Part II

Financial Sector Reforms: Securities Markets

4

Development of the Securities Market in India

G.N. Bajpai*

Exchanges in religion, culture, education, and medicine between China and India began thousands of years ago. India, for example, hosted distinguished Chinese scholars like Fa Hien in the fourth century CE and Hieun Tsang in the seventh century CE, while China welcomed the great Indian physician Sushrutha, who is considered to be the father of surgery, some 2,500 years ago.

The two societies, Chinese and Indian, have approached social and economic development from diverse angles. Whereas the Chinese system functions in a political framework of Maoist ideology with a steadily rising role of nonstate organizations and individual citizens, India has followed the Westminster Parliamentary democratic system, where social and political factors strongly influence economic decisions.

China embarked on modern economic development as a "cooperative venture" on the principle of equality via deep state intervention. On the other hand, post independence India's command and control economy was built on collaboration between the public and private sectors. In the late 1970s, China chose to experiment with liberalization to facilitate private ownership and global participation and began moving from a sluggish, inefficient, and centrally planned model to a more market-oriented economy. It expanded the authority of local agriculture officials in place

*G.N. Bajpai is the former Chairman of the Securities and Exchange Board of India (SEBI) and also former Chairman of the Life Insurance Corporation of India.

of the old collectivization model and plant managers in industry. China permitted a wide variety of small-scale private enterprises in services and light manufacturing, and opened the economy to increased foreign trade and investment.

In the early 1990s, India began to liberalize and integrate globally and launched a program of reforms in response to a fiscal and balance of payments crisis. The program, consisting of stabilization-cum-structural adjustment measures, was put in place with a view to attain macroeconomic stability and higher rates of economic growth. The reforms in the industrial, trade, and financial sectors were much wider and deeper.

Undoubtedly, China has raced ahead of India. Particularly in manufacturing, it has become a global outsourcing center. India has emerged as an information technology powerhouse, with services contributing a major part of growth of the back office of the whole world. It is not the intention of this presentation to either compare the magnitudes of development in the two economies or delineate the reasons for them. What I seek to communicate is that the two emerging (great) economies have pursued different models and distinct paths but have gained enviable success.

Financial Infrastructure

The financial system of the country, including policies, institutions, and judicial system is the engine of economic growth. It is increasingly believed that sustainable economic growth takes place where there is a spirit of enterprise. India's record in managing risks is enviable. That the cascading effect of the East Asian crisis did not cause even ripples in the Indian financial system speaks volumes about the strength and resilience of its financial infrastructure.

Development of the Securities Market

A securities market is a place where the suppliers and users of capital meet to share one another's views, and where a balance is sought among diverse market participants. The securities separate individual acts of saving and investment over time, space, and entities, and thus allow savings to occur without concomitant investment. Moreover, yield-bearing securities make present consumption more expensive relative to future consumption, inducing people to save more. The composition of savings changes, with less of it being held in the form of idle money or unproductive assets, simply because more divisible and liquid assets are available.

The securities market acts as a brake on channeling savings to low-yielding enterprises and impels enterprises to focus on performance. It continuously monitors performance through movements of share prices in the market and threats of takeover. These characteristics improve the efficiency of resource utilization and thereby significantly increase returns on investment. As a result, savers and investors are not constrained by their individual abilities, but enabled by the economy's capability to invest and save, which inevitably enhances savings and investment in the economy. Thus, the securities market converts a given stock of investable resources into a larger flow of goods and services and augments economic growth. In fact, the literature is full of theoretical and empirical studies that have established a causal robust (statistically significant) two-way relation between developments in the securities market and economic growth.

The Indian securities market dates to the eighteenth century, when the securities of the East India Company were traded in Mumbai and Kolkata. However, the orderly growth of the capital market began with the setting up of the Bombay Stock Exchange in July 1875 and Ahmedabad Stock Exchange in 1894. Eventually, 22 other exchanges in various cities were set up.

Given the significance of the securities market and the need for the economy to grow at a projected 8 percent a year, the managers of the Indian economy have been assiduously promoting the securities market as an engine of growth to provide an alternative yet efficient means of resource mobilization and allocation. Further, the global financial environment is undergoing unremitting transformation. Geographical boundaries have disappeared. The days of insulated and isolated financial markets are history. The success of any capital market largely depends on its ability to align itself with the global order.

To realize national aspirations and keep pace with the changing times, the securities market in India has gone through various stages of liberalization, bringing about fundamental and structural changes in the market's design and operation. These changes have resulted in broader investment choices and a drastic reduction in transaction costs. Efficiency, transparency, and safety have also increased integration with the global markets. The opening up of the economy for investment and trade, the dismantling of administered interest and exchange rates regimes, and setting up of sound regulatory institutions have facilitated these changes.

Regulatory Efficacy

The securities market in India was underdeveloped, opaque, dominated by a handful of players, and concentrated in a few cities. Manipulation and unfair practices were perceived to be rampant, prompting an overseas researcher to describe the market as a "snake pit." The transformation of the Indian securities market started with the establishment of the Securities and Exchange Board of India (SEBI) in 1989, initially as an informal body and in 1992 as a statutory autonomous regulator with the twin objectives of protecting the interests of investors and developing and regulating the securities market over a period of time. SEBI has been empowered to investigate, examine, visit company premises, summon records and persons, and inquire and impose penalties commensurate with misconduct. The first and foremost challenge for the fledgling regulator was to create a regulatory and supervisory framework for the market, a job that proved formidable, because vested interests resisted every new step. However, with the designing and notification of 32 regulations and guidelines, during its decade and a half of existence, the apparatus steadily evolved and has adapted to the situation.

SEBI has instituted a consultative process of framing regulations. All reports, concept papers, and policy proposals are posted on SEBI's website (www.sebi.gov.in) for comments from market participants and the public. The comments are compiled and taken into account before regulations are finalized. Even draft regulations are put on the website, so legal experts can comment on the law's correspondence with the spirit of the initiatives. This openness has a profound impact not only in terms of valuable input and gauging public opinion before framing regulations and guidelines but also in terms of improving quality, acceptability, and ease of implementation. SEBI has formed a number of committees of eminent experts and market practitioners to support it in the design of reforms for different aspects of securities markets. The regulator posts all its orders, including those delivered on appeals against its orders, on its website. On request, it provides informal guidance on payments of nominal fees and issues an action letter so that the participants can seek clarification on any aspect and adopt an appropriate business strategy that conforms to the applicable regulations.

SEBI has put timelines for performance of its various functions, such as registration and renewal, on the website. These measures work as a self-disciplining mechanism within SEBI and provide full transparency to its functioning.

Primary Market

The primary market, which at one time was flooded with a number of issues floated by dubious promoters, depriving gullible investors of their lifetime savings, has since been transformed. The changes in this area have been epic and include detailing of complete profiles of promoters, comprehensive disclosures, the existence of tangible assets, and a track record of profit as also reporting end uses of funds to the Board as a part of corporate governance. Recently, when the story of Google's initial public offering (IPO) was being touted in the media worldwide as one of the greatest innovations of recent times for raising risk capital, the *Financial Times*, London, carried the following observation:

> The World's Biggest Democracy can show Google how to conduct an online IPO. . . .[I]n India you cannot apply on the web but investors can access one of the world's largest financial networks with 7000 terminals scattered around 350 cities. And every step of the book building process is public. . . .[T]he Indian system is a refreshing example of a transparent IPO market but it is also a rare one, especially in the insider-friendly Asian markets.

All the IPOs since the reforms started have been a success and, barring a few exceptions, are trading at a premium over the issue price. The regulatory framework has been modified to provide options to Indian firms for raising resources either domestically, globally, or both. These options help discover prices and reduce the cost of funds. A number of Indian firms have raised money through American depository receipts, global depository receipts, and external commercial borrowings. Two-way fungibility is permitted to enhance liquidity.

During 2004–05, a sum of Rs. 282.56 billion, as opposed to Rs. 232.71 billion in 2003–04 (which was larger than the amount raised in the 10 years of the earlier primary market boom), was raised through the primary market. In fact, the corporate sector and central and state governments together raised a total of Rs. 3.75 trillion from the securities market during 2004–05. Thankfully, so far, no major mishap has occurred recently.

If a Rip van Winkle woke up from a prolonged, deep slumber of a couple of years, he would be amazed to see the quality of the secondary market of India. The deafening noise of an outcry trading system has been replaced with the silence of the electronic consolidated anonymous limit order book, with price-time priority matching accessible through more than 10,000 terminals spread over 400 cities and towns across the Indian subcontinent, something perhaps without a parallel in the world. Transaction costs are low, compared with those of the most developed markets.

The Indian settlement system conforms to the Committee on Payment and Settlement–International Organization of Securities Commissions principles and G–30 committee (January 2003, under the chairmanship of Sir Andrew Large) recommendations, which even the most developed markets of the world are proposing to implement by the end of 2006. The institution of central counterparty (CCP), which provides full novation and guarantees settlement, has eliminated counterparty risk entirely. More than 99 percent of the dematerialization of market capitalization and straight-through processing, mandatory for all institutional trades, have enabled the Indian settlement system to function seamlessly, notwithstanding size and spread.

On a T+2 cycle, all securities are fully cleared electronically through a CCP on a rolling settlement. The CCP of the exchanges, which operates a tight risk management system and maintains a short (T+2) and consistent settlement cycle, is now financially able to meet the obligations for four to five consecutive settlements even if all the trading members default in their obligations. The dynamic risk management system comprises capital adequacy norms, trading and exposure limits, index-based market-wide circuit breakers, and margin (mark to market) requirements. The encashability of the underlying liquidity of the margins, comprising cash, bank guarantees, and securities, is evaluated periodically. The real-time monitoring of broker positions and margins and automatic disablement of terminals with value-added risk margining, built on much higher sigma deviation than the best of the markets in the world, have reduced the operational risk to the lowest ebb. In a recent unfortunate, very sharp (more than 25 percent in two days) fall of the market in May 2004, the strength of the system's risk management was tested. There was not a single broker failure or default, and on the third day (after the two consecutive days of decline) the market functioned as if nothing unusual had happened. Even the CCP was not required to fund any broker-dealer's obligations.

The three-legged corporate compliance stool—disclosure, accounting standards, and boardroom practices—has lifted India to a global pedestal in corporate governance. In a study titled *What Works in Securities Laws?* Professors Rafael La Porta, Florencio Lopez de Silanes, and Andrei Shleifer comment, "India scores 100% as far as disclosure standards are concerned." The Indian accounting standards are aligned with international accounting standards and are "principle based." One of the most sophisticated pension fund managers, CalPERS, gave a score of three (the maximum that could be awarded) via permissible equity market analysis when voting for India as an investment destination. Its September

2004 report, CLSA–CG Watch says, "In terms of consolidation, segmental reporting, deferred tax accounting and related party transactions, the gap between Indian and U.S. Generally Accepted Accounting Principles (GAAP) is minimal."

Regarding corporate governance it might be worthwhile to recall what an Economist Intelligence Unit 2003 study said: "Top of the Country class, as might be expected, is Singapore followed by Hong Kong SAR and somewhat surprisingly, India where overall disclosure standards have improved dramatically, accounting differences between local and U.S. standards have been minimized and the number of companies with a majority of independent directors has risen significantly." The CLSA–Emerging Markets Study on Corporate Governance gives India a score of 6.2, which is next only to 7.5 for Singapore and 6.7 for Hong Kong SAR, and this happened before the implementation of the Narayana Murthy Committee recommendations, said to be effective from January 1, 2006. None of the Indian companies listed on the New York Stock Exchange (NYSE) or on the NASDAQ, to public knowledge, has sought the benefit of transition time for the implementation of SOX requirements. What could possibly be more comforting to any regulator or investor than the CLSA–Emerging Markets Study comment "The Securities and Exchange Board of India (SEBI) continues to raise the bar for good corporate governance."

It is not appropriate to compare the Indian securities market with those of Singapore and Hong Kong SAR. Singapore and Hong Kong SAR are city-states and have a much smaller spectrum to watch: listed companies, broker-dealers, investors, and even number of transactions. The Indian securities market is next only to the U.S. market in terms of size. Even though by all criteria of economic research, market capitalization and trades in U.S. dollar terms determine market size, in actual operations, the market participants and the regulators have to grapple with the number of listed securities, market participants, and the volume of transactions—areas where India stands out. The National Stock Exchange (NSE) is the third-largest exchange in the world, next only to the NYSE and NASDAQ, in the number of transactions, followed by the Bombay Stock Exchange, the fifth largest in the world. India has the largest electronic order book; NYSE and NASDAQ books are quote driven. In the matter of single-stock futures, India leads the world, followed by EURONEXT, which is not even 25 percent its size. Even in index futures, NSE volumes are next only to the Chicago Mercantile Exchange and Eurex. No other market in the world, including that of Japan, compares with the volume of transactions of Indian markets.

The focus of development and the quality of regulation have not centered only on primary and secondary markets, they have also been directed at quality of intermediation and enforcement. The mutual fund industry of India, which has gone through a host of reforms via regulatory interventions, today has some outstanding features such as benchmarking mutual fund schemes, valuation norms, uniform cutoff time, and comprehensive risk management. An independent study organized by the Asian Development Bank, the Cadgon report testifies to this.

Investors and issuers can take comfort and make transactions with confidence if intermediaries and their employees (1) follow a code of conduct and deal with probity and (2) are capable of providing professional services. All intermediaries in the securities market are now registered and regulated by SEBI. A code of conduct has been prescribed for each intermediary as well as for their employees, in addition to applicability of fit and proper person regulatory standards. Further, capital adequacy and other norms have been specified and a system of monitoring and inspecting their operations has been instituted to enforce compliance. Disciplinary action is taken against them for violating any ground rules. All the intermediaries in the market are mandated to have a compliance officer, who reports noncompliance observations directly and independently to SEBI.

The state of the market today bears testimony to the role SEBI plays. It is no wonder that a study by the Society for Capital Market Research and Development (October 2004) revealed that there has been great improvement in the general public's perception of capital market regulation in India since 2001.

The Economic Survey 2003–04 by the government of India had the following to say: "The securities markets have made enormous progress in recent years. India's equity market is now being increasingly recognized as a success story on the world scale." These reforms have boosted the confidence of investors (domestic and international) in the Indian securities market. There are four parameters to ascertain the level of investor confidence: (1) investments by foreign institutional investors (FIIs), (2) growth of the mutual funds industry, (3) subscriptions to IPOs, and (4) an increase in the number of accounts with the depositories. According to figures from the 2003–04 financial year, mutual funds mobilized net resources of about Rs. 480 billion, equivalent to about one-fourth of incremental bank deposits. Mutual funds' assets increased from Rs. 1.1 billion at the end of March 2003 to Rs. 2.0 billion at the end of October 2005. Indian companies raised about Rs. 33 billion through euro issues. The year 2004 witnessed a net FII (portfolio money) inflow of US$10 billion. The volume of issuance in the primary market increased from Rs. 41 billion in 2002–03 to Rs. 282.56 billion in 2004–05.

The two benchmark stock market indices, namely the SENSEX and S&P CNX NIFTY, generated astounding returns of 83 percent and 81 percent, respectively, during 2002–03 and 2003–04. Market capitalization grew from Rs. 7 trillion at the end of March 2003 to Rs. 14 trillion at the end of March 2004, and to Rs. 23 trillion as of August 2005, indicating that the equity market is bigger than the banking system. The primary issues in the last year added at least Rs. 2 trillion in market capitalization. The trading in cash segment of exchanges increased from Rs. 932,062 in 2002–03 to Rs. 1,658,787 in 2004–05. Trading in derivatives increased from Rs. 442,341 to Rs. 2,563,165 during the same period. The turnover in government securities increased from Rs. 1,941,621 to Rs. 2,639,897. The impact cost went down to 0.1 percent in 2003–04, reflecting substantial improvement in liquidity. The number of demand accounts with depository participants has increased considerably during the past three years, from 3.8 million to 8 million, and is increasing on average at the rate of more than 100,000 per month. The number of investor complaints received by SEBI has been sharply decreasing over the years.

The efficacy of the market, where entry and exit are possible at will and the liquidity has spread from being skewed to just about 100 to more than 500 securities, is a matter of substantial comfort. More than 2,500 securities (equities) are traded for more than 100 days in a year. Overseas investors are no longer glued to research and assessments of index stocks and have been observing keenly and investing in the mid-cap segment.

The changes in the market have been very fast-paced; they have been possible with the cooperation of all the market participants, other regulators, and the government of India.

However, I would not like to give the impression that in the Indian securities market everything is fine and needs no improvement, polishing, or refurbishing. In fact, the dynamics of the global environment dictate that those charged with the responsibility of bringing about changes must always seek out learning by experience, criticism, and judgments. The market depth needs to be supplemented with further product diversification—mortgage- and asset-backed securities, warrants, and disinvestment in the public sector. The debt market of India, though large and next in size only to Japan in Asia, lacks vibrancy and does not provide adequate options for meeting medium- to long-term funds required for greenfield projects, in particular. Infrastructure funding (essential for continued high economic growth) has become an issue in the absence of a vibrant debt market. There is no market for below-investment-grade paper, or junk bonds.

SEBI's agenda should include making the corporate debt market vibrant: cash and futures, operationalization of Indian deposit receipts, and corporatization and demutualization of stock exchanges (which has already begun with Stock Exchange, Mumbai) where the ownership, management, and trading rights reside with three different sets of entities in order to avoid conflict of interest. The Central Listing Authority and ombudsman should become fully functional. The settlement cycle should migrate to T+1. New products should be introduced to meet the needs of all kinds of market participants. MAPIN (unique identification) should be extended to cover all market participants. Regulations should be revised and amended on a continuing basis to keep them in tune with market developments. National training and skill delivery institutes should be organized to build a cadre of professionals to fulfill specialized functions in the securities market. There is a need to spread an equity culture and build institutions, such as pension funds, to enlarge the market and reduce volatility.

The regulation of listed companies, a job performed in a fragmented manner by SEBI and the Ministry of Company Affairs, needs to be consolidated to eliminate regulatory arbitrage, by unscrupulous operators and blurring of regulatory accountability.

Further, regulation is an evolutionary process and has to be refined on an ongoing basis. Thus, SEBI would and should continue to travel on the learning curve to reorient and reconfigure ground rules (regulations), investigating abilities, and investor protection measures. India will do well because it is fully convinced that securities markets allow people to do more with their savings, ideas, and talents than would otherwise be possible. Development of securities markets will also allow increasingly larger numbers of citizens to participate in some form and to share an opportunity to profit from economic gains. Let me conclude with an opinion expressed recently by Steve Vickers, President of International Risk, published on Finance Asia.com on September 29, 2005: "The stock market has been transformed from a proverbial den of thieves to one of the most transparent automated and well regulated in the world—with record foreign institutional investment inflows a testimony to this."

Appendix I

Fact Sheet on the Indian Capital Market

Number	Market Participants	March 31, 2004	March 31, 2005	September 30, 2005
1	Securities Appellate Tribunal (SAT)	1	1	1
2	Regulators (DEA, MCA, RBI, SEBI)	4	4	4
3	Depositories	2	2	2
4	Depository participants	431	477	499
5	Clearing corporations (NSCCL, BOISL)	2	2	2
6	Stock exchanges (Cash segment)	23	22	22
7	Stock exchanges (Derivatives segment)	2	2	2
8	Negotiated Dealing System (for government securities)	1	1	1
9	Brokers (Cash segment)	9,368	9,129	9,163
10	Corporate brokers (Cash segment)	3,746	3,733	3,786
11	Sub-brokers (Cash segment)	12,815	13,684	16,419
12	Derivative brokers	829	994	1,048
13	Foreign Institutional Investors (FIIs)	540	685	793
14	Portfolio managers	60	84	102
15	Custodians	11	11	11
16	Registrars to an issue/Share transfer agents	78	83	88
17	Merchant bankers	123	128	126
18	Bankers to an issue	55	59	60
19	Debenture trustees	34	35	34
20	Underwriters	47	59	58
21	Venture capital funds—domestic	45	50	62
22	Venture capital investors—foreign	9	14	30
23	Mutual funds	37	39	38
24	Credit rating agencies	4	4	4
25	Approved intermediaries (Stock lending schemes)	3	3	3

Source: *SEBI Bulletin*, November 2005.

Notes: DEA (Department of Economic Affairs, Ministry of Finance, Government of India), MAC (Ministry of Company Affairs, Government of India), RBI (Reserve Bank of India), and SEBI (Securities Exchange Board of India).

Appendix II

Securities Regulations and Guidelines in Effect

Regulations

1. SEBI (Stockbrokers and Sub-Brokers) Regulations, 1992
2. SEBI (Prohibition of Insider Trading) Regulations, 1992
3. SEBI (Merchant Bankers) Regulations, 1992
4. SEBI (Portfolio Managers) Regulations, 1993
5. SEBI (Registrars to an Issue and Share Transfer Agents) Regulations, 1993
6. SEBI (Underwriters) Regulations, 1993
7. SEBI (Debenture Trustees) Regulations, 1993
8. SEBI (Bankers to an Issue) Regulations, 1994
9. SEBI (Foreign Institutional Investors) Regulations, 1995
10. SEBI (Custodian of Securities) Regulations, 1996
11. SEBI (Depositories and Participants) Regulations, 1996
12. SEBI (Venture Capital Funds) Regulations, 1996
13. SEBI (Mutual Funds) Regulations, 1996
14. SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 1997
15. SEBI (Buyback of Securities) Regulations, 1998
16. SEBI (Credit Rating Agencies) Regulations, 1999
17. SEBI (Collective Investment Schemes) Regulations, 1999
18. SEBI (Foreign Venture Capital Investors) Regulations, 2000
19. SEBI (Procedure for Board Meeting) Regulations, 2001
20. SEBI (Issue of Sweat Equity) Regulations, 2002
21. SEBI (Procedure for Holding Inquiry by Inquiry Officer and Imposing Penalty) Regulations, 2002
22. SEBI (Prohibition of Fraudulent and Unfair Trade Practices Relating to Securities Markets) Regulations, 2003
23. SEBI (Central Listing Authority) Regulations, 2003
24. SEBI (Ombudsman) Regulations, 2003
25. SEBI (Central Database of Market Participants) Regulations, 2003
26. SEBI (Self-Regulatory Organizations) Regulations, 2004
27. SEBI (Criteria for Fit and Proper Person) Regulations, 2004

Guidelines

1. SEBI (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999
2. Guidelines for Opening of Trading Terminals Abroad (Issued in 1999)
3. SEBI (Disclosure and Investor Protection) Guidelines, 2000
4. SEBI (Delisting of Securities) Guidelines, 2003
5. SEBI (STP Centralized Hub and STP Service Providers) Guidelines, 2004
6. Comprehensive Guidelines for Investor Protection Fund/Customer Protection Fund at Stock Exchanges (Issued in 2004)

Schemes

1. Securities Lending Scheme, 1997
2. SEBI (Informal Guidance) Scheme, 2003

Source: Securities and Exchange Board of India.

Appendix III

Major Reforms in the Primary Market

- Merit-based regime to disclosure-based regime. Disclosure and Investor Protection Guidelines issued.
- Pricing of public issues determined by the market.
- System of proportional allotment of shares introduced.
- Banks and public sector undertakings allowed to raise funds from the primary market.
- Accounting standards close to international standards.
- Corporate Governance Guidelines issued.
- Discretionary allotment system to QIBs has been withdrawn.
- Foreign Institutional Investors (FIIs) allowed to invest in primary issues within the sectoral limits (including GSec).
- Mutual funds are encouraged in both the public and private sectors and have been given permission to invest overseas.
- Guidelines were issued for private placement of debt.
- Securities and Exchange Board of India promotes Self-Regulatory Organizations.
- Allocation to retail investors increased from 25 percent to 35 percent.
- Separate allocation of 5 percent to domestic mutual funds within the QIB category.
- Freedom to fix face value of shares below Rs. 10 per share only in cases where the issue price is Rs. 50 or more.
- Shares allotted on a preferential basis as well as the pre-allotment holding are subjected to lock-in period of six months to prevent sale of shares.

Source: Securities and Exchange Board of India (SEBI).

Appendix IV

Major Reforms in the Secondary Market

- Registration of market intermediaries made mandatory.
- Capital adequacy norms specified for brokers and sub-brokers of stock exchanges.
- Guidelines issued on Listing Agreement between stock exchanges and corporates.
- Settlement cycle shortened to T+2.
- Stock exchanges and other intermediaries, including mutual funds, inspected.
- Regulation of Substantial Acquisition of Shares and Takeovers, 1997.
- Foreign institutional investors (FIIs) allowed to invest in Indian Capital Market, 1992.
- Order-driven, fully automatic, anonymous screen-based trading introduced.
- Depositories Act, 1996, enacted.
- Guidelines issued on corporate governance.
- Fraudulent and unfair trade practices, including insider trading, prohibited by Securities and Exchange Board of India.
- Straight-through processing introduced and made mandatory for institutional trades.
- Margin trading and securities lending and borrowing schemes introduced.
- Separate trading platform, Indonext, for small and medium-sized enterprises (SME) sector launched.
- Notification of corporatization and demutualization of stock exchanges.
- Settlement and trade guarantee fund and investor protection fund set up.
- Comprehensive risk management system (capital adequacy, trading and exposure limit, margin requirement, index-based market-wide circuit breaker, online position monitoring, automatic disablement of terminals) put in place.
- Comprehensive surveillance system put in place.
- Securities Appellate Tribunal set up July 28, 1997.
- Mutual funds and FIIs to began entering the unique client code (UCC) pertaining to the parent entity at the order-entry level and entered UCCs for individual schemes and subaccounts for the post-closing session.
- Introduction of exchange traded derivatives in India in June 2000.

Source: Securities and Exchange Board of India (SEBI).

Appendix V

Volume: Cash Segment of National Stock Exchange (NSE)

Month/ Year	Number of Companies Listed[1]	Number of Companies Permitted[1]	Number of Companies Available for Trading[1,2]	Number of Trading Days	Number of Companies Traded	Number of Trades (Lakh)	Traded Quantity (Lakh)	Turnover (Rs.)	Average Daily Turnover (Rs.)	Average Trade Size (Rs.)	Demat Securities Traded (Lakh)	Demat Turnover (Rs.)	Market Capitalization (Rs.)[1]	S&P CNX Nifty Index[3]			CNX Nifty Junior Index[4]		
														High	Low	Close	High	Low	Close
1999–00	**720**	**479**	**1,152**	**254**	**NA**	**984**	**242,704**	**839,052**	**3,303**	**85,244**	**153,772**	**711,706**	**1,020,426**	**1,818.15**	**916.00**	**1,528.45**	**5,365.90**	**1,631.90**	**3,695.75**
2000–01	**785**	**320**	**1,029**	**251**	**1,201**	**1,676**	**329,536**	**1,339,510**	**53,367**	**86,980**	**307,222**	**1,264,337**	**657,847**	**1,636.95**	**1,098.75**	**1,148.20**	**3,771.80**	**1,570.20**	**1,601.80**
2001–02	**793**	**197**	**890**	**247**	**1,019**	**1,753**	**278,408**	**513,167**	**2,078**	**29,270**	**277,717**	**512,866**	**636,861**	**1,207.00**	**849.95**	**1,129.55**	**1,676.25**	**1,038.75**	**1,566.95**
2002–03	**818**	**107**	**788**	**251**	**899**	**2,398**	**364,065**	**617,989**	**2,462**	**25,776**	**364,049**	**617,984**	**537,133**	**1,153.30**	**920.10**	**978.20**	**1,690.35**	**1,231.95**	**1,259.55**
2003–04	**909**	**18**	**787**	**254**	**804**	**3780**	**713,301**	**1,099,534**	**4,329**	**29,090**	**713,301**	**1,099,534**	**1,120,976**	**2,014.65**	**920.00**	**1,771.90**	**3,702.60**	**1,259.75**	**3,392.05**
2004–05	**970**	**1**	**839**	**255**	**856**	**4,508**	**797,685**	**1,140,072**	**4,471**	**25,283**	**797,685**	**1,140,072**	**1,585,585**	**2,183.45**	**1,292.20**	**2,035.65**	**4,705.25**	**2,493.70**	**4,275.15**
Apr–04	918	18	795	20	771	319	53,686	100,951	5,048	31,600	53,686	100,951	1,171,828	1,912.35	1,771.45	1,796.10	3,875.55	3,398.00	3,639.80
May–04	928	16	804	21	776	357	54,651	98,920	4,710	27,697	54,651	98,920	950,494	1,837.95	1,292.20	1,483.60	3,756.65	2,493.70	2,846.90
Jun–04	940	12	813	22	787	336	41,987	84,898	3,859	25,298	41,987	84,898	979,700	1,566.50	1,437.90	1,505.60	3,018.40	2,723.50	2,903.35
Jul–04	929	12	815	22	793	377	63,058	93,836	4,265	24,918	63,058	93,836	1,066,087	1,638.70	1,472.55	1,632.30	3,162.85	2,804.75	3,082.10
Aug–04	936	**9**	820	22	799	358	57,543	86,856	3,948	24,260	57,543	86,856	1,143,075	1,658.90	1,573.70	1,631.75	3,206.15	3,006.70	3,199.00
Sep–04	945	**7**	824	22	809	367	62,666	88,508	4,023	24,124	62,666	88,508	1,227,550	1,760.80	1,619.90	1,745.50	3,543.60	3,204.55	3,504.25
Oct–04	950	**6**	828	22	814	299	47,274	75,698	3,785	25,233	47,274	75.698	1,253,825	1,829.45	1,737.85	1,786.90	3,653.40	3,403.70	3,481.55
Nov–04	954	**6**	829	20	816	327	62,548	82,035	4,102	24,859	62,548	82,035	1,446,292	1,963.80	1,776.70	1,958.80	3,913.60	3,466.65	3,884.55
Dec–04	957	**6**	832	23	821	475	99,326	115,593	5,026	24,339	99,326	115,593	1,579,161	2,088.45	1,944.50	2,080.50	4,468.35	3,849.05	4,453.30
Jan–05	958	**5**	833	19	820	410	81,575	99,732	5,249	24,343	81,575	99,732	1,557,444	2,120.15	1,894.40	2,057.60	4,549.85	3,999.75	4,247.80
Feb–05	964	**4**	837	20	825	425	89,665	99,989	4,999	23,551	89,665	99,989	1,614.597	2,110.15	2,036.60	2,103.25	4,427.45	4,213.95	4,388.20
Mar–05	970	**1**	839	22	831	459	83,705	113,055	5,139	24,626	83,705	113,055	1,585,585	2,183.45	1,971.15	2,035.65	4,705.25	4,113.40	4,275.15
2005–06 (*so far*)																			
Apr–05	973	**1**	836	20	829	367	51,265	82,718	4.136	22,527	51,265	82,718	1,517,908	2,084.90	1,896.30	1,902.50	4,413.40	4,016.85	4,024.40
May–05	977	**1**	842	22	830	413	56,516	86,802	3,946	21,020	56,516	86,802	1,654.995	2,099.35	1,898.15	2,087.55	4,369.05	3,998.80	4,364.55
Jun–05	987	**1**	855	23	843	477	70,485	111,397	4,843	23,374	70,485	111,397	1,727,502	2,226.15	2,061.35	2,220.60	4,573.05	4,351.25	4,393.25
Jul–05	999	**1**	868	20	856	503	84,134	123,008	6,150	24,449	84,134	123,008	1,848,740	2,332.55	2,171.25	2,312.30	4,991.50	4,396.15	4,919.10
Aug–05	1,006	**1**	875	22	864	570	100,717	145,731	6,624	25,548	100,717	145,731	1,957,491	2,426.65	2,294.25	2,384.65	5,173.05	4,786.45	5,053.00
Sep–05	1,016	**1**	883	21	872	576	91,996	145,393	6,923	25,229	91,996	145,393	2,098,263	2,633.90	2,382.90	2,601.40	5,419.90	4,955.75	5,303.50
Oct–05	**1,019**	**1**	**881**	**20**	**876**	**463**	**57,670**	**120,810**	**6,040**	**26,077**	**57,670**	**120,810**	**1,927,645**	**2,669.20**	**2,307.45**	**2,370.95**	**5,443.40**	**4,609.15**	**4,714.45**

Source: NSE.
Note: A lakh is a unit corresponding to 100,000.
[1]At the end of the period.
[2]Excludes suspended companies.
[3]S&P CNX NIFTY Index commenced November 3, 1995.
[4]CNX NIFTY Junior commenced November 4, 1996.

Appendix VI

Volume: Cash Segment of Bombay Stock Exchange (BSE)

Month/ Year	Number of Companies Listed[1]	Number of Companies Permitted[1]	Number of Companies Available for Trading[1]	Number of Trading Days	Number of Scrips	Number of Trades (Lakh)	Traded Quantity (Lakh)	Turnover (Rs.)	Average Daily Turnover (Rs.)	Average Trade Size (Rs.)	Demat Securities Traded (Lakh)	Demat Turnover (Rs.)	Market Capitalization (Rs.)[1]	BSE Sensex[2]			BSE=100[3]		
														High	Low	Close	High	Low	Close
1999–00	**5,815**	**0**	**8,028**	**251**	**4,330**	**740**	**208,635**	**686,428**	**2,735**	**9,270**	**NA**	**NA**	**912,842**	**6,150.69**	**3,183.47**	**5,001.28**	**3,906.41**	**1,379.71**	**2,902.20**
2000–01	**5,869**	**0**	**9,826**	**251**	**3,927**	**1,428**	**258,511**	**1,000,032**	**3,984**	**7,002**	**NA**	**NA**	**571,553**	**5,542.81**	**3,436.75**	**3,604.38**	**3,055.14**	**1,633.90**	**1,691.71**
2001–02	**5,782**	**0**	**7,321**	**247**	**5,347**	**1,277**	**182,196**	**307,292**	**1,244**	**24,060**	**NA**	**NA**	**612,224**	**3,759.96**	**2,594.87**	**3,469.35**	**1,830.98**	**1,209.93**	**1,716.28**
2002–03	**5,650**	**12**	**7,363**	**251**	**2,679**	**1,413**	**221,401**	**314,073**	**1,251**	**2,223**	**NA**	**NA**	**572,197**	**3,538.49**	**2,828.48**	**3,048.72**	**1,763.49**	**1,411.32**	**1,500.72**
2003–04	**5,528**	**12**	**7,264**	**254**	**2,610**	**2,028**	**390,441**	**503,053**	**1,981**	**24,806**	**376,304**	**4,79,472**	**1,201,206**	**6,249.60**	**2,904.44**	**5,590.60**	**3,373.24**	**1,446.53**	**2,966.31**
2004–05	**4,731**	**36**	**6,897**	**253**	**2,382**	**2,374**	**477,171**	**518,715**	**2,050**	**21,849**	**431,307**	**451,080**	**1,698,428**	**6,954.86**	**4,227.50**	**6,492.82**	**3,756.07**	**2,226.36**	**3,481.86**
Apr–04	5,292	15	7,098	20	1,907	156	25,669	44,864	2,243	28,702	20,587	38,033	1,255,347	5,979.25	5,599.12	5655.09	3,210.50	2,958.54	3,025.14
May–04	5,296	15	7,223	21	1,768	170	25,907	45,938	2,188	27,014	22,688	39,732	1,023,128	5,772.64	4,227.50	4,759.62	3,090.17	2,226.36	2,525.35
Jun–04	5,271	15	7,560	22	1,780	149	19,122	36,990	1,681	24,894	17,385	32,588	1,047,258	5,012.52	4,613.94	4,795.46	2,658.05	2,446.87	2,561.16
Jul–04	4,730	15	7,087	22	1,991	175	28,624	39,449	1,793	22,583	26,938	35,664	1,135,588	5,200.85	4,723.04	5,170.32	2,771.06	2,518.01	2,755.22
Aug–04	4,735	15	7,133	22	2,093	178	30,446	38,195	1,736	21,501	28,391	33,232	1,216,566	5,269.22	5,022.29	5,192.08	2,813.28	2,682.78	2,789.07
Sep–04	4,733	15	7,148	22	2,314	205	36,955	39,603	1,800	19,301	33,537	33,518	1,309,317	5,638.79	5,155.96	5,583.61	3,020.29	2770.29	2,997.97
Oct–04	4,721	27	6,903	20	2,213	174	29,309	34,608	1,730	19,946	26,860	30,296	1,337,191	5,803.82	5,558.14	5,672.27	3,115.52	2,965.77	3,027.96
Nov–04	4,725	27	6,908	20	2,459	201	42,343	35,742	1,787	17,808	37,139	30,449	1.539,595	6,248.43	5,649.03	6,234.29	3,347.10	3,016.74	3,339.75
Dec–04	4,730	27	6,942	23	2,425	274	62,644	50,226	2,184	18,327	56,775	43,963	1,685,988	6,617.15	6,176.09	6,602.69	3,589.26	3,311.21	3,580.34
Jan–05	4,730	36	6,916	19	2,432	220	53,521	43,888	2,310	19,952	48,571	37,839	1,661,532	6,696.31	6069.33	6555.94	3,641.25	3,269.37	3,521.71
Feb–05	4,732	36	6,946	20	2,455	251	61,626	49,686	2,484	19,787	56,299	43.353	1,730,940	6,721.08	6508.33	6,713.86	3,626.76	3,497.96	3,611.90
Mar–05	4,731	36	6,897	22	2,382	222	61,005	59,528	2,706	26,779	56,137	52,412	1,698,428	6,954.86	6,321.31	6,492.82	3,756.07	3,387.31	3,481.86
2005-06 *(so far)*																			
Apr–05	4,736	35	7,204	20	2,446	136	33,370	37,809	1,890	27,809	29,506	31,187	1,635,766	6,954.86	6,321.31	6,154.44	3,756.07	3,387.31	3,313.45
May–05	4,734	35	7,040	22	2,531	170	43,369	43,359	1,971	25,501	38,716	36,941	1,783,221	6,772.74	6,140.97	6,715.11	3,628.00	3,302.80	3,601.73
Jun–05	4,738	36	7,097	IT,	2,568	204	63,309	58,479	2,543	28,661	57,017	51,109	1,850,377	7,228.21 .	6,647.36	7,193.85	3,829.03	3,575.16	3,800.24
Jul–05	4,743	36	7,129	20	2,577	219	67,719	61,899	3,095	28,281	67,623	61,840	1,987,170	7,708.59	7,123.11	7,635.42	4,112.89	3,786.08	4,072.15
Aug–05	4,752	38	7,166	22	2,669	272	101,503	75,933	3.451	27,954	101,290	75,824	2,123.900	7,921.39	7,537.50	7,805.43	4,248.89	4,027.09	4,184.83
Sep–05	4,746	38	7,134	21	2,552	284	87,055	81,291	3,871	28,589	86,846	81,159	2,254,376	8,722.17	7,818.90	8,634.48	4,606.07	4,191.65	4,566.63
Oct–05	**4,748**	**38**	**7,167**	**20**	**2,421**	**183**	**36,496**	**59,102**	**2,955**	**32,213**	**36,420**	**59,049**	**2,065,611**	**8,799.96**	**7,685.64**	**7,892.32**	**4,666.82**	**4,057.46**	**4,159.59**

Source: BSE.

Note: A lakh is a unit corresponding to 100,000.

[1]At the end of the period.

[2]BSE Sensex commenced January 2, 1986.

[3]BSE-100 Index commenced April 3, 1984.

Appendix VII

Volume: Derivatives Segment at National Stock Exchange (NSE)

Month/ Year	Number of Trading Firms	Index Futures		Stock Futures		Interest Rate Futures		Index Options				Stock Options				Total		Open Interest at the End of Year	
								Call		Put		Call		Put					
		Number of contracts	Turnover (Rs.)	Number of contracts	Turnover (Rs.)	Number of contracts	Turnover (Rs.)	Number of contracts	Notional Turnover (Rs.)	Number of contracts	Notional Turnover (Rs.)	Number of contracts	Notional Turnover (Rs.)	Number of contracts	Notional Turnover (Rs.)	Number of contracts	Turnover (Rs.)	Number of contracts	Turn-over (Rs.)
Jun–00 to Mar–01	211	90,580	2,365	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	90,580	2,365	NA	NA
2001–02	247	1,025,588	21,482	1,957,856	51,516	NA	NA	113,974	2,466	61,926	1,300	768,159	18,780	269,370	6,383	4,196,873	101,925	93,917	2,150
2002–03	251	2126763	43,951	10675786.4	286,532	NA	NA	269,721	5,671	172520	3,577	2456501	69,644	1,066,561	30,490	16,768,909	439,854	97,025	2,194
2003–04*	254	17,192,274	5,54,462	32,485,160	1,305,949	1,013	20	1,043,894	31,801	688,520	21,022	4,258,595	168,174	1,338,654	49,038	56,886,776	2,130,649	235,792	7,188
2004–05	253	21,635,449	772,174	47,043,066	1,484,067	0	0.0	1,870,647	69,373	1,422,911	52,581	3,946,979	132,066	1,098,133	36,792	77,017,185	2,547,053	592,646	21,052
Apr–04	20	2,164,528	79,560	3,829,403	121,048	0	0.0	115,378	4,347	80,733	2,968	292,628	9,640	85,998	2,736	6,568,668	220,299	249,845	7,668
May–04	21	2,551,985	82,149	3,322,799	92,628	0	0.0	196,198	6,824	100,430	3,469	246.630	7,717	63,156	1,976	6,481,198	194,763	179,487	4,696
June–04	22	2,152,644	64,017	3,125,283	78,392	0	0.0	158,784	4,914	117,041	3,559	193,687	5,339	75,380	2,084	5,822,819	158.306	201,871	5,367
July 04	22	1,971,231	61,125	3,492,774	94,009	0	0.0	189,179	6,059	124,352	3,856	262,755	7,614	94,222	2,682	6,134,513	175,345	206,709	5,964
Aug–04	22	1,803,263	57,926	3,577,911	99,591	0	0.0	127,779	4,192	98,618	3,193	284,013	8,499	86,919	2,604	5,978,503	176,006	261,185	7,332
Sep–04	22	1.463,682	49,500	3,768,178	107,123	0	0.0	124,547	4,282	93,808	3,164	365,187	10,763	116,304	3,547	5,931,706	178,380	446,299	13,353
Oct–04	20	1,320,173	47,191	3,660.047	111,695	0	0.0	138,099	5,030	97,628	3,500	357,625	11,684	93,342	3.124	5,666,914	182,224	321,545	9,845
Nov–04	20	1,023,111	38,277	3,600,135	113,525	0	0.0	131,218	4,979	102,223	3,814	363,158	11,971	94,810	3,239	5,314,655	175,805	371,842	12,239
Dec–04	23	1,447,464	58,333	5,238,498	179,387	0	0.0	130,557	5,355	108,650	4,356	481,349	16,952	108,951	3,845	7,515,469	268,227	426,606	15,221
Jan–05	19	1,931,290	76,151	4,551,564	159,564	0	0.0	176,682	7,188	143,416	5,786	362,345	13,502	81,618	3,100	7,246,915	265,290	388,354	13,604
Feb–05	20	1,729,103	71,546	4,167,787	151,743	0	0.0	168,594	7,128	144,627	5,998	367,707	13,890	83,843	3,247	6,661.661	253,551	404,809	14,900
Mar–05	22	2,076,975	86,398	4,708,687	175,363	0	0.0	213,632	9,074	211,385	8,918	369,895	14,496	113,590	4,608	7,694,164	298,857	592,646	21,052
2005–06 *(so far)*																			
Apr–05	20	3,332,361	65,598	4,225,623	106,129	0	0.0	361,544	7,295	295,020	5,981	307,994	8,203	105,955	2,764	8,628,497	195.969	576,056	12,243
May–05	22	3,545,971	70,465	4,466,404	112,882	0	0.0	382,530	7,72o	353,975	7,056	288,137	7,642	100,602	2,609	9.137.619	208,380	670,705	15,863
Jun–05	23	3,626,288	77,218	5,783,428	163,096	0	0.0	421,480	9,092	331,753	7,041	385,640	11,677	104,478	3,122	10,653,067	271,246	997,984	24.545
Jul–05	20	3,451,684	77,399	6,537,794	199,638	0	0.0	358,867	8,130	389,154	8,642	376,129	11,735	84,989	2,623	11,198,617	308.166	1,024,749	27,198
Aug–05	22	4,278,829	100,813	7,124.266	234,817	0	0.0	444,294	10,620	485.001	11,372	350,370	11,935	81,453	2,750	12,764,213	372,307	892,678	24,788
Sep–05	21	4,701.774	118,905	6,995.169	236,945	0	0.0	523,948	13,370	583,081	14,550	363,872	12,917	85,897	3,069	13,253,741	399,756	783,718	23,063
Oct–05	20	6,849,732	170,100	6,526,919	214,398	0	0.0	695,311	17,632	715,208	17,954	309,120	10,753	80,134	2,822	15,176,424	433,660	803,773	21,083

Source: NSE.

Notes: Notional Value of Outstanding Contracts for FUTIDX—Open Interest * Closing price of index future Notional Value of Outstanding Contracts for FUTSTK—Open Interest * Closing price of stock future Notional Value of Outstanding Contracts for OPTIDX - Open Interest * Closing price S&P CNX Nifty Notional Value of Outstanding Contracts for OPTSTK—Open Interest * Closing price of Underlying security Notional Turnover (Strike Price 4 – Premium) * Quantity. Index futures, index options, stock options, stock futures, and interest rate futures were introduced in June 2000, June 2001, July 2001, November 2001, and June 2003, respectively. Volume of derivatives in BSE is negligible. Revised figures.

Appendix VIII

Volume: Trends in Foreign Institutional Investors (FIIs) Investment

Period	Gross Purchases (Rs.)	Gross Sales (Rs.)	Net Investment (Rs.)	Net Investment[1] (millions of US$)	Cumulative Net Investment[1] (millions of US$)
1999–00	**56,856**	**46,734**	**10,122**	**2,339**	**11,237**
2000–01	**74,051**	**64,116**	**9,934**	**2,160**	**13,396**
2001–02	**49,920**	**41,165**	**8,755**	**1,846**	**15,242**
2002–03	**47,060**	**44,371**	**2,689**	**562**	**15,804**
2003–04	**144,858**	**99,094**	**45,765**	**9,949**	**25,754**
2004–05	**216,953**	**171,072**	**45,881**	**10,172**	**35,926**
Apr–04	19,692	12,972	6,720	1,483	27,237
May–04	15,655	19,201	–3,546	–806	26,431
Jun–04	10,894	11,168	–274	–57	26,374
Jul–04	11,247	10,534	713	157	26,531
Aug–04	12,856	10,335	2,521	550	27,080
Sep–04	13,097	10,522	2,575	556	27,637
Oct–04	16,063	14,035	2,028	439	28,075
Nov–04	21,302	13,117	8,185	1,783	29,858
Dec–04	25,841	15,702	10,140	2,229	32,087
Jan–05	17,502	17,819	–317	–75	32,012
Feb–05	24,360	15,151	9,209	2,101	34,113
Mar–05	28,444	20,517	7,927	1,813	35,926
2005–06 *(so far)*					
Apr–05	16,210	17,686	–1,475	–338	35,588
May–05	15,619	17,005	–1,386	–318	35,271
Jun–05	25,960	20,702	5,259	1,210	36,481
Jul–05	25,717	17,956	7,760	1,784	38,264
Aug–05	28,359	23,737	4,621	1,062	39,327
Sep–05	26,651	22,194	4,457	1,023	40,349
Oct–05	**27,166**	**31,794**	**–4,627**	**–1,054**	**39,295**

Source: Securities and Exchange Board of India (SEBI).
[1]Net investment in millions of U.S. dollars at monthly exchange rate.

Appendix IX

Trends in Mobilization of Funds by the Mutual Fund Industry

(In rupees)

	Gross Mobilization				Redemption[1]				Net Inflow				Assets at the End of the Period
Period	Private sector	Public sector	UTI	Total	Private sector	Public sector	UTI	Total	Private sector	Public sector	UTI	Total	
1999–00	**43,726**	**3,817**	**13,698**	**61,241**	**28,559**	**4,562**	**9,150**	**42,271**	**15,166**	**–745**	**4,548**	**18,970**	**107,946**
2000–01	**75,009**	**5,535**	**12,413**	**92,957**	**65,160**	**6,580**	**12,090**	**83,829**	**9,850**	**–1,045**	**323**	**9,128**	**90,587**
2001–02	**147,798**	**12,082**	**4,643**	**164,523**	**134,748**	**10,673**	**11,927**	**157,348**	**13,050**	**1,409**	**–7,284**	**7,175**	**100,594**
2002–03	**284,095**	**23,515**	**7,096**	**314,706**	**272,026**	**21,954**	**16,530**	**310,510**	**12,069**	**1,561**	**–9,434**	**4,196**	**109,299**
2003–04	**534,649**	**31,548**	**23,992**	**590,190**	**492,105**	**28,951**	**22,326**	**543,381**	**42,545**	**2,597**	**1,667**	**46,808**	**139,616**
2004–05	**736,463**	**56,589**	**46,656**	**839,708**	**728,864**	**59,266**	**49,378**	**837,508**	**7,600**	**–2,677**	**–2,722**	**2,200**	**149,600**
Apr–05	63,753	11,193	4,206	79,152	50,403	10,194	4,586	65,183	13,350	999	–380	13,969	153,214
May–04	55,356	–3,227	3,341	55,469	50,793	–3,178	2,476	50,091	4,562	–49	865	5,378	154,018
Jun–04	62,776	3,973	4,090	70,840	60,327	3,922	4,792	69,041	2,450	51	–702	1,799	155,875
Jul–04	57,961	5,005	6,669	69,635	58,783	4,657	6,458	69,898	-822	348	211	–263	157,747
Aug–04	64,060	30,240	3,090	97,390	65,527	36,481	4,629	106,638	–1,468	–6,241	–1,540	–9,249	155,686
Sep–04	68,359	-19,949	2.923	51,334	72,353	–25,448	3,526	50,430	–3,993	5,500	–603	904	153,108
Oct–04	52,074	3.441	2,769	58,284	54,949	4,280	2,772	62,000	–2,875	–839	–3	–3,716	147,995
Nov–04	47,229	3,786	2,376	53,391	48,473	4,118	2,882	55,472	–1,244	–332	–506	–2.082	149,581
Dec–04	75,048	4,762	3,450	83,260	76,320	5,637	3,759	85,717	–1,272	–875	–309	–2,456	150,537
Jan–05	51,801	5,308	3,099	60,207	50,041	4,398	3,205	57,644	1,760	910	–106	2,563	150,378
Feb–05	53,512	5,712	3,993	63,217	54,767	4,968	3,821	63,556	–1,255	745	171	–339	153,253
Mar–05	84,535	6,345	6.650	97,529	86,127	9,237	6,473	101,837	–1,593	–2,892	177	–4,308	149,600
2005–06 *(to date)*													
Apr–05	63,049	5,015	3,849	71,913	52,693	4,099	3,847	60,638	10,357	917	2	11,275	158,422
May–05	54,135	3,264	5,107	62,506	48,962	3,836	4,178	56,976	5,173	–572	928	5,529	167,978
Jun–05	63,887	6,584	4,106	74,577	66,128	6,447	4,532	77,108	–2,241	136	–426	–2,531	164,546
Jul–05	70,145	5,855	5,282	81,283	64,130	6,087	5,014	75,231	6,015	–231	268	6,052	175,916
Aug–05	91,833	8,608	7,515	107,956	80,277	6,679	6,239	93,195	11,555	1,929	1.277	14.761	195,784
Sep–05	78,791	11,736	7,156	97,683	78,625	9,414	7,828	95,868	165	2,322	–672	1,815	201,669
Oct–05	**81,429**	**8,868**	**8,068**	**98,366**	**79,696**	**7,528**	**7,024**	**94,249**	**1,733**	**1,340**	**1,044**	**4,117**	**200,209**

Source: Securities and Exchange Board of India (SEBI).

Notes: (i) The former UTI has been divided into the UTI mutual fund (registered with the Securities and Exchange Board of India (SEBI)) and the specified undertaking of UTI (not registered with SEBI). The above data contain information only for the UTI mutual fund.
(ii) Net assets pertaining to funds of funds schemes are not included in the above data.
(iii) Data for UTI-I are included up to January 2003.

[1]Includes repurchases as well as redemption.

IDBI— MF (earlier a public sector mutual fund) has now become Principal MF (a private sector mutual fund).

Appendix X

Daily Return and Volatility: Select World Stock Indices

(In percent)

	United States		United Kingdom		France		Australia		Hong Kong SAR		Singapore		Malaysia	
Year/Month	Return	Volatility	Return	Volatility	Return	Volatility	Return	Volatility	Return	Volatility	Return	Volatility	Return	Volatility
2000	–0.04	1.40	–0.04	1.20	0.00	1.48	0.00	0.85	–0.05	1.98	–0.10	1.47	0.07	1.40
2001	–0.06	1.36	–0.07	1.37	–0.10	1.64	0.02	0.80	–0.12	1.76	–0.06	1.45	0.01	1.33
2002	0.11	1.64	–0.11	1.73	–0.16	2.22	–0.05	0.70	–0.08	1.22	–0.08	1.03	–0.03	0.75
2003	0.08	1.06	0.09	1.16	0.11	1.37	0.15	0.93	0.12	1.07	0.12	1.17	0.09	0.72
2004	0.04	0.70	0.03	0.65	1.58	0.00	1.58	0.00	0.04	1.03	0.06	0.78	0.06	0.72
Nov. 04– Oct. 05	**0.03**	**0.67**	**0.05**	**0.55**	**0.07**	**0.70**	**0.06**	**0.58**	**0.04**	**0.73**	**0.05**	**0.62**	**0.02**	**0.53**

(In percent)

	Brazil		Mexico		South Africa		Japan		SENSEX		S&P CNX Nifty	
Year/Month	Return	Volatility	Return	Volatility	Return	Volatility	Return	Volatility	Return	Volatility	Return	Volatility
2000	–0.04	2.00	–0.09	2.20	–0.01	1.31	–0.11	1.4	–0.12	2.20	–0.06	1.96
2001	–0.05	2.14	0.05	1.48	0.10	1.39	–0.09	1.55	–0.09	1.72	–0.07	1.59
2002	–0.07	1.89	–0.02	1.40	–0.05	1.19	–0.09	1.44	–0.01	1.10	0.01	1.06
2003	0.34	2.06	0.11	1.07	0.14	1.2	0.12	1.44	0.23	1.19	0.23	1.26
2004	0.06	1.80	0.15	0.94	0.07	0.91	0.03	1.04	0.04	1.61	0.03	1.76
Nov. 04– Oct. 05	**0.10**	**1.58**	**0.12**	**1.03**	**0.13**	**0.78**	**0.11**	**0.79**	**0.13**	**1.04**	**0.11**	**1.07**

Source: Basic data are taken from Bloomberg L.P.

References

La Porta, Rafael, Florencio Lopez de Silanes, and Andrei Shleifer. "What Works in Securities Laws?" Available via the Internet: www.nber.org/papers/w9882

CLSA-CG Watch, CLSA Asia Pacific Markets (Subsidiary of Calyon Credit Lyonnais) Headquartered in Hong Kong SAR, September 2004.

CLSA Emerging Markets Study, CLSA Asia Pacific Markets (Subsidiary of Calyon Credit Lyonnais) Headquartered in Hong Kong SAR, September 2004.

Cadgon report, Study by Asian Development Bank with the help of Government of India under expert, Mr. Cadgon.

Society for Capital Markets, Research and Development Society. Delhi, India.

Steve Vickers, President International Risk, Published in FinanceAsia.Com, September 29, 2005.