies for a longer time window 1971-2007. It is aimed to find whether the Indian private corporate sector follow stable cash dividend policies, whether dividends smoothen earnings in India, to estimate the implicit target payout ratio and speed of adjustment of dividends towards a long run target payout ratio.

We further test applicability of dividend stability hypothesis and add to the relatively limited literature on aspects of dividend decision by examining the dynamics of relationship between dividend payouts and a host of other explanatory variables. We estimate the basic static PD model, GMM-in-Levels {GMM (in-Lev)} model, and its other variations GMM-in-first-differences {GMM (in-Diff)} and GMM-in-Systems {GMM (in-Sys)} so to include other lag structures. This procedure shows us how much the size of the dividend determinants, the speed of adjustment coefficient and the one of the implicit target payout ratio varies across the different estimation techniques. In addition, it will also be useful to compare our results with those of Pooled OLS-estimation with alternate data definitions for checking the robustness of the results.

**2. Forecasting of Indian Stock Market Index using Artificial Neural Network**

*By Manna Majumder and MD Anwar Hussian*

This paper presents a computational approach for predicting the S&P CNX Nifty 50 Index. A neural network based model has been used in predicting the direction of the movement of the closing value of the index. The model presented in the paper also confirms that it can be used to predict price index value of the stock market. After studying the various features of the network model, an optimal model is proposed for the purpose of forecasting. The model has used the preprocessed data set of closing value of S&P CNX Nifty 50 Index. The data set encompassed the trading days from 1st January, 2000 to 31st December, 2009. In the paper, the model has been validated across 4 years of the trading days. Accuracy of the performance of the neural network is compared using various out of sample performance measures. The highest performance of the network in terms of accuracy in predicting the direction of the closing value of the index is reported at 89.65% and with an average accuracy of 69.72% over a period of 4 years.

**3. Is it Heterogeneous Investor Beliefs or Private Information that Affects Prices and Trading Volume?**

*By Sugato Chakravarty and Rina Ray*

A large fraction of the behavioral finance literature is based on a "disagreement" model, an important component of which is heterogeneous priors. Heterogeneous priors usually rely on some form of public information. While some investors may be especially skillful in "interpreting" public information and arriving at heterogeneous priors, public information can also trigger private signals. Once private information is introduced into the system, to effectively test such models of heterogeneous priors, the empiricist has to address the "joint behavior" of price and trading volume. In this paper we make such an attempt. Using a new dataset from India, we pit heterogeneous priors against private information to test the explanatory power of such heterogeneous priors. Our measure of heterogeneous priors is based on abnormal order data submitted by institutions, high net worth individuals and retail investors for a sample of Indian IPOs. Our measure of private information is the probability of informed trade (PIN) commonly used in market microstructure literature and computed from high frequency transaction data. While we find that private information dominates heterogeneous priors in explaining trading volume, heterogeneous priors measure dominates imbalance in trading frequency or net buy, i.e. the difference between buy and sell trades. Further, heterogeneous priors affect prices significantly through this trading imbalance. The price impact of our heterogeneous belief measure could be interpreted either as a behavioral bias or as an information processing, and analyzing, cost.

## 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. The data and info-vending services of National Stock Exchange (NSE) are provided through DotEx International Limited (DoteEx) which is a separate professional set-up dedicated solely for this purpose. DotEx provides NSE's market quotes and data for various market segments. DotEx currently provides the following five products: (i) *NSE's online Real Time Data Feed* is high speed streaming data providing Stock Exchange trade quotations and other related information pertaining to the trading on the Capital Market, Wholesale Debt Market, Futures and Options Segments, Securities Lending & Borrowing Market and Currency Derivatives Market Segment of NSE. NSE's real time data is provided in three levels i.e. level 1, level 2 and tick by tick; (ii) NSE's 5-minute, 2-minute and 1 minute Snapshot Data feed contains data pertaining to stock exchange trade quotations and other related information pertaining to the trading on various market segments of National Stock Exchange of India Limited; (iii) *NSE's End of Day data* contains the End of Day bhavcopy information along with security and trade details pertaining to the Capital Market, Wholesale Debt Market and Futures and Options Segments of National Stock Exchange of India Limited (iv) *Historical Data* is provided on DVDs/CDs. The historical data is available for the Capital Market Segment, Futures & Option Segment and Wholesale Debt Market Segment. Historical Data contains (a) Day wise bhavcopy for each trading day, (b) Circulars issued by NSE or NSCCL during the month, (c) masters containing information like symbols, series, ISINs etc., (d) snapshots of the limit order book at four time points in the day and (e) trades data containing details about every trade that took place; (v) *Corporate Data* contains data pertaining to company fundamentals, corporate announcements and shareholding pattern.

## Investor Awareness and Education

NSE has been carrying out investor awareness and education seminars on a regular basis in various centres across the country. Informative brochures and booklets have been prepared for educating investors which are distributed free of cost at the seminars. 1000 Investor Awareness Programmes were conducted during the year 2010.

## `Visit to NSE´ Program

It has been the endeavor of NSE to spread knowledge about financial markets as widely as possible. As part of this endeavor, NSE has been organizing the 'Visit to NSE' Program, under which groups of students visit NSE to attend a 2-hour session. The session includes lecture on 'Overview of the Exchange', 'Capital Markets', 'Derivative Markets' and NSE's NCFM certification which not only expands their knowledge base, but also improves their career prospects. In this session, the students learn about stock exchange structure, its operations, products traded on it and so on. This program is conducted in the Mumbai office as well as the regional offices located at Delhi, Kolkata and Chennai**.**

Around 75 colleges have visited the Exchange till December 2010.

## Investor awareness efforts for Currency Derivatives

National Stock Exchange of India Ltd is pioneer in the development of Indian securities market and various reforms including creation of a vibrant derivatives market. Over the years, NSE has taken many new initiatives to strengthen the securities industry. With evolving needs of the market, NSE has launched several new products and has attracted active participation from various categories of market participants. Within two year of launching Currency Future in India, NSE has launched currency options on USD-INR currency pair on October 29, 2010.

Focused efforts have been made to enhance knowledge and understanding of both the new and existing product categories through various interactive sessions and training programs to NSE Members, Sub-brokers and Investors. A total of 675 programs have been conducted in 95 locations across the country partnering more than 160 members. These training and awareness programs included topics on Currency Derivatives, ETFs, Mutual Fund Service Systems, Interest Rate Futures and Investor Awareness programs focused on Exchange Traded products. The participants include corporate, importers- exporters, banks, individual clients, NSE members, their Branches and sub brokers.