Chapter – I
Introduction
INTRODUCTION

Capital investment, an essential input for economic development, accelerates economic growth when channelized into productive activities and securities market is an effective channel through which investable resources can be routed to companies. A well organised and efficient securities market is conducive to sustained economic growth.

Stock markets refer to a market place where investors can buy and sell stocks through approved stock market intermediaries. Stock market is an important ingredient in the economy as it performs a critical role of capital resource allocator. Over the years, the efficient stock market allocation has resulted in the unprecedented growth of industrial sector. This is mainly beneficial since it overcomes the commitment quotient of companies in the fund raising vis-à-vis debt. With the constant upgradation of the stock market systems in India, especially with the introduction of dematerialisation, now the Indian stock markets are at par with developed markets.

The price at which each buying and selling transaction takes is determined by the market forces of demand and supply. In earlier times, buyers and sellers used to assemble at stock exchanges to make a transaction. In short, now with the dawn of IT, most of the operations are done electronically. Hence, the century old outcry system has been completely replaced by, making trading and settlement much faster, easier and efficient.
By the end of 20th century, the concept of dematerialisation of physical shares came into existence. This brought in revolutionary changes and facilitated the resurgence of the Indian stock markets from the clutches of inefficient and time taking century old trading and settlement processes. With this Indian stock markets became the hub of international investments with FII’s flowing into the nation.

1.1 HISTORY AND GROWTH OF STOCK EXCHANGES

Indian Stock Markets are one of the oldest in Asia, dating back to nearly 200 years ago. By 1830’s business on corporate stocks and shares in Bank and Cotton presses took place in Bombay. Though the trading list was broader in 1839, there were only half a dozen brokers recognized by banks and merchants during 1840 and 1850.

The 1850’s witnessed a rapid development of commercial enterprise and brokerage business attracted many men into the field and by 1860 the number of brokers increased into 60. With the stoppage of cotton supply from United States, as a result of American Civil War; thus in 1860-61 the 'Share Mania' in India began and the number of brokers increased to about 200 to 250. But the end of the American Civil War in 1865 brought in a disastrous slump. The brokers who thrived out of Civil War in 1874, found a convenient place in a street to assemble and transact business.
They formally established in Bombay, the "Native Share and Stock Brokers' Association" in 1887. In 1895, the Stock Exchange acquired a premise in the same street and it was inaugurated in 1899. The Bombay Stock Exchange is the oldest stock exchange in Asia. Many of the regional stock exchanges have started aligning themselves with one or both of the two large exchanges (the Bombay Stock Exchange and the National Stock Exchange) both of which have VSAT networks that give them a nationwide reach. Most of the remaining stock exchanges are broker-owned (mutual) organisations, but the Bombay Stock Exchange is actively considering demutualisation. As new mills were floated, the need for a Stock Exchange at Ahmedabad was realised and in 1894 the brokers formed "The Ahmedabad Share and Stock Brokers Association".

The sharp boom in jute shares in 1870’s, tea shares in the 1880’s and 1890’s; and a coal boom between 1904 and 1908, activated some leading brokers to form "The Calcutta Stock Exchange Association" in 1908. Indian cotton and jute textiles, steel, sugar, paper and flour mills and all companies generally enjoyed phenomenal prosperity, due to the First World War. In 1920, the phenomenal prosperity enjoyed by the industrial sector made "The Madras Stock Exchange" to have 100 members in 1920, but the faded boom made the number of members to come down to three and gradually to disappear.

Rapid increase in the number of textile mills and plantation companies activated the stock market activity in 1935 in South India and the stock exchange activities in Madras got revived through Madras Stock Exchange Association.
(Pvt) Limited in 1937, renamed as Madras Stock Exchange Limited in 1957. Lahore Stock Exchange formed in 1934 was merged with the Punjab Stock Exchange Limited, incorporated in 1936. The Uttar Pradesh Stock Exchange Limited (1940), Nagpur Stock Exchange Limited (1940) and Hyderabad Stock Exchange Limited (1944) were incorporated.

Delhi Stock and Share Brokers' Association Limited and the Delhi Stocks and Shares Exchange Limited in 1947 were amalgamated into the Delhi Stock Exchange Association Limited. Lahore Exchange was closed during partition of the country and later migrated to Delhi and merged with Delhi Stock Exchange.

Bangalore Stock Exchange Limited was registered in 1957 and recognized in 1963. Though most of the other exchanges languished till 1957 applied for recognition under the Securities Contracts (Regulation) Act, 1956, the well established exchanges like Bombay, Calcutta, Madras, Ahmedabad, Delhi, Hyderabad, Bangalore and Indore were recognised under the Act. Thus, during early sixties there were eight recognized stock exchanges in India and the number virtually remained unchanged, for nearly two decades.

Stock Exchange Limited (1989), Vadodara Stock Exchange Limited (1990) and exchanges at Coimbatore and Meerut are the recent additions. There were totally twenty four recognised stock exchanges in India. But during 2006-'07 period, SEBI de-recognised four of them.

Hence, today in India there are only 20 recognised stock exchanges. Most of the existing stock exchanges have taken corporate memberships in NSE and BSE through their subsidiary company and today most of the business in India is happening in NSE and BSE only.

It is observed that Indian stock markets have not only grown in number of exchanges, but also in number of listed companies and the capital of listed companies. The review of growth reveled that favourable government policies towards security market industry was identified as a major factor for the remarkable growth after 1985.

1.1.1. GROWTH PATTERN OF INDIAN STOCK MARKET

Trading in Indian stock exchanges is limited to listed securities of public limited companies. They are broadly divided into two categories, namely, specified securities (forward list) and non-specified securities (cash list).

Equity shares of dividend paying, growth-oriented companies with a paid-up capital of atleast Rs.50 million and a market capitalization of atleast Rs.100 million and having more than 20,000 shareholders are, normally, put in the specified group and the balance in non-specified group.
Two types of transactions can be carried out on the Indian stock exchanges: (a) spot delivery transactions "for delivery and payment within the time or on the date stipulated when entering into the contract which shall not be more than 14 days following the date of the contract": and (b) forward transactions "delivery and payment can be extended by further period of 14 days each so that the overall period does not exceed 90 days from the date of the contract".

The latter is permitted only in the case of specified shares. The brokers who carry over the outstanding pay carry over charges (cantango or backwardation) which are usually determined by the rates of interest prevailing.

A member broker in an Indian stock exchange can act as an agent, buy and sell securities for his clients on a commission basis and also can act as a trader or dealer as a principal, buy and sell securities on his own account and risk, in contrast with the practice prevailing on New York and London Stock Exchanges, where a member can act as a jobber or a broker only.

The nature of trading on Indian Stock Exchanges are that of age old conventional style of face-to-face trading with bids and offers being made by open outcry. However, there is a great amount of effort to modernize the Indian stock exchanges in the very recent times.

Today India’s stock exchanges are fully computerised order driven or order-cum-quote driven systems. The country has made rapid strides towards a dematerialised trading environment on the basis of a competing depositories
model. Investors have the choice of holding their stocks in physical or
dematerialised form, but trading in the exchanges is in mandatory dematerialised
mode in most important stocks.

As of October 2000, about 98per cent of the trading in the stock
exchanges is in dematerialised mode. India has put in place a regulatory regime
for internet trading of stocks. A large number of online brokers have started
operations. More brokers are expected to follow when the exchanges put in place
an ASP (Application Service Provider) model for online trading software. However, currently, the level of penetration of online trading is extremely small.

The stock exchanges currently run two parallel settlement systems. Practically all the trading takes place in the account period settlement system in
which all trades during a weekly account period are netted off and the net
obligations are settled five business days after the end of the period.

The other unpopular system is that of rolling settlements where trades of
each day are settled on a T+5 basis. SEBI is currently working on mandatorily
shifting all stocks in a phased manner to the rolling settlement system. Further
improvements in the settlement system to T+3 or beyond would have to wait for
improvements in the payment system.

However, account period settlement does not give rise to significant
systemic risks in India because of stringent end of day and intra-day margining
systems. Put simply, the weekly settlement is regarded as akin to a one-week
futures contract, and the systemic risk is taken care of by using futures style margining.

The exchange imposes daily mark to market and initial margins on the brokers to eliminate settlement risk. Exchanges also have clearing houses to guarantee settlements on the exchange. As a result, there have been no settlement failures in the principal stock exchanges during the last five years.

1.1.2. TRADING PATTERN OF THE INDIAN STOCK MARKET

Indian Stock Exchanges allow trading of securities of only those public limited companies that are listed on the Exchange(s). They are divided into two categories:

**Figure 1.1**

Trading pattern of the Indian Stock Market

- Listed Securities of Public Limited Companies
  - Specified Securities (Forward List)
  - Non Specified Securities (Cash List)
  - Equity Shares of Companies not covered in specified securities
  - Equity Shares of Company that are:
    - Dividend paying
    - Growth-Oriented Companies
    - Paid up capital of at least Rs. 50 Million
    - Market Capitalisation of at least Rs. 100 Million
    - Has more than 20000 shareholders.
1.1.3. TYPES OF TRANSACTIONS

The flowchart below describes the types of transactions that can be carried out on the Indian stock exchanges:

**Figure 1.2**

Types of transactions in Indian Stock Market

- **Transactions on Indian Stock Exchanges**
  - **Spot Delivery Transactions**
    - Includes transactions that require delivery and payment within stipulated time period at the time of entering into the contract
    - This period shall not be more than 14 days following the date of the contract
  - **Forward Transactions**
    - Transactions in which delivery and payment can be extended by further period of 14 days each
    - The overall period should not exceed 90 days from the date of contract.
    - Transactions permitted only in cases of specified shares

Indian stock exchange allows a member broker to perform following activities:

1. Act as an agent,
2. Buy and sell securities for his clients and charge commission for the same,
3. Act as a trader or dealer as a principal,
4. Buy and sell securities on own account and risk.

1.2. STOCK EXCHANGES OF INDIA

1.2.1. BOMBAY STOCK EXCHANGE (BSE)

The Bombay Stock Exchange (BSE) (formerly, The Stock Exchange, Bombay) located on Dalal Street, Mumbai is the oldest stock exchange in Asia. The equity market capitalisation of the companies listed on the BSE was US$1.63 trillion as of December 2010, making it the 4th largest stock exchange in Asia and the 8th largest in the world. It has the largest number of listed companies in the world and has also been cited as one of the world's best performing stock market.

As of December 2010, there are over 5,034 listed Indian companies and over 7700 scrips on the stock exchange, the Bombay Stock Exchange has a significant trading volume. The BSE SENSEX, also called the "BSE 30", is a widely used market index in India and Asia. In short, SENSEX is comprised of 30 stock sensitive companies from 13 industries chosen to be representative of the businesses in India. It serves much like the Dow Jones Industrial Index or the S&P 500 Index in America.

It traces its history to the 1850s, when 4 Gujarati and 1 Parsi stockbroker would gather under banyan trees in front of Mumbai’s Town Hall. The location of these meetings changed many times, as the number of brokers constantly
increased. The group eventually moved to Dalal Street in 1874 and in 1875 became an official organization known as ‘The Native Share & Stock Brokers Association’. In 1956, the BSE became the first stock exchange to be recognized by the Indian Government under the Securities Contracts Regulation Act. The Bombay Stock Exchange developed the BSE Sensex in 1986, giving the BSE a means to measure overall performance of the exchange. In 2000 the BSE used this index to open its derivatives market, trading Sensex futures contracts.

The development of Sensex options along with equity derivatives followed in 2001 and 2002, expanding the BSE’s trading platform. Historically an open outcry floor trading exchange, the Bombay Stock Exchange switched to an electronic trading system in 1995. It took the exchange only fifty days to make this transition. This automated, screen-based trading platform called BSE On-line trading (BOLT) currently has a capacity of 8 million orders per day.

The BSE has also introduced the world’s first centralised exchange-based internet trading system, BSEWEBx.co.in to enable investors anywhere in the world to trade on the BSE platform. The BSE is currently housed in Phiroze Jeejeebhoy Towers at Dalal Street, Fort Area.

1.2.2. NATIONAL STOCK EXCHANGE (NSE)

With the liberalisation of the Indian economy, it was found inevitable to lift the Indian stock market trading system on par with the international standards.
On the basis of the recommendations of high powered Pherwani Committee, the National Stock Exchange was incorporated in 1992 by Industrial Development Bank of India, Industrial Credit and Investment Corporation of India, Industrial Finance Corporation of India, all Insurance Corporations, selected commercial banks and others. Hence, the National Stock Exchange was incorporated in 1992 and was recognised as a Stock Exchange on April 1993.

Since its inception in 1992, National Stock Exchange of India has been at the vanguard of change in the Indian securities market. This period has seen remarkable changes in markets, from how capital is raised and traded, to how transactions are cleared and settled. The market has grown in scope and scale in a way that could not have been imagined at the time. Average daily trading volumes have jumped from 17 crores in 1994-95 when NSE started its Cash Market segment to `16,959 crores in 2009-10. Similarly, market capitalization of listed companies went up from `363,350 crores at the end of March 1995 to `6,009,173 crores at end March 2010. Indian equity markets are today among the most deep and vibrant markets in the world.

NSE offers a wide range of products for multiple markets, including equity shares, Exchange Traded Funds (ETF), Mutual Funds, Debt instruments, Index futures and options, Stock futures and options, Currency futures and Interest rate futures. Our Exchange has more than 1,400 companies listed in the Capital Market and more than 92% of these companies are actively traded. The debt market has 4,140 securities available for trading. Index futures and options trade
on four different indices and on 190 stocks in stock futures and options as on 31st March 2010. Currency futures contracts are traded in four currency pairs. Interest Rate Futures (IRF) contracts based on 10 year 7% Notional GOI Bond is also available for trading.

NSE provides a trading platform for of all types of securities for investors under one roof – Equity, Corporate Debt, Central and State Government Securities, T-Bills, Commercial Paper (CPs), Certificate of Deposits (CDs), Warrants, Mutual Funds (MFs) units, Exchange Traded Funds (ETFs), Derivatives like Index Futures, Index Options, Stock Futures, Stock Options Currency Futures and Interest Rate Futures. The Exchange provides trading in 4 different segments viz., Wholesale Debt Market (WDM) segment, Capital Market (CM) segment, Futures & Options (F&O) segment and the Currency Derivatives Segment (CDS).

1.2.3. AHMEDABAD STOCK EXCHANGE

Ahmedabad Stock Exchange Limited is a premier national equities exchange that plays a key role in the Indian securities markets. Serving individual and institutional investors from around the world, its primary business is the trading of approximately 2000 nationally listed equities. The Exchange also trades over 200 high growth companies that are solely listed on the ASE or dually listed with another exchange.
The Ahmedabad Stock Exchange is the second oldest exchange of India. It was constituted as a Public Charitable Trust in 1894, is the second oldest exchange of India. It is recognised by Securities Contract (Regulations) Act, 1956 as permanent stock exchange.

The membership of the merged entity was 463. In 1982, The Stock Exchange-Ahmedabad got the permanent recognition from the Government of India in 1982.

The 80s and 90s saw major focus on building up requisite infrastructure and bringing about rapid progress in the area of computerization in the exchanges as whole. Recognizing and appreciating the necessity of computerization and putting emphasis on screen based trading the Stock Exchange-Ahmedabad went live on December 12, 1996. Today, The Stock Exchange-Ahmedabad is one of the oldest bourses with 333 trading members is serving the investors with its transparent trading system which among the best in India.

1.2.4. BANGALORE STOCK EXCHANGE

Bangalore Stock Exchange (BgSE) started functioning from 1963 and it is currently the largest stock exchange in South India. There are 595 listed companies with more than 300 non-regional companies in it. Over 5000
companies from listed and permitted category can be traded at the exchange at present.

Bangalore Stock Exchange is managed by the Council of Management which consists of members being nominated by SEBI, public representatives, elected members and Executive Director. At present the exchange has about 239 members. 25% of the total is corporate members.

Bangalore Stock Exchange was the first exchange in the Southern India which started electronic trading of securities. Started in 1996, Bangalore Electronic Securities Trading (BEST) system provides an automatic order matching facilities in trades. When trade takes place, the system generates unique trade number and execution time with complete reliability and transparency in the dealing.

The new system of trading resulted in a sharp growth in the volumes of shares being traded on the exchange. The growth was seen in the turnover which had a 97% leap in one year. In 1996-97, the turnover was Rs.4300 crores and it grew to Rs.8300 crores in 1997-98. To support the investors in resolving their grievances, the exchange has taken an initiative of establishing an Investor Services Centre. The cell comprises of Public Representatives, members, Vice-President and Executive Director. They look after the functioning of the centre and also take appropriate steps for resolving the grievances. To make investors reach the Service Centre, the same has also been set up at Mysore, Shimoga
and Davangere and proposals are there to open at other leading commercial points of Karnataka.

1.2.5. BHUBANESHWAR STOCK EXCHANGE

Bhubaneshwar Stock Exchange (BhSE) was initially incorporated on the 17th April 1989 as a Company limited by guarantee without having share capital. On 15th September 2005, SEBI approved the corporatisation and demutualisation schemes of the Bhubaneshwar Stock Exchange which were required in accordance with the provisions of the Securities Contracts (Regulations) Act, 1956.

As regards the compliance of the part of demutualisation, the statutory requirement was that the Stock Exchange had to ensure, at least 51% of its share capital should be held by the public other than the shareholders having trading rights in the Stock Exchange in the manner prescribed under Securities Contract (Regulation) (Manner of Increasing and Maintaining Public Shareholding in Recognised Stock Exchanges) Regulations, 2006.

1.2.6. CALCUTTA STOCK EXCHANGE

The inception of Calcutta Stock Exchange emerges from a get together under a "Neem Tree" way back in the 1830s, and from then the Calcutta Stock broking fraternity has come a long way. Though the once famous shelter for
Calcutta Stock brokers no longer exist, the roots laid in the last century have dug themselves deep into the city and the region. The North-Eastern region today plays a crucial role in the country’s capital market, while the Calcutta Stock Exchange has emerged as the second largest bourse in the country. The investors from the Eastern Zone are also at the forefront today.

At the time of incorporation in 1908, the Stock Exchange had 150 members. Today the total membership has risen to more than 900, which contains several corporate and institutional members. The number of companies listed on the Exchange is more than 3,500.

The Annual turnover of the Exchange in 1997-98 was to the tune of Rs, 1,78,779 crores. The Calcutta Stock Exchange has been granted permanent recognition by the Central Government with effect from April 14, 1980 under the relevant provisions of the Securities Contracts (Regulation) Act, 1956, with a view to render useful service to investors.

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The Calcutta Stock Exchange has implemented a fully computerised On-Line Trading System known as C-STAR (CSE ONLINE Screen-based Trading and Reporting System) in 1997. The main system hardware is a Tandem S74000 series machine with customised software prepared by CMC Ltd. for both LAN and WAN to broker offices in various parts of India apart from Calcutta and its outskirts. The LAN technology used in state-of-the-Art with optical fibre cables being used to hook up individual terminals with the main system. A dual ring topology has been used in case of failure of one communication line. The wide area network works on Router/Modem through Leased Circuits. CSE uses higher end fault tolerant systems for its trading and related functionalities.

It uses Integrity Non-stop S74000 systems for its online trading systems (CSTAR). The systems have been designed to deliver the best performance without compromising on key factors of availability, scalability, ROI and TCO.

An additional Disaster Recovery System to take care of natural calamities / unexpected breakdowns consisting of a Tandem S74000 series machine has also been installed at a site away from the main system. Individual broker workstations comprise Intel Pentium based personal computers with super VGA Colour Monitors and working under Microsoft Windows operating system (Compatible with both Windows NT Workstation and Windows 2000 Professional Operating Systems). A contingency pool capable of accommodating around 50 brokers has also been set up to help members in case of exigencies (earlier it
used to accommodate 200 people). The entire project was carried out by CMC Ltd.

The Exchange had transferred 101 "B" group non-specified scrip of the On-Line Trading Environment with effect from 26th February, 1997 and this project was inaugurated by the Hon’ble Chief Minister of West Bengal, Shri Jyoti Basu. Subsequently the remaining "B" and all "Permitted" group Scrips (approx. 3500) were transferred on to the C-STAR System with effect from 7th March, 1997.

The Exchange finally shifted the entire "A" group specified securities on to the C-STAR System with effect from 4th April, 1997. Thus the era of Out-cry system of Trading which was approximately 90 years old was finally brought to an end. On-Line Trading is expected to prove beneficial to investors because it will offer complete transparency of all transactions, and eliminate errors as matching will be done by the central computer.

1.2.7. COCHIN STOCK EXCHANGE

Cochin Stock Exchange Limited is one of the premier Stock Exchanges in India, with just 5 companies listed in 1978 -79, and 14 members. Today the Exchange has more than 508 members and 240 listed companies. In 1980 the Exchange computerised its offices. In order to keep pace with the changing scenario in the capital market, CSE took various steps including trading in dematerialized shares. CSE introduced the facility for computerized trading -
"Cochin Online Trading (COLT)" on March 17, 1997. CSE was one of the promoters of the "Interconnected Stock Exchange of India (ISE)". The objective was to consolidate the small, fragmented and less liquid markets into a national level integrated liquid market. With the enforcement of efficient margin system and surveillance, CSE has successfully prevented defaults. Introduction of fast track system made CSE the stock exchange with the shortest settlement cycle in the country at that time. By the dawn of the new century, the regional exchanges faced a serious challenge from the NSE & BSE. To face this challenge CSE promoted a 100% subsidiary called the "Cochin Stock Brokers Ltd. (CSBL)" and started trading in the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE).

CSBL is the first subsidiary of a stock exchange to get membership in both NSE & BSE. CSBL also became a depository participant in the Central Depository Services Ltd. The Cochin Stock Exchange is directly under the control and supervision of Securities & Exchange Board of India (the SEBI), and is today a demutualized entity in accordance with the Cochin Stock Exchange (Demutualisation) Scheme, 2005 approved and notified by SEBI on 29th of August 2005.

Demutualisation essentially means de-linking and separation of ownership and trading rights and restructuring the Board in accordance with the provisions of the scheme. The Exchange has been demutualised and the notification thereof published in the Gazettee.
1.2.8. COIMBATORE STOCK EXCHANGE

Coimbatore Stock Exchange Limited (CSX), the youngest Stock Exchange in India is housed in its own building at Trichy Road, Coimbatore. The Exchange has successfully implemented Screen Based Trading (SBT) system and commenced its operations with effect from 9th October, 1996. The system is capable of handling 25,000 trades per day. All the members of the Exchange are connected in a Local Area Network (LAN). The system can be expanded to handle up to 400 members. The SBT system has been interfaced with the existing settlement system.

The margins are monitored online on the SBT system. Each member is given a computer terminal, telephone connections which are accommodated in a cubicle. The communication facilities include the terminals of Reuters and Knight Ridder constantly updating economic and capital market related news.

1.2.9. DELHI STOCK EXCHANGE

The Delhi stock Exchange Association Limited (DSE) was incorporated on June 25, 1947. The exchange is an amalgamation of Delhi Stock and Share Brokers' Association Limited and the Delhi Stocks and Shares Exchange Limited. It is India's fifth exchange. The exchange is one of the premier Stock Exchange
in India. The Delhi Stock Exchange is well connected to 50 cities with terminals in North India.

The exchange is having over 3,000 listed companies. It has received the market regulator's permission from BSE and has become its member. Now it facilitates the DSE members to trade on the BSE terminals. The exchange is also considering the same from NSE.

Delhi Stock Exchange has tied up with the National Security Depository Limited (NSDL) and commenced trading in dematerialised shares with effect from September, 1988. However, the option for delivering shares either in physical or demat form started from November 1998.

DSE has initialised its Rs.125 crore Trade Guarantee Fund on July 27, 1998. TGF guarantees all the transactions of the DSE interse through the Stock Exchange. If a member fails to honour the settlement commitment, TGF undertakes to fulfill the commitment and complete all the settlement without disruption.

1.2.10. GUWAHATI STOCK EXCHANGE

The Guwahati Stock Exchange (GSE) incorporated on 29th November 1983, is located in Guwahati, Assam, India. It was recognised by the Government of India on 1 May 1984. The GSE is limited by guarantee by the
member-brokers. By 1999-2000, the exchange had a total of 206 brokers, out of which 5 were corporate brokers.

The GSE is inter-connected with the NSE through the ISE Securities and Services Ltd. (ISS). ISS is the subsidiary of Inter-connected Stock Exchange of India Ltd. and GSE is one of the associated exchanges of it. The trading of GSE is done through Screen Based Trading System. GSE is also planning to have its connectivity with the Calcutta Stock Exchange. In future it also looks forward to connect with BSE. Internet trading is also planned.

The Guwahati Stock Exchange is having a T+5 trading system from Tuesday to Monday. The settlement takes place in the immediate next week of the trading cycle. The first step in the settlement process is the distribution of Offer and the Difference Statement. It takes place on Tuesday.

The deliverable members are suppose to submit the shares/D-Mat slip to the Clearing House of GSE on the following Thursday. On the same day the Delivery Statement of Shares is distributed among all the receivable members. The PAY-IN day is Friday and the PAY-OUT day is Saturday. The entire process of the settlement is done through the Clearing House of GSE. The present need of the Indian Capital Market is to interconnect it, vanishing the concept of regional market. This helps in multiple accesses to different markets and it further results in greater liquidity and turnover. To achieve all these, the GSE is also planning to have its connectivity with the Calcutta Stock Exchange. In future, it also looks forward to connect with BSE. Internet trading is also in the ambit.
The Hyderabad Stock Exchange Limited (HSEL) was established in the year 1944 and it started functioning under Hyderabad Securities Contract Act of No. 21 of 1352 under H.E.H. Nizam’s government as a company limited by guarantee. It was the sixth stock exchange recognized under Securities Contract Act, after the Premier Stock Exchanges, Ahmedabad, Bombay, Calcutta, Madras, and Bangalore Stock Exchange. All deliveries were completed every Monday or the next working day.

The HSE was first recognized by the Government of India on 29 September, 1958 as Securities Regulation Act was made applicable to twin cities of Hyderabad and Secunderabad from that date. In view of substantial growth in trading activities, and for the yeoman services rendered by the exchange, the exchange was bestowed with permanent recognition with effect from 29 September, 1983.

The number of members of the Exchange was 55 in 1943, 117 in 1993 and increased to 300 with 869 listed companies having paid up capital of Rs.19128.95 crores as of March 31, 2000. The business turnover also substantially increased to Rs. 1236.51 crores in 1999-2000. The Exchange had a very smooth settlement system. The Hyderabad Stock Exchange Ltd. (HSE) failed to dilute atleast 51 percent of its equity share capital to public other than
shareholders having trading rights on or before the stipulated date of 28th August 2007. Consequently, in terms of section 5(2) of the Securities Contracts (Regulation) Act, 1956 the recognition granted to HSE was withdrawn with effect from 29th August 2007.

1.2.12. JAIPUR STOCK EXCHANGE

Jaipur Stock Exchange is the third largest exchange in India in terms of membership. Jaipur Stock Exchange Limited (JSEL) was incorporated as a company limited by guarantee under the Companies Act, 1956. On announcement of the Demutualisation Scheme of the Stock Exchange in Finance Act, 2004 and in pursuance of SEBI notification it was converted into a Company Limited by shares. After demutualisation of the Jaipur Stock Exchange Limited, trading membership and ownership rights stand segregated. At present, the authorised share capital of the Exchange is Rs.6507800.

Jaipur Stock Exchange Limited presently has 740 listed companies with a paid up capital of Rs.5688.50 crores of the listed companies. Out of which 135 Companies have their registered office in Rajasthan. At present, JSEL has 468 trading members and 299 shareholders each holding 10,000 shares of Re.1/- each contributing to Rs.29.90 lakhs capital of the Exchange.
1.2.13. LUDHIANA STOCK EXCHANGE

Ludhiana Stock Exchange established in the early 1980’s as one of the leading Regional Stock Exchange and has been in the forefront of other Stock Exchange in every sphere, whether it is formation of subsidiary for providing the platform of trading to investors, for brokers etc. In the era of Screen based trading introduced by National Stock Exchange and Bombay Stock Exchange, entering into the field of Commodities trading or imparting education to the Public at large by way of starting Certification Programmes in Capital Market.

The Exchange has 295 members out of which 162 are registered with National Stock Exchange as Sub-brokers and 121 with Bombay Stock Exchange as sub-brokers through our subsidiary. For settlement of dematerialised securities, the Ludhiana Stock Exchange has also been linked up with the National Securities Depositories Ltd. (NSDL).

1.2.14. MADHYA PRADESH STOCK EXCHANGE

Madhya Pradesh Stock Exchange, set up as 'association of persons', is on the verge to get incorporated as a 'for-profit company limited' by the shares and demutualisation. With this, the ownership and management will be segregated from their trading rights.
Then, there will only exist one class of trading members who will be enjoying similar rights and privileges. A uniform standard will be maintained in terms of the capital adequacy, deposits and fees for admitting any one as a trading member or for accepting his surrender.

Voting rights of the shareholders, also trading members, will be limited to 5% and people who are not shareholders but having trading rights will hold minimum of 51% of equity stake of the corporatised and demutualised stock exchange.

In 1999-2000, Madhya Pradesh Stock Exchange Ltd. (MPSE) had a total of 187 brokers, out of which 28 were corporate brokers. Among 187 brokers, it was further classified as 155 proprietor brokers, 4 partnership brokers and 28 corporate brokers. Then, there were only 5 sub-brokers registered.

1.2.15. MADRAS STOCK EXCHANGE

Madras Stock Exchange Ltd (MSE) is a self regulatory organisation having permanent recognition under the Securities Contracts (Regulations) Act, 1956, and the first Stock Exchange in the southern part of the country.

The Exchange is a demutualised corporate entity pursuant to the MSE (Corporatisation and Demutualisation) Scheme, 2005 approved by the Securities and Exchange Board of India (SEBI). The stakeholders of the Exchange include Financial Institution of the Tamil Nadu State Government, leading corporate
houses, high networth individuals and Trading Members of the Exchange. The Exchange is managed by the Board of Directors, representing the various stakeholders in the manner as stipulated in the Demutualisation Scheme. MSE has a strategic arrangement with the National Stock Exchange (NSE) which provides for the facility of trading by the members of MSE on NSE platform and also for trading of MSE listed companies on the NSE.

Empowerment of the investors through education has been the focus of the Exchange. The Exchange has established an exclusive investment education centre named as the “MSE Institute of Capital Markets” to cater to the educational needs of the market participants. This Centre conducts regular and intensive training programmes, seminars and workshops throughout the State of Tamil Nadu & Pondicherry. The Exchange continuously holds monthly Investors’ Meet at its premises in Chennai on the third Saturday of every month. The Exchange also provides Depository Services as Depository Participant of CDSL and NSDL. MSE has set up subsidiary - MSE Financial Services Ltd., which is a Corporate Broking House, having membership of BSE and NSE and trading facilities are provided to the investors through the Members of MSE.

The Madras Stock Exchange, established in 1937, the first Stock Exchange in the entire South India, has an unimpeachable track record of 71 glorious years of service in regulating the securities transactions and ensuring investor protection.
To service the increasing investor population, the Madras Stock Exchange has started providing Depository Services. The objective is not only ensuring safety of your securities, but providing the best services at affordable charges to keep the transaction cost at the minimum.

1.2.16. MAGADH STOCK EXCHANGE

Magadh Stock Exchange Association Limited, (MSEA) located in Patna, India, was established in the year 1986. It is one among the 21 odd regional stock exchanges in India. By 1999-2000, the Magadh Stock Exchange had a total of 199 brokers, out of which 15 were corporate brokers. Among 199 brokers, it was further classified as 183 proprietor brokers, 1 partnership broker and 5 corporate brokers. Then, there were only 2 sub-brokers registered.

In September 2005, the Magadh Stock Exchange was corporatised and demutualised in accordance with the provisions of the Securities Contracts (Regulation) Act, 1956. On 17 August 2000, the Magadh Stock Exchange became the only regional stock exchange in the country to trade on the National Stock Exchange (NSE), the Bombay Stock Exchange (BSE), Calcutta Stock Exchange (CSE) and the Interconnected Stock Exchange (ISE) when the exchange finally got connected to the NSE through ISE. SEBI vide order dated 3rd September 2007 refused to renew the recognition granted to Magadh Stock Exchange Ltd.
The Mangalore Stock Exchange Limited (MgSE), located in Mangalore, Karnataka, India was incorporated as a public limited company. The Exchange was recognised by the Central Government for an initial period of 5 years on 9 September 1985 under section 4 of the Securities Contracts (Regulation) Act, 1956 and later on the period of recognition was extended by one year, from 9 September 1990 to 8 September 1991. The last recognition was valid up to September 8, 2003.

On August 31, 2004, SEBI decided to derecognize the Mangalore Stock Exchange. Hence, today as per Securities Appellate Tribunal order dated 4th October 2006; the Mangalore Stock Exchange is a de-recognised Stock Exchange under section 4(4) of Securities Contracts (Regulation) Act, 1956.

In case of de-recognition, the companies listed in the Mangalore Stock Exchange can consider seeking listing at other stock exchanges or can opt for exit option to the shareholders as per the Delisting Guidelines of SEBI. Upon de-recognition, the members or the shareholders of MgSE will cease to be members of any recognised stock exchange and therefore will be liable to be de-registered. Hence, their certificate of registration will stand automatically cancelled.
1.2.18. MEERUT STOCK EXCHANGE

Meerut Stock Exchange is one of the well known Regional Stock Exchange in India. It has been registered under the Companies Act, 1956. The exchange is modelled to provide a high level liquidity to its investors, to spread equity cult in the region, to impart capital market knowledge to all its intermediaries and to develop a winning team of professionals.

1.2.19. OVER THE COUNTER EXCHANGE OF INDIA (OTCEI)

Traditionally, trading in Stock Exchanges in India followed a conventional style where people used to gather at the Exchange and bids and offers were made by open outcry. This age-old trading mechanism in the Indian stock markets used to create much functional inefficiency.

Lack of liquidity and transparency, long settlement periods and benami transactions are a few examples that adversely affected the small investors to a great extent. In order to overcome these inefficiencies and to provide improved services to investors, the country’s first ringless, scripless, electronic stock exchange - OTCEI was incorporated in 1990 under the Companies Act 1956.

OTCEI was created in 1992 by country’s premier financial institutions such as Unit Trust of India, Industrial Credit and Investment Corporation of India, Industrial Development Bank of India, SBI Capital Markets, Industrial Finance Corporation of India, General Insurance Corporation and its subsidiaries and
CanBank Financial Services. OTC has a unique feature of trading compared to other traditional exchanges. That is, certificates of listed securities and initiated debentures are not traded at OTC. The original certificate will be safely with the custodian. But, a counter receipt is generated out at the counter which substitutes the share certificate and is used for all transactions. In the case of permitted securities, the system is similar to a traditional stock exchange. The difference is that the delivery and payment procedure will be completed within 14 days.

1.2.20. PUNE STOCK EXCHANGE

Pune Stock Exchange Ltd, a company limited by guarantee, was established in September 1982 to cater to the needs of the growing investor community in the city. Starting small, with 35 members and a few lakh rupees business initially, the exchange has grown tremendously to over 185 members and about 15-20 crores of business daily. Much of the work is computerised with a smooth settlement system. Over 310 companies are listed with the Stock Exchange. Pune Stock Exchange opted for the on-line screen based trading in 1995.

The trading was switched to computerised system from 15th March 1996 onwards. Hence, Pune Stock Exchange was the first regional stock exchange to implement the online trading system. The Exchange has been successfully using
a screen based Trading System known as VECTOR (Versatile Engine for Centralised Trading and On-line Reporting). This system enables the brokers to conduct trading from their offices, without assembling in the trading ring.

1.2.21. SAURASHTRA KUTCH STOCK EXCHANGE

Saurashtra Kutch Stock Exchange Limited (SKSE), one of three stock exchanges in Gujarat, located at Sadar Bazaar, Rajkot, India. It was incorporated in July 1989 and got recognition from the Government of India. The recognition has been renewed from time to time by the Central Government and SEBI.

The Stock Exchange is recognized under Securities Contracts Regulation Act. Earlier the Stock Exchange was having very good volume. The broker members were doing huge volume on the floor of the stock exchange. Subsequently after the commencement of National Stock Exchange and on-line computerised trading, the volume on the regional Stock Exchanges faced the decreased trend and as a result, the regional stock exchanges were facing difficulties of reduced liquidity, volume and dept. Recently, in the month of December 1999, SEBI has permitted the regional stock exchange to acquire membership of bigger stock exchanges like BSE and NSE by forming a subsidiary company and thereby to provide trading platform to the brokers of regional stock exchanges.
Accordingly, many stock exchanges have floated subsidiary company for acquiring membership of BSE or NSE. Our stock exchange has also floated a subsidiary company namely SKSE Securities Limited which is a 100% subsidiary of Saurashtra Kutch Stock Exchange Ltd. This subsidiary has acquired membership of BSE and NSE and it has got SEBI registration also and got permission for trading from the Stock Exchange, Mumbai and National Stock Exchange of India Ltd., Mumbai. Our subsidiary is also a Depository Participant of CDSL. Today, SEBI vide order dated 6th July 2007 has withdrawn the recognition granted to Saurashtra Kutch Stock Exchange Ltd.

1.2.22. UTTAR PRADESH KUTCH STOCK EXCHANGE

Uttar Pradesh Stock Exchange Association Ltd. was inaugurated on 27th August, 1982 and occupies one of the prominent place among the Stock Exchanges in India. It plays an important role in the development of the capital market of North India. Initially, it had only 350 members which has grown up to 540 at present. The membership is open to companies even beyond the territories of Uttar Pradesh.

Currently, the exchange has 843 listed companies with a total capitalisation of Rs.81184 crores. The Additional Trading Floor-Lucknow, also known as ATF-Lucknow, is the first additional trading floor in India. The motto of
this set up is to further increase business and to provide online trading facility to Lucknow based members. It commenced online trading from 24th March, 1999.

Currently, 22 members have been allotted computer terminal in Lucknow which is connected with the UPSE main Server via VSAT. At present, 13 of them are taking part in the trading. UPSE Securities Ltd. is a 100% owned subsidiary of the U.P. Stock Exchange Association Ltd. and was incorporated on 19th of April, 2000. Its main object is to obtain membership of the big exchanges like BSE or CSE. It aims at providing trading facilities on these bigger exchanges to the members of U.P. Stock Exchange as sub-brokers according to the policies/guidelines issued by SEBI.

The Company acquired the membership of Bombay Stock Exchange (BSE) and commenced an online trading on BSE On-Line Trading System (BOLT) from 29th of January, 2001. Currently, 43 members are trading on BSE through the Company, 96 have been registered with SEBI as sub-brokers and 153 have applied for participation. The Company has also been admitted as member of CSE and further steps are being taken in this regard.

The changing technology has helped the exchange to install a corporate database of over 7000 companies. The rates of UPSE, BSE and NSE is displayed live for the benefit of investors.
1.2.23. VADODARA STOCK EXCHANGE

Vadodara Stock Exchange Limited (VSEL) received recognition as Stock Exchange from the Government of India on 5th January 1990 and became Country’s 19th recognized Stock Exchange. In the beginning it had 150 members and now the strength is 289.

Vadodara Stock Exchange Limited floated its 100% subsidiary named as VSE Stock Services Limited (VSSL). As on 31-Dec-2009 there are about 98 active sub-brokers in VSSL and its current average daily turnover is Rs.80 crores in the cash segments of BSE and NSE.

VSEL, as per Vadodara Stock Exchange Limited (Corporatisation and Demutualisation) Scheme, 2005 (“the Demutualisation Scheme”), notified by SEBI and in terms of Securities Contract (Regulation) (Manner of increasing and maintaining Public Shareholding in Stock Exchanges) Regulations, 2006, is required to reduce the shareholding of its Trading members up to 49% of its equity share capital i.e. minimum 51% holding is required to be owned by non-trading members, subject to the prior approval of SEBI. For the Depository operations, VSEL has branches in Surat, Bharuch & Anand and plans to expand its Depository participant business immediately after demutualisation in all towns of Gujarat and later on all over India. VSEL currently has 289 Trading Members out of which 54 are corporate Trading Members. Since, presently there is no turnover on the Exchange the Trading Members are routing their business
through the subsidiary of the Exchange and presently, 100 members are trading through subsidiary.

1.2.24. INTER CONNECTED STOCK EXCHANGE OF INDIA

Inter-connected Stock Exchange of India Limited (ISE) is a national-level stock exchange, providing trading, clearing, settlement, risk management and surveillance support to its Trading Members. It has 841 Trading Members, who are located in 131 cities spread across 25 states. These intermediaries are administratively supported through the regional offices at Delhi, Kolkata, Patna, Ahmedabad, Coimbatore and Nagpur, besides Mumbai.

ISE aims to address the needs of small companies and retail investors by harnessing the potential of regional markets, so as to transform them into a liquid and vibrant market using state-of-the-art technology and networking. ISE has floated ISE Securities & Services Limited (ISS) as a wholly-owned subsidiary under the policy formulated by the Securities and Exchange Board of India (SEBI) for “Revival of Small Stock Exchanges”. The policy enunciated by SEBI permits a stock exchange to float a subsidiary, which can take up membership of larger stock exchanges, such as the National Stock Exchange of India Limited (NSE), and Bombay Stock Exchange Limited (BSE). ISS has been registered by SEBI as a Trading-cum-Clearing Member in the Capital Market segment and Futures & Options segment of NSE and Capital Market segment of BSE. Trading
Members of ISE can access NSE and BSE by registering themselves as Sub-brokers of ISS. Thus, the trading intermediaries of ISS can access other markets in addition to the ISE market.

ISS, thus provides the investors in smaller cities, a one-stop solution for cost-effective and efficient trading and settlement services in securities. Complementing the stock trading function, ISE’s depository participant (DP) services reach out to intermediaries and investors at industry-leading prices. The full suite of DP services are offered using online software, accessible through multiple connectivity modes - leased lines, VSATs and internet. Operation of the demat account by a client requires just a few mouse clicks. The Research Cell has been established with the objective of carrying out quality research on various facets of the Indian financial system in general and the capital market in particular.

It brings out a monthly newsletter titled “NISE” and a fortnightly publication titled “V share”. The Research Cell plans to expand its activities by publishing a host of value based research publications, covering a number of areas, such as equities, derivatives, bonds, mutual funds, risk management, pension funds, money markets and commodities.

The ISE Training Centre conducts class-room training programmes on different subjects related to the capital market, such as equities trading and settlement, derivatives trading, day trading, arbitrage operations, technical analysis, financial planning, compliance requirement, etc. Through these
courses, the training centre provides knowledge to stock brokers, sub-brokers, professionals and investors to also appear for the certificate courses conducted by the stock exchanges.

It also aims to make and build the professional careers of MBAs, post graduates and graduates, with a view to enabling them to work effectively in securities trading, risk management, financial management, corporate finance disciplines or function as intermediaries (viz. stock brokers, sub-brokers, merchant bankers, clearing bankers, etc).

ISE & ISS are technology driven companies and state of art technology spread across the country covering 146 cities and almost all states in India. Technology team comprises of experienced & skilled persons at various levels from Networking, Systems & Infrastructure. Its technology is hybrid, consisting of VSAT’s, MPLS, RF technology, Leased Lines, ISDN etc. In Mumbai itself we have more than 100 branches and across India its more than 450 branches connecting to our various hubs and Head office at Mumbai. We have redundant backup and failover systems in place at any point the links are down then we have a backup link which is made readily available for the members providing minimum of downtime.

1.3. METHODOLOGY AND PROFILE OF THE STUDY

Designing a suitable methodology and selection of analytical tools are important for a meaningful analysis of any research problem. This section of the
chapter is devoted to describe the methodology which includes objectives, scope and significance of the study, period of the study, design and limitations of the study.

1.3.1. RESEARCH PROBLEM

In the earlier days of shares trading, the nation followed outcry system of trading where the buyers, sellers and the other market intermediaries used to assemble at the stock exchange to transact shares. This stock trading system that existed in the Indian stock market had lot of shortcomings like theft, bad deliveries, counterfeit shares, time consuming, costly etc and it never enhanced transparency and reliability quotient in the share market. Since because of these inefficiencies, the Indian stock market failed to attract Indian as well as foreign investors.

After the establishment of SEBI in 1995, as a market regulator it brought about many landmark decisions and has revolutionised the Indian capital market, raising its standard at par with many international stock exchanges today. From 1st April 2003 onwards SEBI made it mandatory to have compulsory demat system in all stock exchanges throughout the nation. Today the Indian capital market is making unprecedented growth in the value of shares traded and market capitalisation. Apart from this Indian capital market is attracting FIIs which was an aftermath of efficiency and enhanced systems brought in the Indian stock
markets due dematerialisation. Hence, it is relevant to study the impact of dematerialisation on Indian stock market.

1.3.2. **OBJECTIVES OF THE STUDY**

1. To narrate the history, growth and development of stock exchanges in India.
2. To provide a descriptive approach of dematerialisation in the Indian Stock Market.
3. To assess the volume of stock trading in the Indian stock market after introducing the paperless regime.
4. To analyse the effect of dematerialisation in stock market operations.
5. To make suggestions, based on the findings of the study.

1.3.3. **SCOPE AND SIGNIFICANCE OF THE STUDY**

The study is significant as all over the world investments in securities are making an unprecedented growth. With the advent of computerisation complimented by internet and online trading becoming a reality, it has become relevant to study the extent of impact created by the process of dematerialisation in the stock exchanges.

The study aims to highlight the impact of dematerialisation in the Indian Stock Market. The study would also leave further inroads for future researchers
in other disciplines of economics and management regarding the progressive growth of Indian Stock Market.

1.3.4. INTERDISCIPLINARY RELEVANCE

Stock Exchange is often referred to as the barometer of the economy. The capital formation triggered by the stock exchanges as they are the primary source for infusing funds into the economy. The growth in capital markets was instrumental in developing various other disciplines in the economy.

The growth of the Indian Capital Market and the consequent expansion of the Stock Markets brought about by dematerialisation process have brought significant changes in the stock market. The study would be beneficial for research scholars in other disciplines alike.

1.3.5. PERIOD OF THE STUDY

The relevant information pertaining to the timelines from 2001 to 2010 have been used for the completion of the study. In order to trace impact of dematerialisation, the data during these timelines found to be meaningful.

1.3.6. OPERATIONAL DEFINITIONS

a. Depository: An organisation maintaining computer systems in which shares are kept in electronic mode.
b. Depository Participant (DP): An agent of the depository through which it interfaces with the investor.

c. DP Live: Depository Participant which is active, where investors can open their account and keep their shares in electronic mode.

d. DP Location: Place at which Depository Participant’s branch office is functional.

e. Enabled Members: Exchange Members (Stock Broker) who has taken certain facilities to offer to their clients.

f. Registered Clients: Clients who completed KYC procedures and ready to trade.

g. Traded Quantity: Number of shares transacted in a stock exchange.

h. Shares Delivered: Number of shares delivered at the time of settlement.

1.3.7. DESIGN OF THE STUDY

This study made use of secondary data only. The data was collected mainly from various secondary sources like annual reports of the concerned organisations, publications, research abstracts, journals, handbooks etc and was electronically processed and presented in the form of tables and graphs. Various statistical tools like simple averages, standard deviation and coefficient of variation, regression analysis and method of least squares, t test and F test were made use of for deriving meaningful analysis and conclusion.
1.3.8. LIMITATIONS OF THE STUDY

1. The study is purely based on secondary data; hence the limitations of the secondary data do apply.

2. Non availability of data relating to the exact volumes of transactions prior to dematerialisation.

3. The periphery of the study is limited to the effect of dematerialisation.

1.3.9. CHAPTER SCHEME

The study of ‘PAPERLESS TRADING IN INDIAN STOCK MARKETS’ is divided into the following five chapters for easy compilation and understanding.

Chapter I introduces the subject and its related aspects. It deals from basic introduction, stock exchanges of India and sums up the chapter with objectives, scope, period, limitations of the study and the chapter scheme. Chapter II describes the concept of dematerialisation, depository system, depositories in India, online trading and the recent trends in the Indian Capital Market. Chapter III deals exclusively with the review of literature. Chapter IV consists of data analysis and interpretations. Chapter V presents a summary of the findings, recommendations in the context of the research findings and a conclusion.
REFERENCES

20. Websites of SEBI, NSE, BSE and all other regional stock exchanges.