Chapter – V
Findings, Conclusion &
Recommendations
The Indian Stock Market has come a long way from the earlier days of out-cry system to the present day screen based and net based paperless trading system. It has seen the phasing out of the century old ‘badla’ system with the introduction of a plethora of new products and market mechanism, with the aim of greater levels of transparency and efficiency.

Today the Indian Stock Market can claim to be one among the best across the world. Infact, Indian Capital Markets are at par with many international standards, apart from infrastructure, adoption of international practices in accounting standards, settlement cycle through rolling settlement, implementation of corporate governance etc. Trading platforms, clearing and settlement mechanisms, regulatory frameworks, positioning of various industry players are being redefined on a day-to-day basis. Moreover, SEBI is consistently evolving improved market mechanisms, processes and regulations.

From 1st April 2003, SEBI made it mandatory to have 100 percent demat form of delivery in all stock exchanges in India. Hence, an analysis into the pre and post demat era in the Indian stock market was initiated to identify the effect of the same on the Indian stock market and thereby to make suggestions for the further improvements in the existing system.

The period of the study is from 2001 to 2010 and the study is based purely on secondary data from annual reports of the concerned organisations,
publications, research abstracts, journals, handbooks, websites of all Indian stock exchanges and SEBI website.

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.

The summary of findings and recommendations are enumerated below. The objectives relating to history, growth, development and approach of dematerialisation is presented in a qualitative pattern. The volume of stock trading and effect of dematerialisation is presented in a quantitative pattern. The conclusion evolved from the study is also presented along with the findings and recommendations.
FINDINGS

5.1. HISTORY, GROWTH AND DEVELOPMENT OF STOCK EXCHANGES.

5.1.1. Indian Stock Markets started with Bank and Cotton presses in Bombay has a history of nearly 200 years.

5.1.2. During 1840s and 50s the number of recognized brokers was half a dozen. With the development of commercial enterprises the brokerage business made improvements and the number of brokers increased substantially over the period.

5.1.3. In 1874, the brokers found a convenient assembling place to transact business and it gave birth to the Native Share and Stock Brokers' Association in Bombay in 1887.

5.1.4. The floating of new mills in Ahmedabad made the beginning of the Ahmedabad Share and Stock Brokers Association in 1894. Boom in jute shares in 1870’s, tea shares in 1880’s and 1890’s; and a coal boom 1904 - 1908, activated to form the Calcutta Stock Exchange Association in 1908.

5.1.5. The prosperity made in the industrial sector in 1920 made the beginning of the Madras Stock Exchange in 1920 but it gradually disappeared. Rapid increase in the number of textile mills and plantation companies activated the stock market activity in 1935 in South India and lead to the revival of
Madras Stock Exchange Association 1937 which is renamed as Madras Stock Exchange in 1957.

5.1.6. Lahore Stock Exchange formed in 1934 was merged with the Punjab Stock Exchange in 1936. But it was closed during partition of the country and later migrated to Delhi and merged with Delhi Stock Exchange.

5.1.7. The other stock exchanges floated were The Uttar Pradesh Stock Exchange (1940), Nagpur Stock Exchange (1940) and Hyderabad Stock Exchange (1944). Delhi Stock and Share Brokers’ Association, and the Delhi Stocks and Shares Exchange were amalgamated into the Delhi Stock Exchange Association in 1947. Bangalore Stock Exchange was registered in 1957 and recognized in 1963.

5.1.8. During early sixties there were eight recognized stock exchanges in India and the number virtually remained unchanged, for nearly two decades.


5.1.10. Though there were twenty four recognized stock exchanges in India, SEBI de-recognized four of them in 2006-'07 period and the number of
recognized stock exchanges in India came down to 20. Many of the regional stock exchanges have aligned or taken corporate memberships in NSE and BSE and most of the business in India is happening in NSE and BSE only.

5.1.11. The conventional style of face-to-face trading with bids and offers by open out-cry in the stock exchanges are superseded by. The traditional out-cry system of stock trading coupled with physical share transactions has been completely replaced by fully computerised order driven or order-cum-quote driven systems.

5.1.12. Growth in Indian stock markets, measured in terms of number of exchanges, number of listed companies and the capital of listed companies were mainly contributed by favorable government policies towards security market industry particularly after 1985.

5.1.13. Though specified and non-specified securities are permitted in Indian stock exchanges, forward transactions are limited to specified securities and spot transactions are rather open.

5.1.14. The total number of companies listed in the stock exchanges had grown by 72.3 per cent and there has been tremendous growth in secondary market trading at BSE and NSE.

5.1.15. The present day screen based efficient trading system insists on compulsory demat mode with effect from 1st April 2003 and they all are controlled and supervised by SEBI.
5.1.16. Though stocks can be kept either in physical or dematerialised form, only dematerialised shares can be delivered in Stock Exchanges. As of October 2000, about 98 per cent of the trading in the stock exchanges was in dematerialised mode.

5.1.17. Lack of efficient settlement systems had its set-backs in stock market earlier. The incidence of lost trading days (liquidity), lost scrips, improperly paid dividends, mistaken registration, unnecessary financing cost, failure of counter party and fraud were reported frequently.

5.1.18. Manual and paper based settlement system called for delayed settlements, long settlement periods, high level of failed trade, high cost of transaction and bad deliveries, large number of bad deliveries, mismatch of signatures on transfer deeds, theft, forgery, mutilation of certificates and other irregularities were common.

5.1.19. The International institutional investors to India had become apprehensive about credit risk, systematic risk and the reliability of the trade settlement mechanisms.

5.1.20. The first online trade using e-trade technology took place in 1983 and caused an explosive growth between mid Eighties and mid Nineties in the Indian capital market.
5.2. APPROACH OF DEMATERIALISATION IN STOCK MARKET

5.2.1. The enactment of Depositories Act in 1996 made by Government of India, with the objective of ensuring free transferability of securities with speed, accuracy and security lead to an orderly growth and development of the Indian capital market.

5.2.2. Indian capital market has shown rapid growth in the last decade with foreign investors, and more market intermediaries through electronic book entry for the transfer of securities, and settlement with the support of Depositories, Depository Participants, Stock Exchanges, Clearing Houses, Registrars & Transfer Agents.

5.2.3. The depository model has two organizations, primarily promoted by NSE and BSE, such as National Securities Depositary Ltd. (NSDL) and Central Depositary Services (India) Ltd. (CDSL). Leading Indian Institutions are promoters of both these depositories.

5.2.4. In a period of about nine years, investors have switched over to demat settlement and NSDL stands at the centre of this change. CDSL also plays a key role.

5.2.5. NSDL provides the software required by depository participants, companies, R&T Agents and clearing corporations for conducting depository operations, the export and import facility to take out the transaction details.
5.2.5. Use of National Exchange for Automated Trading (NEAT) with proper upgradation, setting up of STP Central Hub, Central Listing Authority, Unique Identification Number (UIN), the facility of Direct Market Access (DMA), replacing of Badla by ‘Rolling-Settlement’, widening of geographical coverage of depository participants of NSDL and CDSL etc has contributed to the progress of Dematerialisation.

5.3. VOLUME OF STOCK TRADING

5.3.1. There has been a growth of 6.3 times in BSE and 7.99 times at NSE regarding the total number of shares delivered. Regarding the total value of shares delivered the growth came to 5.19 times in BSE and 12.77 times in NSE during the same period. 23.84 percent of the total shares traded in NSE and 35.71 percent of the total shares traded in BSE were delivered in the market. The variation observed in the number and value of shares traded and delivered clearly indicates the influence of dematerialisation process in stock exchanges.

5.3.2. Correlation coefficient between the number of shares traded (0.9591), number of shares delivered (0.9045) and the value of shares delivered (0.9282) occurred in NSE and BSE indicated highly significant relatedness between these variables and it is clearly identified as a major outcome of dematerialisation.
5.4. **EFFECT OF DEMATERIALISATION IN STOCK MARKET OPERATIONS**

5.4.1. The dematerialisation process has made the Indian stock markets more reliable, efficient and faster with no bad deliveries.

5.4.2. The transaction cost for equity shares in India revealed substantial decrease in transaction costs and observed that the dematerialisation as one of the important factor for this trend.

5.4.3. It is inferred from the result of t test and F test that there is significant linear relationship between the average number of shares traded and the corresponding value of shares delivered across the period under review both in NSE and BSE. Since the intercept of NSE exceeds that of BSE, it is evident that NSE had a better advantage than BSE, when the effect of dematerialisation is considered.

5.4.4. The statistical inferences with the help of r and $R^2$ also indicates a higher degree of relatedness between the number of shares traded and the corresponding value of shares delivered, both in NSE and BSE.

5.4.5. The degree of relationship existing between DP locations and corresponding demat quantity of NSDL (0.9744) and CDSL (0.9769) very well indicates high degree of relatedness between the variables.

5.4.6. The t test and F test result indicated by NSDL and CDSL confirmed a significant linear relationship between the variables namely DP locations and the corresponding demat quantity during the period under review and
the level of relatedness is found to be significant in NSDL as well as CDSL. The statistical inferences with the help of r, $R^2$ also indicates a high degree of relatedness between the variables namely market capitalisation and the corresponding shares delivered, both in BSE and NSE.

5.4.7. The turnover of the capital market segment increased rapidly from 1339510 crores in 2000-'01 to 4138023 crores by 2009-'10 registering an unprecedented growth rate. The statistical inferences with the help of r, $R^2$, t and F indicate a significant linear relationship between shares traded and corresponding market capitalisation.

5.4.8. Over the past one decade there has been a significant improvement in Foreign Institutional Investment in Indian capital market. It has grown from 13,821 million USD in 2001 to 92,116 million USD by 2010, except in the year 2009. The growth in the number of registered sub-brokers during the period 2001-’10 came to 10.25 times in NSE and 5.19 times in BSE.

5.4.9. The investments in mutual funds in Indian capital market increased by 11.26 times from 2000-’01 to 2009 –’10. The average daily turnover in the capital market has recorded an increase from 5337 crores in 2000-’01 to 16959 crores in 2009-’10. This is a clear indication that Indian capital market has become more attractive to the investors.

5.4.10. This growth in the number of registered sub brokers, average daily turnover, capital market transactions, and Foreign Institutional Investments are mainly brought in by dematerialization.
5.4.11. Fast spread of NSE’s VSAT terminals led to the decline of BSE’s turnover in the capital market segment from 97.4 percent during 1995-'96 to 44.3 percent during 1999-2000. The dip in trade during the years 2001-'02 and 2008-'09 in the Indian stock markets was found to be due to the recessionary trends which prevailed in the global economic environment.

5.4.12. When investors were allowed web based access to NSE’s trading system, 1.6 percentage of total turnover were routed and executed through internet. There is a growth of 4.72 times in the enabled members with internet trading facility during the past ten years.

5.4.13. There has been a significant improvement in cost reduction in the trading process under dematerialised scenario when compared with the traditional outcry system of share trading in physical format.

5.4.14. Various blocks in the growth and expansion of Indian stock market like counterfeit share certificate, bad delivery, theft etc were not reported after 2001 and it is believed to be a positive impact of dematerialisation.

5.4.15. The Indian stock market shifted to a T+2 rolling settlement from T+3 rolling settlement in 2002, this has increased the efficiency of stock market transactions apart from attracting foreign investments.

5.4.16. Under the dematerialisation scenario the gap between delivery and payment narrowed down and it is almost on delivery versus payment basis.
5.4.17. The process of compulsory demat delivery for all class of investors was introduced in a phased manner in the year 1999. Of the three groups of companies, five out of seven companies from the first group recorded substantial growth in volumes traded ranging from 14 percent to 141 percent, in the post-demat period compared to pre-demat period.

5.4.18. Of the three groups of companies, seven out of ten companies from the second group recorded substantial growth in volumes traded ranging from 20 percent to 879 percent, in the post-demat period compared to pre-demat period.

5.4.19. Of the three groups of companies, eight out of eleven companies from the third group recorded substantial growth in volumes traded ranging from 15.6 percent to 380 percent, in the post-demat period compared to pre-demat period.

5.4.20. There has been an increase of 50 percentage in the volume of shares traded of Group I companies, 326.85 percentage increase in the case of Group II companies and 15.35 percentage in case of Group III companies. Based on the benchmark index as laid down by S&P CNX Nifty, the impact of dematerialisation in the above phases are strong and significant.
CONCLUSION

Post 1990’s, many important policy initiatives have focused on fostering liquidity and efficiency of the Indian Securities Market. Indian stock markets had taken significantly less time to complete the dematerialization task as compared to some of the developed markets. This was mainly because of the deadlines kept by SEBI for dematerialisation and compulsory compliance norms issued by the regulatory authority in order to finish the entire dematerialisation process in a time bound manner. All must appreciate that no market in the world is both foolproof and fail proof at any point in time. Therefore, malpractices and misconducts prevail in the Indian stock markets too, but their degree and impact varies. The Indian Stock Markets has encountered its fair proportion of market misconducts and malpractices over the period of time. But, every such act that has occurred in the Indian stock market has lifted the entire system to better standards. The attempts of the regulators have been to improve the overall systems by taking the appropriate cues from every such damaging event. In short, the Indian stock market has experienced some revolutionary changes in its functioning over the years, especially with the introduction of dematerialisation and post dematerialisation era. Today the Indian stock market is at par with the international standards in the following paradigms:

- Fully dematerialised stock markets.
- Fully electronic and state of the art trading platform.
- Shift of the settlement cycle to T+2 rolling settlement.
- Establishment of Central Listing Authority (CLA).

The improved attractiveness of the Indian Stock Markets is the effect of all these ongoing reforms and adoption of international standard practices. It has already been felt and its reflection is seen in the growth of SENSEX as well as Nifty.

RECOMMENDATIONS

1. Market misconducts and other fraudulent activities should be tackled and initiatives should be taken to prevent the recurrence of such events in the future in order to uphold investor’s confidence in the Indian Stock Exchanges.

2. Involvement of illegal activities such as terrorist financing, money laundering etc that hopes the free interplay of market forces of demand and supply should be monitored.

3. The Indian capital market should move to the era of T+0 settlement mechanism in order to face the emerging global competition.

4. Further simplification of IPO process will attract new investors and fresh money into the stock markets.
5. In order to further promote small investors, DPs should reduce demat charges and account maintenance charges from them.

6. More robust software that would bring in more integration between trading end and back end should be developed and implemented in order to enhance real time updating of investor position in the market.

7. Bank automation that facilitates real time clearing system should be developed to bring in real time settlements in stock market operations.

8. Indian universities and leading management schools should promote and provide specializations in capital market in order to infuse more professionalism and corporate governance.