Chapter 1

Introduction of Indian Stock Market

And Financial Investor
1. INTRODUCTION

“To invest successfully over a lifetime one does not require a stratospheric IQ, unusual business insights or seaside information. What's needed is a sound intellectual framework for making a decision and the ability to keep emotions from corroding that framework” - Warren Buffet.

1.1 Financial Market

A financial market is a market in which people and entities can trade financial securities, commodities, and other fungible items of value at low transaction costs and at prices that reflect supply and demand. Securities include stocks and bonds, and commodities include precious metals, agricultural goods, oil, etc.

There are both general markets (where many commodities are traded) and specialized markets (where only one commodity is traded). Markets work by placing many interested buyers and sellers, including households, firms, and government agencies, in one "place", thus making it easier for them to find each other. An economy which relies primarily on interactions between buyers and sellers to allocate resources is known as a market economy in contrast either to a command economy or to a non-market economy such as a gift economy.

In economics, typically, the term market means the aggregate of possible buyers and sellers of a certain goods or services and the transactions between them.
The term "market" is sometimes used for what are more strictly exchanges, organizations that facilitate the trade in financial securities, e.g., a stock exchange or commodity exchange. This may be a physical location (like the NYSE, BSE, and NSE) or an electronic system (like NASDAQ). Most of trading of stocks takes place on an exchange. Still, corporate actions (merger, spinoff) are outside an exchange. While any two companies or people, for whatever reason, may agree to sell stock from the one to the other without using an exchange.

Trading of currencies and bonds is largely on a bilateral basis, although some bonds trade on a stock exchange, and people are building electronic systems for these as well, similar to stock exchanges.

The financial markets can be divided into different subtypes:
- Capital markets which consist of stock markets, which provide financing through the issuance of shares or common stock, and enable the subsequent trading thereof. Bond markets which provide financing through the issuance of bonds, and enable the subsequent trading thereof. Commodity markets which facilitate the trading of commodities. Money markets which provide short term debt financing and investment. Derivatives markets which provide instruments for the management of financial risk. Futures markets which provide standardized forward contracts for trading products at some future date. Insurance markets which facilitate the redistribution of various risks. Foreign exchange markets which facilitate the trading of foreign currencies.
The capital markets may also be divided into primary markets and secondary markets. Newly formed (issued) securities are bought or sold in primary markets, such as during initial public offerings. Secondary markets allow investors to buy and sell existing securities. The transactions in primary markets exist between issuers and investors, while in secondary market transactions exist among investors.

Liquidity is a crucial aspect of securities that are traded in secondary markets. Liquidity refers to the ease with which a security can be sold without a loss of value. Securities with an active secondary market mean that there are many buyers and sellers at a given point in time. Investors benefit from liquid securities because they can sell their assets whenever they want; an illiquid security may force the seller to get rid of their asset at a large discount.

Stock Exchange is a platform where buyers and sellers of securities issued by Government, financial institutions, corporate houses etc. meet & where the trading of these corporate securities take place. The securities which are traded in stock exchange are shares, debentures of public Ltd. co.’s, port trusts, utility undertakings and by other authorities. A Stock Exchange is a nervous system of the capital market. The changes in the capital market are brought about by a complex set of factors, all operating in the capital market simultaneously like general economic situation financial & monetary policies, Tax charges, Political environment, International economic & financial developments etc. These trends are influenced to some extent by periodical cycles of boom & depression in the market.
In the absence of Stock Exchange the people with savings would hardly invest in corporate securities for which there would be no liquidity (buying & selling facility). It is the open auction market where buyers & sellers meet & a competitive price for the securities is being set.

“Stock Exchange means anybody of individuals whether incorporated or not constitute for the purpose of selling or dealing in securities, regulating or controlling the business buying”, *The Securities Contracts & Regulation Act, 1956.*

The Stock Exchange is a “Double Auction Market” quite distinct from the common auction market in which there is only one seller & many potential buyers.

In a Stock Exchange, a number of potential buyers & potential seller’s co- exist all competing both amongst themselves & with one another in making bids & counter-bids, offers & counter- offers until an agreed price is reached. Since buying & selling of different types of securities takes place in Stock Exchange, the prices of particular securities reflect their demand & supply. Infect, stock Exchange is said to be a barometer of economic & financial health. Just like reading on a barometer reflect the atmospheric pressure & changes, Stock Market. A quotation of securities prices gives an idea about the economic & industrial conditions.

There are some features of stock exchange. It is a place where listed securities are brought & sold. It is an association of persons known as members. Trading in Securities is allowed under rules & regulations of Stock Exchange. Membership must for transacting
business. Investors & speculators, who want to buy & sell Securities, can do so through members of Stock Exchange i.e., brokers.

1.2 REFORMS IN INDIAN ECONOMY

The Indian economy has already gone through the reform process and a considerable shift of individual saving from defined return on investments to variable return on investment has been registered. The study on the changing pattern of household sector investment will help the policy maker and the financial institution to explore and experiment with the structure of present financial system, in order to serve the requirements of the household sector in a more meaningful manner.

CHANGE IN THE PATTERN OF SAVING AND INVESTMENTS OF INDIVIDUAL IN INDIA

During the post Independence period of India the development pattern was designed through strong centralized planning, government owned basic and key industries, excessive regulations and the strict control over the private enterprise, trade protection through the tariff and non tariff barriers in addition to selective approach towards the foreign capital.

The economic reforms were set-in motion, when control on industries was reduced through the Industrial policies in the year 1985. The economic reforms program received a big boost when a new industrial policy was announced in the national parliament on 24th July, 1991, resulted in the significant growth rate. These structural changes brought
into the economy, also led the significant changes to the household income level and the saving pattern as well.

India has emerged as a technologically strong, industrially diversified and service sector oriented economy from the traditional agricultural economy. Unlike of other countries, the share of major instruments for long term saving, in India, namely pension and life insurance were stagnated for more than last 30 years, due to the certain fundamental weaknesses, one of them was that the market was dominated by public sector like Unit Trust of India (UTI), Life Insurance corporation of India (LIC) and employees provident fund Organization (EPFO). The three financial institutional investing companies accounted for about one third of financial savings. Another reason for becoming the national saving stagnated was that these financial institutional allocation of portfolios which were heavily regulated, resulted in very low returns and with lack of flexibility to react to market developments, consequently failing in to attract the investors at a time when more locative option were emerged in the creation of a transparent and competitive field for mutual funds (Securities and Exchange Board of India, SEBI 1996). These funds include the relaxation of investments restriction in the money market as well as in the debt instrument.

They included listing of open ended funds and the possibilities for mutual funds to launch pension schemes also. Individual investment in financial market in general and savings in the form of financial assets in particular exhibited remarkable growth since late eighties. The growth of household savings during the decade of eighties has been facilitated by a simultaneous increase in physical as well as financial assets. Financial saving of
households during the first half of the nineties registered the remarkable growth. There are enough evidences of compositional changes in the financial assets. Financial savings of households during the first half of the nineties registered the remarkable growth. There are enough evidences of compositional changes in the financial savings of the households.

At the time when the higher domestic savings are desired, to finance a better growth rate, the policies aimed only to mobilization of savings and were not to expand the investments; this might not, necessarily the best instrument to achieve the required target.

In 1993, “in a country like India, this has been observed that the growth has less suffered from a low saving rate than, that, from inefficient investment”. However the Indian saving rate has been, relatively higher and has continuously been rising over the past 30 years, the efficiency in investments was remained very low because of the dominant role of public sector in the economy. After liberalization and globalization due to the entry of privat players in all sector of financial market, competition was increased and due to the regulatory control of the government the Indian households were able to get the required investments product from the market. However if the level of saving and investment in a economy is to be sustained and effectively used for productive processes, financial market stability, transparency and depth is very much required.

A research into individual investors and their behavior has received a lot of consideration during the past, and is increasingly in the focus of interest of many scientists, being not confined only to economists. However, the particular way of looking at individual
An economic man adheres to the axioms of rational choice theory. Over the past decades psychologists and behavioral scientists have documented robust and systematic violations of principles of Expected utility theory, Bayesian learning, and rational expectations - questioning their validity as a descriptive theory of decision making. Furthermore, Simon (1991), to whom the term "bounded rationality" is usually attributed, has emphasized "the limits upon the ability of human beings to adapt optimally, or even satisfactorily, to complex environments."

"It has been applied extensively to theoretical models and empirical studies of financial securities prices, generating considerable controversy as well as fundamental insights into the price-discovery process".

One researcher describe that "accepting market efficiency in the sense of beating the markets," however, rejecting the definition in the sense of rationality, by which "rational
prices reflect only utilitarian characteristics, such as risk, not value-expressive characteristics, such as sentiment”.

In the evolutionary model individual market participants adapt to changing environment by using heuristics. Researchers believe that if we were able to measure changes in investor population, changes in investor preferences, and changes in the investment environment, it might be possible to build actively managed portfolios that better suit an investor's needs.

In the Prospect theory of robust-ness and pervasiveness of this cognitive-psychological research have bolstered its impact on the economic theory, as well as the finance (whose Modern portfolio theory is also based on the assumption of rational agents). Individual investors - who use heuristics, depend on framing of the problem, and are prone to biases, which in turn may lead to various anomalies at the market level - are subjects of research in the area of behavioral finance.

Behavioral finance builds itself upon two blocks: limits to arbitrage and psychology. Behavioral finance funds and its applications on various levels of financial markets: on the aggregate market level, on the cross-section of average returns, on individual investor behavior, and on corporate finance.

One of the earlier comprehensive studies of individual investors, who manage their own equity portfolios, identified four classes of anomalies on the level of individual investor behavior: Firstly, investors are prone to biases in the perception of asset price movements. In one study, researcher conducted a mail survey among 125 investors.
affiliated with the American Association of Individual Investors (AAII), where he documented an extrapolation bias, that is, 'the expected continuation of past price changes.' Quite the opposite, in his 1991 study, by interpreting Livingston surveys data, he concluded that economic experts are contrarians in their predictions. Furthermore, investors predict too narrow confidence intervals in the subjective probability distributions of prices.

Secondly, the perception of asset's value is largely dependent on popular models, that is socially shared tips from peers, financial advisors, news in the media (and nowadays, especially, on Internet portals, forums, and news groups). In one study, it is found that when managing risk and return, many investors do not diversify their portfolios. This may be due to false beliefs that the risk is defined at the level of an individual asset rather than the portfolio level, and that it can be avoided by hedging techniques, decision delay, or delegation of authority.

Additionally, in their portfolios investors hold surprisingly large amounts of fixed-income securities (bonds), despite the empirical fact that stocks outperform them on the long run. However few researchers) have differed an explanation to this famous "equity premium puzzle", by investors' myopic loss aversion - a combination of high sensitivity to losses, and frequent monitoring of one's wealth. Finally, although investor/traders are often pre committed to certain rules and techniques, even professional ones seem to fail to maintain discipline and consistency. Investing/Trading practices are highly influenced by two strong reference points – performance of the market index, and the price at which the asset was purchased.
Table 1.1

Gross Domestic Savings and Investment

<table>
<thead>
<tr>
<th>Items</th>
<th>Amt. in Rs Crore</th>
<th>Percent of GDP at current market prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household sector saving</td>
<td>7,16,874</td>
<td>8,64,653</td>
</tr>
<tr>
<td>Financial Asset</td>
<td>3,17,546</td>
<td>4,20,974</td>
</tr>
<tr>
<td>Physical Asset</td>
<td>3,99,328</td>
<td>4,43,679</td>
</tr>
<tr>
<td>GDS</td>
<td>9,97,873</td>
<td>12,28,086</td>
</tr>
</tbody>
</table>

Source: SEBI Annual Report, 2012-2013

The above table shows that there is a gradual increase in the Gross Domestic savings from 31.68 % to 37.68 % of the GDP during the years 2009-2010 to 2012-2013. The proportion of savings in physical assets is greater than the financial assets. Physical assets are represented by real assets like real estate, gold and silver, precious stones etc. The savings in the economy should be channelized towards financial assets so as to provide for capital formation and economic development. The current trend in India is that people prefer bank deposits and real assets to other forms of financial assets.

2. HISTORY OF INDIAN CAPITAL MARKET AT A GLANCE

In India only registered Stock Exchange can operate the Stock market activities & the recognition is governed under provisions of Securities & Contract (Regulation) Act, 1956.
There are 24 regional Stock Exchanges in India. BSE & NSE daily turnover of all the Stock Exchanges is about 300,000 crores daily. BSE is 139 years old, which was established in 1875 where NSE is just 21 years old & was established in 1993. NSE has brought Screen Based Trading system in India.

2.1 EVOLUTION OF THE INDIAN CAPITAL MARKET

The stock market in India is around 200 years old. The transactions of the loan securities of the East India Company towards the close of the 18th century were probably the earliest record of security dealings. The volume of business which included loans as well as corporate stocks had increased by the 1830’s. Broking business also started prospering in Calcutta by that time. In 1836, the “Englishman”, a widely circulated newspaper of that period, had started publishing quotations of loans of East India Company and shares of Bank of Bengal. By 1839, many newspapers in Calcutta started publishing quotations of banks such as Union Bank, Agra Bank and Companies like Bengal Bonded Warehouse etc. Trading in those days was not done in trading halls like the present days. Trading was done in open places where brokers met each other for transactions of shares. There was no code of conduct among brokers. By 1860, there were around 60 stock market brokers who used to meet each other under a Banyan tree in Bombay to deal with the stocks. The scenario in Calcutta was more or less same as that in Bombay. The centre of activities of the brokers in Calcutta was under a Neem tree where at present the Majestic Building of Chartered Bank at BBD Bag stands. Brokers in Bombay, during the period 1860 to 1870, did not have a good time. The American civil war was one of the important causes for the fall in the share price of the East India Company and the British Banks.
Members of the public investing in those shares became frustrated and felt disillusioned with the shares. However, the cloud of uncertainty started receding by the year 1874 and in the year 1875 Asia’s Oldest Stock Exchange in Mumbai came to existence in 1875 as “Native Share and Share Brokers’ Association”. It was an unincorporated body of stock brokers and trading was essentially confined between them.

Stock exchange trading got a big boost during the First World War and Second World War with the incorporation of large number of joint stock companies and coming up of new stock exchanges at Chennai, Delhi, Nagpur, Kanpur, Hyderabad and Bangalore.
The evolution of the Indian financial system falls, from the viewpoint of exposition, into three distinct phases. A snapshot of these phases is given as follows:

- **Phase I: Pre-1951 Organization**
- **Phase II: 1951 to Mid-Eighties**
- **Phase III: Post Nineties**

**Phase I: Pre-1951 Organization**

The organization of the Indian financial system before 1951 had a close resemblance with the theoretical model of a financial organization on a traditional economy. The principal features of the pre-independence industrial financing organizations are the closed circle character of industrial entrepreneurship, a semi-organized and narrow industrial securities market, devoid of issuing institutions and the virtual absence of participation by intermediary financial institutions in the long-term financing of industry. As a result, industry had very restricted access to outside savings.

**Phase II: 1951 to Mid-Eighties**

The organization of the Indian financial system during the post-1951 period evolved in response to the imperatives of planned economic growth with social justice as enshrined in the Indian Constitution, under Directive Principles of State Policy. The scheme of planned economic development was initiated in 1951. The introduction of planning has had important implications for the financial system.
Phase III: Post Nineties

The organization of Indian financial system, since mid-eighties in general, and the launching of the new economic policy in particular, has been characterized by profound transformation. The fundamental philosophy of the development process in India has shifted to free market economy and the consequent liberalization/globalization/deregulation of the economy. Major economic policy changes initiated here in includes macro-economic stabilization, declining of industry, trade liberalization, currency reforms, reduction in subsidiaries, financial sector reform etc. This liberalization policy starts the rally of reforms in the Indian economy.

A major feature of economic reforms in India since 1991 has been progressive liberalization of external capital flows, especially non-debt creating ones like Foreign Direct Investment (FDI) and Foreign Institutional Investment (FII).

The evolutions in the realm of capital market in India could be broadly discussed as follows:

2.2 INFRASTRUCTURE STAGE

The period between 1947 and 1973 marked the period of the development of infrastructure for capital markets. The stage saw the process of strengthening of capital market through the establishment of a network of development financial institutions such as IFCI (1948), ICICI (1955), IDBI and UTI (1964), SFCs (during the fifties and sixties) and SIDCs (during the sixties and early seventies). A number of important enactments covering the functioning of different segments of capital market were legislated during this period. These include: Capital Issues (Control) Act, 1947, Securities Contracts (Regulation) Act, 1956 and Companies Act, 1956.
Development of an organized indigenous capital market was inhibited in the initial years. There was insignificant demand for long-term funds owing to weak industrial base and low serving rate. There was huge dependence of many foreign companies upon the London capital market for raising funds rather than on the Indian capital market. There were adverse consequences of the managing agency system, which performed different functions of promotion, management and underwriting of new capital issues. There was lukewarm interest shown by Indian corporate for mobilizing capital through the instruments of shares and debentures from capital market and more reliance of the industry on the bank credit which offered credit at relatively lower (often subsidized) rates of interest. There were many hazards of administered interest rate structure.

2.3 NEW ISSUES STAGE
This stage heralded the enactment of the Foreign Exchange Regulation Act (FERA) between the period 1973 and 1980. Under this Act, shareholding of foreign firms in joint ventures was restricted to 40 percent if the companies wanted to be recognized as Indian companies. This period saw many well-managed multinational companies offering their equities to the public at regulated low prices. This encouraged a large number of domestic public limited companies to come out with the offer of new capital issues for public subscription. All these culminated in the stock market exhibiting an upward trend with share prices displaying a high level of buoyancy. This also created, for the first time, awareness among the common investors about the potential of equity investments as a hedge against inflation and source of higher earnings compared to the other forms of investments.
2.4 ESTABLISHMENT OF SEBI

The Controller of Capital Issues (CCI) which was mostly responsible for regulating the issue of capital market in instruments and not for post-issue-regulations and investors’ protection was abolished with effect from May 29, 1992. The Securities and Exchange Board of India (SEBI) came into existence on January 30, 1992 by virtue of an ordinance promulgated by the President of India. The aim of establishing SEBI was to protect the interests of investors in securities, to promote and regulate the development of the securities market. The SEBI has issued new comprehensive guidelines on June 11, 1992 in order to envisage a system of checks and balances in the capital market. At that point of time, SEBI issued some guidelines. Every company had to give adequate disclosure to SEBI. It was compulsory for mandatory full underwriting of issues. SEBI kept the record of monitoring and deployment of issue proceeds. SEBI defined the Role of lead managers. SEBI fixed the promoters’ contribution with lock-in period. Every company had to maintain minimum interval time between two issues.

Through these guidelines are not fool-proof measures to protect investors, still it is a definite attempt to strike a balance between the right of investors and promoters. The SEBI since its inception has always been trying to work as a watch-dog of the security market. By an amendment to the SEBI Acts in 1995, more powers of both civil and criminal nature to control the intermediaries and the players in the capital market are now vested with SEBI.

New financial services such as credit rating, etc. came to be introduced. Several credit rating institutions such as CRISIL, CARE and ICRA were set up in order to help investors make a right choice of investment. Similarly, Stock Holding Corporation of India was set up.
up to provide custodial services; IL&FS was set up to offer infrastructure financing and leasing services; and TDICI, RCTC and TFCI were also constituted as specialized financial institutions. The OTCEI was established to provide screen-based stock exchange facility to investors. Similarly, mutual funds and venture capital fund/companies were also set up.

2.5 Committees/Working Groups

An important part of growth during this period was the constitution of a number of committees in order to suggest measures to revamp and restructure the working of the secondary market and cause buoyancy in the primary market so as to instill confidence in the investing community. These included the following:

a) A Committee on Organization and Management of Stock Exchange, 1986 under the chairmanship of Mr. G.S. Patel.


c) A Study Group for Guidelines Relating to Valuation and New Instruments, 1991 under the chairmanship of Mr. M.J. Pherwani.


e) A Committee on Trading in Public Sector Bonds and Units of Mutual Funds, 1992 under the chairmanship of Mr. S.S. Nadkarni.

A number of recommendations of the above committees were implemented to help streamline the operations of the capital market. However, this period witnessed one of the worst crises in the Indian capital market with a major scam in securities breaking out. Large-scale irregularities in securities transactions that took place in 1992 exposed the
loopholes in the existing systems and procedures of stock trading. This necessitated the overhauling of the regulatory framework of the capital market for preventing recurrence of such irregularities in the future.

2.6 The Structural Transformation

The structural transformation started taking place from 1992. Many technological innovations on par with the developed countries of the world began to be introduced in the realm of trading operations in the stock market. Some of the significant forces/happenings that were responsible for the structural transformation are explained here. Financial liberalization, adoption of market oriented approach was adopted. Computerized online trading and setting up of clearing houses/corporations by most of the stock exchanges was done. A constitution of a depository to facilitate scripless trading was regulated. Overhauling and strengthening of regulatory structure of stock exchanges with the establishment of SEBI was done at that point of time. Permission was given to Indian companies to raise resources abroad through the issue of Global Depository Receipts (GDRs) and Foreign Currency Convertible Bonds (FCCBs) after obtaining specific approval from the Government of India, since May 1992. Disinvestments were started by Government of its holding in public sector undertakings commencing from 1992-1993. Opening up of the market was done for portfolio investment by foreign institutional investors and encouraging foreign private participation in financial services including stock broking.
Restructuring of the corporate sector was done. Global recessionary trend and portfolio diversification by the international fund managers was done. Entry of new institutions likes merchant banks, leasing and hire purchase companies, venture capital funds/companies were allowed. Greater participation of banks and financial institutions in capital market were encouraged. It was found that there was growth in saving of households backed by changing attitudes and investing habits towards investment in shares. Innovative financial instruments such as warrants, cumulative convertible preference shares and a host of hybrid bonds/debenture were introduced. Measures were initiated by the Government, SEBI and stock exchange authorities for protecting the interests of investors, i.e., setting up of investor protection funds at the stock exchanges, restructuring of various committees on the stock exchanges with larger participation of public nominees of clearing corporations/houses on the stock exchanges, making merchant bankers responsible for the contents to offer documents and laying down the code of conduct for market intermediaries including brokers/sub-brokers.

SEBI issued separate set of guidelines for different categories of intermediaries such as brokers/sub-brokers, merchant bankers, registrars to issue, portfolio managers, under writers to issue, mutual funds, bankers to issue, debenture trustees and venture capital funds/companies. Detailed guidelines were issued by the SEBI for disclosure and investor protection in respect of new issues and for regulation of insider trading and prohibition of fraudulent and unfair trade practices.
Capital market constitutes the fulcrum of the financial system of a country, for it is the capital market that provides all the facilities and the institutional arrangements for the funds needed for the business, besides providing an opportunity for the investors to utilize their savings in an effective manner. While money market assumes the character of a center for short-term financial assets, capital market essentially serves as a security market providing the necessary platform for launching new issues as well as for trading existing securities. The participant banks, non-banking companies, financial institutions, etc. provide all the spirit required for the working of the capital market. Incidentally, the activities of the capital market are not restricted to specific locations.

Indian capital market is robust, although it is faced with the problem of ineffective delivery of benefits to small investors and often rocked by scams. However, things are beginning to show marked improvement with the market regulator SEBI initiating measures for bolstering the investor confidence by reining in on the erring companies that do not follow good corporate governance practices. Indian capital market is divided into gilt-edged market and industrial securities market. Gilt-edged market deals with Government securities and bonds and equity of corporate enterprises are dealt within the industrial securities market. Industrial securities market comprises of primary market and secondary market. Primary market is used for raising fresh capital in the form of shares and debentures. Secondary market, through the mechanism of stock exchanges, provides necessary trading support to the primary market.
An essential characteristic of Indian capital market is that it is developing and making rapid strides by allowing the development of new financial institutions to develop. Important among them include venture capital firms, mutual firms, credit rating agencies, factoring firms, etc. An innovative feature of the capital market in India is the introduction, of late, of the new and innovative financial instruments used by firms for raising capital. Notable among them are deep discount bonds, zero-coupon bonds, equity shares with warrants, etc. SEBI comes out regularly with necessary guidelines for regulating the working of the various constituents of the Indian capital market, despite the fact that the ‘Harshad Factor’ really unsettled the years of efforts towards building a strong and a vibrant capital market. In addition, Government is also making earnest efforts in this direction. The recent initiative towards corporatization and de-mutualization of stock exchanges is a case in point.

### 2.7 THE POSITION OF BSE AND NSE AT INTERNATIONAL LEVEL

The 30 stock sensitive index or Sensex was first compiled in 1986. The Sensex is compiled based on the performance of the stocks of 30 financially sound benchmark companies. In 1990 the BSE crossed the 1000 mark for the first time. It crossed 2000, 3000 and 4000 figures in 1992. The reason for such a huge surge in the stock market was the liberal financial policies announced by the then Finance Minister Dr. Manmohan Singh.

After the liberalization 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. As per the data released by the World Federation of Exchanges, NSE was ranked fourth and BSE was seventh among the topmost exchanges of the world in terms of the number of trade in equity shares for the calendar year 2008. In terms of the value of shares traded NSE was 18\textsuperscript{th} among the topmost exchanges of the world.

The growth in the capital market may be understood from the steady increase in the rate of market capitalization as a percentage of the GDP, volumes traded in the cash segment, the number of intermediaries. The amount mobilized through mutual funds etc. An analysis of the data relating to the above are presented below.

\textbf{Table 1.2}

\textbf{GROWTH IN MARKET CAPITALIZATION AND TOTAL TURNOVER}

<table>
<thead>
<tr>
<th>Year</th>
<th>BSE Market Capitalisation to GDP Ratio</th>
<th>NSE Market Capitalisation to GDP Ratio</th>
<th>Total Turnover to GDP Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cash Segment (All-India)</td>
</tr>
<tr>
<td>2007-08</td>
<td>23.28</td>
<td>21.85</td>
<td>39.33</td>
</tr>
<tr>
<td>2008-09</td>
<td>43.44</td>
<td>40.53</td>
<td>58.71</td>
</tr>
<tr>
<td>2009-10</td>
<td>54.32</td>
<td>50.71</td>
<td>53.4</td>
</tr>
<tr>
<td>2010-11</td>
<td>84.41</td>
<td>78.57</td>
<td>66.76</td>
</tr>
<tr>
<td>2011-12</td>
<td>85.51</td>
<td>81.22</td>
<td>70.02</td>
</tr>
</tbody>
</table>
This table shows that BSE market capitalization has grown from 23.28 per cent in the year 2007-08 to 58 per cent in the year 2013-14. NSE market capitalization has grown from 21.85 per cent to 54.42 per cent in the year 2013-14.

Similarly the total turnovers in the two stock exchanges have recorded a significant growth over the years as mentioned above.

**Table 1.3**

<table>
<thead>
<tr>
<th>SEBI REGISTERED MARKET INTERMEDIARIES</th>
</tr>
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<tbody>
<tr>
<td><strong>Market Intermediaries</strong></td>
</tr>
<tr>
<td><strong>2003</strong></td>
</tr>
<tr>
<td>Stock Exchanges (Cash Market)</td>
</tr>
<tr>
<td>Foreign Institutional Investors</td>
</tr>
<tr>
<td>Depositories</td>
</tr>
<tr>
<td>Depository Participants</td>
</tr>
<tr>
<td>Mutual Funds</td>
</tr>
</tbody>
</table>

**Sources:** SEBI Annual Report 2013-14

The above table 1.3 shows the growth of market intermediaries. Starting from the year 2003, there is a momentum jump in the number of intermediaries especially depository
participants, Foreign Institutional Investors, mutual funds etc. The number of FIIs in the year 2003 was only 450. From the year 2003 till the current year there is a steady increase in the number of FIIs as shown above. The number of FIIs as on 2013 is 1635. These show the renewed interest of foreign players in the Indian capital market. With the growth in the stock market there is an increase in the number of Depository Participants as well. These services are done by both Indian and Foreign institutions. These signify the growth of the capital market in India.

2.8 DEPOSITORY SYSTEM

Since the beginning of liberalization process in 1991, the size of Indian Capital market expanded manifold. The traditional system of settlement through physical transfer of securities failed to cope up with the requirements of growing capital market and hindered further growth of the market. Physical settlement mechanisms gave rise to inefficiencies and risks of bad deliveries, delays in transfer and registration, fake certificates and forgeries. The Depositories Act has paved the way for instituting an infrastructure for eliminating various risks associated with capital market transactions. It allows dematerialization of securities in depositories through electronic book entry.
<table>
<thead>
<tr>
<th>Particulars</th>
<th>NSDL</th>
<th>CDSL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012-2013</td>
<td>2013-14</td>
</tr>
<tr>
<td>Companies Signed up (No.)</td>
<td>7,354</td>
<td>7,801</td>
</tr>
<tr>
<td>Companies Available for Demat (No.)</td>
<td>7,354</td>
<td>7,801</td>
</tr>
<tr>
<td>Demat Quantity of Shares (lakh)</td>
<td>23,68,970</td>
<td>28,28,700</td>
</tr>
<tr>
<td>No. of shares Settled in Demat (lakh)</td>
<td>6,99,286</td>
<td>5,43,543</td>
</tr>
<tr>
<td>Value of shares Settled in Demat (Rs. Crore)</td>
<td>14,20,717</td>
<td>10,88,895</td>
</tr>
<tr>
<td>Market Capitalisation of Companies in Demat (Rs. Crore)</td>
<td>52,19,720</td>
<td>31,10,345</td>
</tr>
</tbody>
</table>

Sources: SEBI Annual Report, 2013-14

The two depositories were set up with the objective of providing convenient, dependable and secure depository services at affordable cost to all market participants. Table 1.4 shows the number of companies registered with NSDL and CDSL for the two years and also the number of shares which are dematerialized. Even though dematerialization is not compulsory as of now, the raise in dematerialization is a good development with respect to capital market reforms.
National Securities Depository Ltd. (NSDL) the first and largest depository in India, established in August 1996 and promoted by institutions of national stature responsible for economic development of the country has since established a national infrastructure of international standards that handles most of the securities held and settled in dematerialized form in the Indian capital market.

Central Depository Services (India) Ltd. (CDSL) was promoted by Bombay Stock Exchange (BSE) Limited jointly with leading banks such as State Bank of India, Bank of India, Bank of Baroda, HDFC Bank, Standard Chartered Bank, Union Bank of India and Centurion Bank. It commenced its operations from the year 1999.

3. INVESTORS

An important feature of the financial markets is the depth and breadth of public participation (i.e. individual investors) in the market. Millions of households and individual investors provide a pool of capital and a diversity of decision making that creates liquidity in markets and makes it dynamic. Thus the number of household and individual stock holders, fix-deposit holders in bank and post-office, Bond holders or investors in different mutual-funds, insurance-linked investment plans is most commonly cited summary statistics denoting the breadth of investors in the population. These statistics are useful tools for understanding the changes that take place in the financial markets and for policy formulation. It needs to mention that government, business, and individuals are three key participants in the investment process, and each may act as a
supplier or investor of funds. Depending upon personal investment goals and objectives, individuals may place their savings in saving accounts, buy shares of a listed company, buy debt instruments, buy insurance or purchase various type of property.

3.1 INDIVIDUAL INVESTORS IN INDIAN CAPITAL MARKET

Investors in the capital market may be institutions or Individuals. In the capital market the role of individual investors cannot be ignored since household’s savings account for the lion’s share of the gross savings in the country. Even though Foreign Financial Institutions play a major role in the Indian capital market, the participation of Individual investors will be a great boost for the development of the capital market and for reducing the volatility in the stock market. The market fluctuations arise mainly due to the sudden exit or entry of FIIs in the Indian capital market. The capital market regulators should not ignore the individual investors whether they are retail or high net worth individuals since their aspirations, attitudes, perceptions and expectations are going to have a long term effect on the growth of stock market in India.

There are many studies relating to the participation of individual investors in the Indian Capital Market. A Reserve Bank of India study of ownership of shares in 1978 covered 361 companies listed on various stock exchanges. The total paid up value of Rs.1390.85 crore of the shares of these 361 companies were held by 30,16,000 accounts of which individuals held 99.3 per cent Value-wise, individual holdings accounted for 37.58 percent, joint stock companies 33.77 per cent, financial institution 25.68 per cent, government and semi-government bodies 1.49 per cent, and 1.48 per cent was held by
trusts and charitable institutions.

An Industrial Development Bank of India (IDBI) study of 1986 gave the pattern of equity shares of 575 companies. Total paid-up capital of the 575 companies was Rs. 2755.5 crore in terms of value. It was owned by 76,28,598 account holders. The largest numbers of accounts, 99.5 per cent, were held by individuals. In terms of value their holdings accounted for 36 per cent of total equity. Joint stock companies accounted for 25.9 per cent, financial institutions 22.6 percent, government and semi-government organizations 14.4 per cent, and 1.1 per cent was held by trusts and charitable institutions.

The number of listed companies in India has gone up from 2,225 in 1980 to over 9,000 in 1997. As on 31 March 1997, there were 9,890 companies listed on the Indian stock exchanges (India, 1998). According to a survey by Securities and Exchange Board of India (SEBI) in 1996, there are more than 17 million individual shareholders and 72 per cent of them are in the middle income group.

An individual who purchases securities for his/her own personal account rather than for an organisation is a retail investor. SEBI defines a retail shareholder as presently listed companies making public issues can make reservation on competitive basis for its existing shareholders who, as on the record date, are holding shares worth up to Rs. 50,000/-. However, no limit has been set on the value of the application that can be made by such shareholders. It has now been decided to define the term “Retail Individual Shareholder” to mean a shareholder (i) whose shareholding is of value not exceeding Rs.
1,00,000/- as on the day immediately preceding the record date, and (ii) who makes application or bids in a public issue for value not exceeding Rs 1,00,000. Retail investing activity occurs through any of the channels. The investor directly invests. He acts through an agent or broker. His accounts are managed by his D/P. He joins an investment group - friends, colleagues, family members etc. (though unofficially).

A retail investor comes from a middle class family. Retail investing activity takes place in the shadow of institutional investing activity. There is every chance that their interest might be affected because of the smaller size of their holding and the resultant voting power.

A typical small investor or a retail investor in India is not a speculator who does day trading but a pure investor who buys shares when prices are likely to go up and sells when the prices are likely to come down. Such an investor is a rational investor who does what is generally expected. His information level is very low and he mainly relies on the brokers.

In many countries it is common to find all people, and not just those belonging to the middle class, investing a part of their savings in stock market. In the 80s in Singapore even a cab driver had parked his funds in shares/ debentures etc. But in India the so called equity culture started only from the 90s. Reliance Industries Limited in particular wooed the middle class-salaried, professionals, small business persons and traders and well-off farmers to subscribe to the company’s share issue. Many did and were
handsomely rewarded.

The small investor today seems to disappear slowly from the market in a phased manner. In spite of the 24 hour channels on business news and hyped information about IPOs the small investor does not want to take any risk. The Swarup Committee Report 2009 shows that the retail investor population has shrunk to less than half since 2000-01.

In 2003, SEBI and the National Council of Applied Economic Research (NCAER) estimated that 21 million individuals had invested in equity or debentures while 19 million had invested in mutual funds. The reference period for this study was 2000-01.

The SEBI-NCAER survey further said that the number of equity investor ‘households’ in India had halved from 12.1 million in 1998-99 to 6.1 million in 2000-01. Now, the Swarup Committee says that the number of individual retail investors too has shrunk to just eight million. This is clearly a frightening situation.

The retail shareholders participation in the primary issues is also decreasing gradually compared to the earlier period as evident from the table given below.
If this trend continues it will definitely undermine the government’s plan for disinvestment. The first and the foremost reason is that investor has no confidence in the capital market. It stems from the fact that the Institutions and Systems in the country are at present heavily loaded in favor of the FIIs and other large investors.

The minimum percentage of shares that has to be offered to the public has come down drastically over the years from 60 percent to even 10 per cent in some of the cases. The small investor is simply siphoned out. The total number of investors in India hovers around 4 per cent of the population. Now in June 2010, The Government has made amendments to the Securities Contracts (Regulation) Rules. The salient features of the amendment are as follows:
a) The minimum threshold level of public holding will be 25% for all listed companies.
b) Existing listed companies having less than 25% public holding have to reach the minimum 25% level by an annual addition of not less than 5% to public holding. This amendment is likely to increase the retail investor participation in the capital market in the years to come.

Traditionally Indian investors have always entered the capital market through IPOs, because they were reasonably assured of an attractive price and returns but now since the abolition of Controller of Capital Issues, the IPO is heavily priced and there are instances of vanishing companies. So the retail investor stays away from the traditional route to the capital market. The best example of an IPO disaster is the Reliance Power IPO where the investors lost. Because of the oversubscription the losses were minimized to some extent for retail investors.

Frequent Scams and resultant volatility also decreased the investor confidence in Stock Market as a small investor would have burnt his finger more than once. The first occasion was during the Harshad Mehta scam followed by Ketan Parek and many sundry problems. In the year 1999-2000 the stock market witnessed the dot com bubble followed by a bull run and then when the market was going steady, the major crash resulted in 2008 due to the subprime crisis.

Ms. Madhabi Puri Buch, Managing Director and CEO, ICICI Securities Limited say that it would be a pity if retail investors were not to participate in the markets now. She adds
the stock market is a wonderful place for retail investors simply because if you look at a one year plus time frame the trend is distinctly upward and if the retail investors have a three to five year time frame, they will not be disappointed. (The Hindu Business Line, Feb. 2010).

When the stock market is experiencing a boom the retail investors can also enter and reap the rewards provided they don’t fall prey to either fear or greed and behave rationally. Any time is a good time to enter the market provided we have a long term perspective. The game of investing like any other game requires certain qualities and virtues on the part of investors.

**Table 1.6**

**NUMBER OF INDIVIDUAL INVESTORS IN INDIA**

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Individual Investors(in Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>24</td>
</tr>
<tr>
<td>1985</td>
<td>60</td>
</tr>
<tr>
<td>1990</td>
<td>90</td>
</tr>
<tr>
<td>1995</td>
<td>130</td>
</tr>
<tr>
<td>2000</td>
<td>160</td>
</tr>
<tr>
<td>2005</td>
<td>310</td>
</tr>
<tr>
<td>2013</td>
<td>520</td>
</tr>
</tbody>
</table>

*Source: SEBI annual reports*
The number of share-holding population has been increasing in India. This increase can result in the transformation of trading capital to industrial capital. Though India witnessed the spread of the equity cult in the 1980s, wild gyrations and extreme volatility in stock prices do cause worries.

3.2 STATE-WISE SHARE-OWNER DISTRIBUTION

Among the states, Maharashtra accounts for nearly one third of India's share owning population. A comparison of state-wise distribution of shareowners for 1984 and 1992 shows the emerging trends in the Indian capital market.

**Table 1.7**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>State/Union Territory</th>
<th>Population as per 1991 Census</th>
<th>No. of Individual Share owners</th>
<th>Share-owner incidence (No. of shareowners per 100 persons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Gujarat</td>
<td>4,11,74,343</td>
<td>24,21,225</td>
<td>1.43</td>
</tr>
<tr>
<td>3.</td>
<td>W. Bengal</td>
<td>6,79,82,732</td>
<td>11,78,275</td>
<td>0.57</td>
</tr>
<tr>
<td>4.</td>
<td>Tamil Nadu</td>
<td>5,56,38,318</td>
<td>6,67,313</td>
<td>0.39</td>
</tr>
<tr>
<td>5.</td>
<td>Karnataka</td>
<td>4,48,06,468</td>
<td>4,99,463</td>
<td>0.31</td>
</tr>
<tr>
<td>6.</td>
<td>Punjab</td>
<td>2,01,90,795</td>
<td>1,83,463</td>
<td>0.17</td>
</tr>
<tr>
<td>7.</td>
<td>Rajasthan</td>
<td>4,38,80,640</td>
<td>3,66,350</td>
<td>0.20</td>
</tr>
<tr>
<td>8.</td>
<td>Haryana</td>
<td>1,63,17,715</td>
<td>1,27,988</td>
<td><strong>0.16</strong></td>
</tr>
<tr>
<td>9.</td>
<td>Kerala</td>
<td>2,90,32,828</td>
<td>2,14,525</td>
<td>0.09</td>
</tr>
<tr>
<td>10.</td>
<td>Andhra Pradesh</td>
<td>6,63,54,559</td>
<td>4,00,663</td>
<td>0.12</td>
</tr>
<tr>
<td>11.</td>
<td>Uttar Pradesh</td>
<td>13,90,31,130</td>
<td>5,39,958</td>
<td>0.10</td>
</tr>
<tr>
<td>12.</td>
<td>Madhya Pradesh</td>
<td>6,61,35,862</td>
<td>2,31,075</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>State</td>
<td>Population</td>
<td>Capital</td>
<td>Share (%)</td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>-------------</td>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>13</td>
<td>Bihar</td>
<td>8,63,38,853</td>
<td>1,90,288</td>
<td>0.03</td>
</tr>
<tr>
<td>14</td>
<td>Assam</td>
<td>2,22,94,562</td>
<td>44,363</td>
<td>0.02</td>
</tr>
<tr>
<td>15</td>
<td>Himachal Pradesh</td>
<td>51,11,079</td>
<td>10,425</td>
<td>0.05</td>
</tr>
<tr>
<td>16</td>
<td>Jammu &amp; Kashmir</td>
<td>77,18,700</td>
<td>13,263</td>
<td>0.02</td>
</tr>
<tr>
<td>17</td>
<td>Orissa</td>
<td>3,15,12,070</td>
<td>38,913</td>
<td>0.02</td>
</tr>
<tr>
<td>18</td>
<td>Delhi (UT)</td>
<td>93,70,475</td>
<td>10,37,425</td>
<td>4.60</td>
</tr>
<tr>
<td>19</td>
<td>Chandigarh (UT)</td>
<td>6,40,725</td>
<td>66,225</td>
<td>2.40</td>
</tr>
<tr>
<td>20</td>
<td>Goa</td>
<td>11,68,622</td>
<td>33,163</td>
<td>0.27</td>
</tr>
</tbody>
</table>


Table 1.7 shows that the share of the top 5 states, viz., Maharashtra, Gujarat, West Bengal, Tamil Nadu and Karnataka, came down from 82.6 per cent in 1984 to 74.7 per cent in 1992. Gujarat stands as an exception, which increased its percentage share from 16.2 in 1984 to 19.4 in 1992. The share-holding habit in Gujarat has spread among the people of small towns and villages. In Haryana, there is also large no. of investor.

### 3.3 INVESTMENT BEHAVIOR OF INVESTOR

To gauge the impact of the change and growth of the investments market on individual investor during post liberalization and to analyze the quality of its growth, the study of investment pattern & investor’s behavior is required. Saving and investment is a disposable income which does not include consumption. Therefore the national saving will comprise of national disposable income, which does not include the national consumption. In an economy where financial markets are developed, the savings of household sector are reflected through the investment in various financial instruments issued by different intermediaries like banks, financial institutions and the government.
In India, other than such savings like financial instrument, a component, of physical savings is also estimated that includes construction cost of living houses. A very peculiar feature in India is the purchase of gold by households in order to meet the future expenses as well as to keep up with social customs. In an economic scenario the savings behavior is reciprocal to the national consumption behavior.

Savings in large extents influenced firstly through investment opportunities or investment demand which in turn depends upon the growth prospect and the potential return available on those investments, secondly it depends upon the avenues available in the economy for mobilize savings, in the form of well developed financial system with a variety of institution and markets for different financial instruments and thirdly on the general thirst of the people as a part of national culture. Therefore the well developed and integrated financial system is essential to mobilize the saving into productive investment.

It is therefore important to estimate these statistics to assess the growth of financial market. The securities market in India has grown dramatically in the last 15 years and this has led to the expansion of direct equity ownership in the country. A large number of house-holds have also in directly owned equity shares and debentures through their participation in mutual funds. During the recent past securities market are highly volatile and due to these reasons some individual investors are more inclined towards traditional Investments like bank & Post office deposits, insurance policies, ELSS & S.I.P. offered by banks and mutual funds.
At the macro level the behavior of individual saving and investments is primarily related to the nation’s marginal propensity to consume, which in turn depends upon the level of income of the investor, secondly it can be considerably influenced by the incentive structure provided by the authorities, fiscal or otherwise. While providing incentives there are two approaches, first the income oriented approaches and the second one is the price oriented approach. Income oriented approach include changing the monetary and fiscal policy mix by lowering government and private consumption while stimulating investment through lower interest rates. Price oriented approach include rising the rate of return to the investor or saving by lowering the tax rate or raising the reward for investments by offering investments and additional depreciation allowances.

At the micro level, the behavior of individual investor saving and investments is a very complex phenomenon and can only be determined through the study of various factors. Several econometric studies have recently attempted to identify determinants of the Indian saving rate, using a standard life-cycle approach, ordinary least-squares methods were employed to derive the broad results. The complexity of the study of individuals saving behavior can reasonably explained by the emotional and sentimental behavior of individual towards saving and investments. In India the cultural aspect also plays an important role in saving and investment of Indian individual investor. The result of few of the studies which have conducted on Indian households, it was found that GDP growth has had no significant impact on the saving rate. Rising per-capita income, however, was found to have a weak positive effect on household saving. The agricultural sector in India has a lower propensity to save compared to other sector, so that a diminishing share of
agriculture in GDP raises the saving rate. The effects of taxation on saving have been weakly negative. A higher real interest rate has apparently increased saving surprisingly. However, the interest rate has affected physical saving positively but has had no impact on financial saving. Financial deepening (as measured by the broad money to GDP ratio and by the number of bank branches) also has increased the saving rate. Country of other Asian economies, growth in the relative size of the working age population was not found to have a significant impact on saving. However, saving has been negatively related to the traditional saving instruments like higher interest rates or special tax incentives have failed to raise the household saving rate.

4. **INVESTMENT AVENUES AT A GLANCE**

There are numerous avenues of investment available today. Investing has been an activity confined to the rich and business class in the past. This can be attributed to fact that availability of investible funds is a pre requisite to the deployment of funds. But, today with the growing income level of the public investment has become a household word and is popular with people from all walks of life. Brief descriptions of the investments are given below.

- Financial Securities
- Non-securitized Financial Assets
- Mutual Fund Schemes
- Real Assets.
4.1 **Financial Securities:** Financial securities include equity shares, preference shares, convertible debentures, non-convertibles debenture, public sector bonds, savings certificates, etc. Equity shares and public sector bonds are the most common investment avenues among the financial securities for the common man.

4.2 **Non-Securitized Financial Investment:** Unlike a financial security, non-securitized financial investment is not transferable or negotiable. Post-office Saving Deposits and fixed deposits like National Saving Certificates, Kisan Vikash Patra, etc. Saving bank accounts and fixed deposit in banks, provided fund schemes, fixed deposits in companies, Life Insurance etc. are some of the non-securitised financial investment. The post-office and savings banks deposits, recurring deposits and fixed deposits are most common and important among the non-securities financial investment.

Deposits in post offices and nationalized commercial banks are regarded as the least risky investment avenues. However the rates of return in those investment avenues are comparatively less. The rate of return in a fixed deposit in a bank is as high as 13% in the year 1991 which has come down to less than 5% in the year 2008-2009.

4.3 **Mutual Funds Schemes:** Instead of directly buying financial securities, one can invest in mutual funds. Those mutual funds managed by professionals decide where to invest, when to invest, how much to invest and when to disinvest so that the mutual funds scheme would be able to give a profit to its investors.
4.4 Real Assets: For the bulk of the investors the most important asset in their portfolio is a residential house. In addition to a residential house, the more affluent investors are likely to be interested in the following types of real estate:

- Agricultural land
- Semi-urban land
- Time share in a holiday resort
Reference:


Annal Lourdhu Regina, P “A study of individual investor behavior in capital market with special reference to Tamilnadu” Bharathidasan University, Tamilnadu.

Rawal, Umesh “A study on investor behavior in financial market, with special reference to some selected cities of Saurashtra region” Maharaja Krishnakumarsinhji Bhavnagar University, Gujarat.

Bawa, Imanjeet Singh “The determinants of foreign institutional investments in India: a critical analysis” Shri Jagdishprasad Jhabarmal Tibarewala University, Rajasthan.

Phani Kumar, T V V “Retail investor perspective on capital market: a study on retail investors in Visakhapatnam city”, Andhra Pradesh, Acharya Nagarjuna University.

J. Michael Sammanasu ”An inquiry in to the investor’s preferences in capital market investment with special reference to tiruchirappalli district”, Bharathidasan University, Tamilnadu.

Varghese, Tomy “A study of individual investors in the capital market in Karela” Cochin University of science and technology, Karela.

TheSE Official Directory. 9(iii). p.11.


Financial analysts journal, 55(6):18{27, 1999}