CHAPTER - 1
THEORETICAL OVERVIEW

1.1 INTRODUCTION

1.1 (a) Evolution of Capital Markets

The Evolution of Capital Market for formal trading can be traced back to 1861 i.e. during the period of American Civil War. Several companies came to formal existence during this period, which were into the business of exports to the United Kingdom and the United States of America. This triggered need for formal banking system as an outcome good number of banks came into existence creating formal financial system in their respective economies, undertaking various financial transactions for their clients/customers across their trading continents. These financial institutions were commonly registered under the British Companies Act.

In India the Stock Exchange of Mumbai came into existence during 1875. During this era the markets experienced much fluctuation especially due to the American Civil War, and the battles in Europe. For most of the years Sir Premchand Raychand acted as a kingpin in the Indian Capital Markets. Sir Phiroze Jeejeebhoy was another who dominated the stock market, his word was law and he had a great influence over both brokers and the government. He was a good regulator many crises were averted due to his wisdom practicality. Currently, the BSE building, icon of the Indian capital markets, is called P.J. Tower in his fond memory.

The security contract and regulation act became parent regulation and a basic law to be followed by security market in India, after Indian contract act 1872. Then the
(CCI) controllers of capital issues act was passed in 1947 to regulate the issue of share. The markets has seen very good times too, the (CCI) controllers of capital issues decided the price at which shares could be issued and with the entry of Mr. Dhirubhai Ambani, said to be the father of modern markets generated huge interest with issuance of share certificates to educate people. The next big boom and mass participation by retail investors happened in 1980. Retail investors began participating in the stock markets in a small way with the dilution of FERA in 1978.

Several changes has been taken place during the short history of capital markets, such as establishment of (SEBI) Securities Exchange Board of India 1992, Two new stock exchanges, (NSE) National Stock Exchange of India established in 1994 and (OTCEI) Over the Counter Exchange of India established in 1992 gave BSE a nationwide competition, online trading system in 1995, establishment of the depositing in 1996, In April 1995, the National Securities Clearing Corporation (NSCC) and in November 1996, the National Securities Depository Limited (NSDL) were set up for demutualised trading, clearing and settlement. Information Technology scrips were the major players in the late 90s with companies like Wipro, Satyam, and Infosys. In February 2000, permission was given for internet trading to overcome the limitations of physical handling of the securities, dematerialization of the securities has been done and from June, 2000, futures trading started.

1.1 (b) Classification of Financial Markets

Financial markets in India carries out its operations to cater to the requirements of the market and its participants in accordance to the objectives they carry while transacting in these markets; either for their investment needs or for the purpose of their
liquidity. In this background the markets so as to functionalize their operations classify themselves as depicted in table 1.1 below;

**Table 1.1**  
**Classification of Financial Markets**

<table>
<thead>
<tr>
<th>Mode of Classification</th>
<th>Nature of Financial Markets</th>
</tr>
</thead>
</table>
| 01. Financial Claim    | **Debt market** is the financial market for the fixed claims (debt instruments).  
**Equity market** is the financial market for residual claims (equity instruments). |
| 02. Maturity of the Claim | **Money market** the market for short term financial claims  
**Capital Markets** is referred to as the market for long-term financial claims |
| 03. New issues or Outstanding issues claims | **primary market** the market where issuers sell new claims  
**Secondary market** the market where investors trade outstanding securities |
| 04. Timing of delivery | **Cash or spot market** is one where the delivery occurs immediately  
**Forward or futures market** is one where the delivery occurs at a pre-determined time in future. |
| 05. Nature of organizational structure | **Exchange-traded market** is characterized by a centralized organization with standardized procedures.  
**Over-the counter market** is a decentralized market with customized procedures |

1.2 Indian Capital Market and its Participants

Indian capital Markets since its inception in organized form has been successful in attracting diverse pool of investment participants towards them, who invest their liquidity surplus in diverse investment tools that ensure them with opportunities to realize their objective behind participation. Table 1.2 below summarizes various investment groups and nature of participants that it normally observes;

**Table: 1.2**

**Participants in Indian Capital Markets**

<table>
<thead>
<tr>
<th>SL. No</th>
<th>Nature/types of participants</th>
<th>Mode of participation/investment mediums available</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Domestic Investors</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Individual</td>
<td>Equity shares, IPOs debentures, currency markets, derivatives, metals etc</td>
</tr>
<tr>
<td>B</td>
<td>Institutional</td>
<td>PPF, Infrastructure, Insurance, corporate equities, commercial bonds</td>
</tr>
<tr>
<td>2</td>
<td>International/Foreign investors</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Direct equity investors</td>
<td>Insurance, Infrastructure, Company Stocks, Banks &amp; Financial Instruments</td>
</tr>
<tr>
<td>B</td>
<td>FDI (Foreign Direct Investment)</td>
<td>Institutional Participation in form of Infrastructure (purchase consideration)</td>
</tr>
<tr>
<td>C</td>
<td>FII (Foreign Institutional Investments)</td>
<td>Institutional Participation in form of financial Instruments like FPI (Foreign Portfolio Investments), PN (Promisory Note).</td>
</tr>
</tbody>
</table>

Source: [www.wfe.com](http://www.wfe.com), accessed on 12th June 2010, at 12.10 pm
1.3 Major Markets in India

Indian Capital market operations are indexed across two of its major exchanges, National Stock Exchange (NSE) of India, and Securities and Exchange Board of India (SEBI). These two exchanges account for more than 80-85% of capital market operations. A brief note on these exchanges are presented below.

1.3 (a) National Stock Exchange (NSE)

NSE is recognized as a stock exchange in April 1993 under the Securities Contracts (Regulation) Act. It commenced its operations in Wholesale Debt Market in June 1994. The capital market segment commenced its operations in November 1994, whereas the derivative segment started in 2000. NSE introduced a fully automated trading system called NEAT (National Exchange for Automated Trading) that operated on a strict price/time priority. This system enabled efficient trade and the ease with which trade was done. NEAT had lent considerable depth in the market by enabling large number of members all over the country to trade simultaneously, narrowing the spreads significantly.

The derivatives trading on NSE commenced with S&P CNX Nifty Index futures on June 12, 2000. The futures contract on NSE is based on S&P CNX Nifty Index. The Futures and Options trading system of NSE, called NEAT-F&O trading system, provides a fully automated screen based trading for S&P CNX Nifty futures on a nationwide basis and an online monitoring and surveillance mechanism. It supports an order-driven market and provides complete transparency of trading operations.

Benchmark Indices futures: Nifty Midcap 50 futures, S&P CNX Nifty futures, CNX Nifty Junior, CNX IT futures, CNX 100 futures, Bank Nifty futures.
From the above table it becomes very much evidential that the market performance has been very much cyclical, where during the year 2006 – 08 the market had observed a aggressive growth later during the year 2008-09 the market had observed a rampant slug as an impact of global market downturn, further due the corrective measures initiated by the government the market has been successful in recovering and currently is more into a recovery mode, and is expected by the market to continue for a favourable period of time. Moreover Nifty being a broad base index for the global markets and the investors as a bench mark for decision making; looking at the trend it could be concluded that the NSE is showcasing a positive cue for investor for investments in India, ensuring favourble liquidity positions in the days to come to the Indian Economy.
1.3 (b) Bombay Stock Exchange (BSE)

BSE is the oldest stock exchange in Asia, led to the formation of the Native Share Brokers Association in 1875, which later became Bombay Stock Exchange Limited (BSE). BSE is widely recognized due to its pivotal and pre-eminent role in the development of the Indian capital market.

01. In 1995, the trading system transformed from open outcry system to an online screen-based order-driven trading system.

02. The exchange opened up for foreign ownership (foreign institutional investment).

03. Allowed Indian companies to raise capital from abroad through ADRs and GDRs.

04. Expanded the product range (equities/derivatives/debt).

05. Introduced the book building process and brought in transparency in IPO issuance.

06. Depositories for share custody (dematerialization of shares).

07. Internet trading (e-broking).

08. Governance of the stock exchanges (demutualization and corporatization of stock exchanges) and internet trading (e-broking).

BSE has a nation-wide reach with a presence in more than 450 cities and towns of India. BSE has always been at par with the international standards. It is the first exchange in India and the second in the world to obtain an ISO 9001:2000 certification. It is also the first exchange in the country and second in the world to receive Information Security Management System Standard BS 7799-2-2002 certification for its BSE Online Trading System (BOLT).

**Benchmark Indices futures:** BSE 30 SENSEX, BSE 100, BSE TECK, BSE Oil and Gas, BSE Metal, BSE FMCG.
BSE Index Performance for the Year 2006-07 to 2012-13

From the above table it becomes very much evidential that the market performance has been very much volatile, where during the year 2006 – 08 the market had observed a aggressive growth later during the year 2008-09 the market had observed a rampant slug as an impact of global market downturn, further due the corrective measures initiated by the government the market has been successful in recovering and currently is more into a recovery mode, and is expected by the market to continue for a favourable period of time. Moreover Nifty being a broad base index for the global markets and the investors as a bench mark for decision making; looking at the trend it could be concluded that the NSE is showcasing a positive cue for investor for investments in India, ensuring favourable liquidity positions in the days to come to the Indian Economy.

Source: Capitaline.com
1.4 Broad based market Indices

Market Index is considered as one of the major benchmarks to access the capital market potential. Table 1.3 exhibits the top market indices across the world as published by World Federation of Exchanges (WFE) in terms of their growth in local currency during the last two years.

Table: 1.3

Top 09 performing Broad Base Market Indices (for the year 2012-13 - in terms of Local Currency)

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Exchange</th>
<th>% change 2012 / 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>IMKB</td>
<td>52.6%</td>
</tr>
<tr>
<td>02.</td>
<td>Egyptian Exchange</td>
<td>50.8%</td>
</tr>
<tr>
<td>03.</td>
<td>Stock Exchange of Thailand</td>
<td>35.8%</td>
</tr>
<tr>
<td>04.</td>
<td>Athens Exchange</td>
<td>33.4%</td>
</tr>
<tr>
<td>05.</td>
<td>Philippine Stock Exchange</td>
<td>33.0%</td>
</tr>
<tr>
<td>06.</td>
<td>National Stock Exchange India</td>
<td>31.8%</td>
</tr>
<tr>
<td>07.</td>
<td>BSE India</td>
<td>31.2%</td>
</tr>
<tr>
<td>08.</td>
<td>Warsaw Stock Exchange</td>
<td>26.2%</td>
</tr>
<tr>
<td>09.</td>
<td>Deutsche Borse</td>
<td>24.8%</td>
</tr>
</tbody>
</table>

Source: www.wfe.com, accessed on 15th April 2013, at 6.15 p.m

From the above table it could be observed that both of its major exchanges have seen their place among the top exchanges in the world, where NSE takes 6th place BSE holds seventh position with an annual growth of 31.8% and 31.2% respectively. The important aspect to govern is that though NSE is relatively new in Indian Markets compared to BSE
with its broad base market operations and favorability of both domestic and global market participants with it in India it has outperformed BSE both in terms of value and volumes traded.

1.5 Indian Capital Market few Evidences in the past

The introduction of the Fraudulent Trade practices Act, prevention of Insider Trading Act, taken over code and corporate governance Norms, major development in the capital markets over the last few years that has made the markets attractive to foreign international investor.

India’s growth story has important implications for the capital market, which has grown sharply with respect to several parameters — Amounts raised number of stock exchanges and other intermediaries, listed stocks, market capitalization, trading volumes and turnover, market instruments, investor population, issuer and intermediary profiles. A good capital market is an essential pre-requisite for industrial and commercial development of any country and acts as a central coordinating and directing mechanism for free and balanced flow of financial resources into the economic system operating in a country.

With the introduction of trading of new securities, stock exchanges have brought in innovation in terms of technology With the introduction of the same there was a need to create another financial institution/body. The National Securities Clearing Corporation Ltd (NSCCL), Depository participants and other intermediaries came into existence and which has replaced traditional brokers. Exchanges also stared the trading of the new investment tools like Exchange-Traded Fund (ETFs), Gold ETFs, and Real Estate Investment Trusts (REITs). Financial engineering and Equity and Debt products: Non-voting shares, differential voting rights, employee stock options,
Sweat Equity shares, Callable and Puttable common shares, American Depository Receipts (ADRs), Global Depository Receipts (GDRs), Indian Depository Receipts (IDRs), warrants, World Equity Benchmark Shares (WEBS) etc., are the innovative financial products came into existence through Financial Engineering in Equity class.

### 1.6 Equity Market in India – Few evidences

With the onset of globalization and the subsequent policy reforms, significant improvements have been made in the area of securities market in India. Dematerialization of shares was one of the revolutionary steps that the government implemented. This led to faster and cheaper transactions, and increased the volumes traded by many folds. The adoption of the market-oriented economic policies and online trading facility transformed Indian equity markets from a broker-regulated market to a mass market. This boosted the sentiment of investors in and outside India and elevated the Indian equity markets to the standards of the major global equity markets.

The 1990s witnessed the emergence of the securities market as a major source of finance for trade and industry. Equity markets provided the required platform for companies and start-up businesses to raise money through Initial Public Offerings (IPOs), Venture Capital fund (VC), and finance from High Net worth Individuals (HNIs). As a result, stock markets became a people’s market, flooded with primary issues. In the first 11 months of 2007, the new capital raised in the global public equity markets through IPOs accounted for $107 billion in 382 deals out of the total of $255 billion raised by the four BRIC countries. This was a sizeable growth from $90 billion raised in 302 deals in 2006. Today, the corporate sector prefers external sources for meeting its funding requirements rather than acquiring loans from financial institutions or banks.
With khetan parekh (1990) and Harshad Mehta (1992), along with this there was a major capital market scam where bankers and brokers were involved. With this, many investors left the market. Later there was a securities scam in 1991-92 which revealed the inefficiencies and inadequacies of the Indian financial system and called for reforms in the Indian Equity Market.

1.7 Capital Market Reforms – a need felt by SEBI in light of scandals

Reported by the Market

Few of the important measures initiated by SEBI to reform the market operations are summarized and presented below;

01. Penalty for failure by any person to enter into agreement with clients.
02. Penalty for failure to redress investors' grievances.
03. Penalty for certain defaults in case of mutual funds.
04. Penalty for failure to observe rules and regulations by an asset management company.
05. Penalty for failure in case of stock brokers.
06. Penalty for insider trading.
07. Penalty for non-disclosure of acquisition of shares and take-overs.
08. Penalty for fraudulent and unfair trade practices.
09. Penalty for contravention where no separate penalty has been provided.

1.7(a) Few other measures under review for transforming the capital market operations

To safeguard the interest of investors, Market regulator SEBI has decided to undertake several reforms to develop equity culture in the country, towards investors, IPOs and mutual funds.
Not to allow companies to raise funds through IPOs if their intentions are unclear and investors' interest is compromised.

Rejecting those IPOs (Initial Public Offers), about which the regulator is "not very sure that the intention is clear, the data and information is clear..."

Balancing the needs of the retail investors and also the need to encourage people to invest in the equity market. Where people invest on a long term basis.

"The world over, equity market has developed on the back of pension reforms and that is missing in India. It is not only about PFRDA (Pension Fund Regulatory and Development Authority of India) even the EPFO (Employees Provident Fund Organization) should permit the funds to invest in the securities market. Large pension funds from across the world are coming to invest in India, but our own funds are not investing"

Major Stakeholders in equity markets

- Investors
- Issuers
- Intermediaries
- Regulators

If all these four stakeholders are taken good care of; from the onset - a stock market would easily exhibit a sound growth and perform exponentially.

The Indian Equity Market is more popularly known as the Indian Stock Market. The Indian equity market has become the third biggest after China and Hong Kong in the Asian region. According to the latest report by ADB (Asian Development Bank), it has a market capitalization of nearly $600 billion. As of March 2009, the market capitalization was around $598.3 billion (Rs 30.13 lakh crore) which is one-tenth of the combined
valuation of the Asia region. The market was slow since early 2007 and continued till the first quarter of 2009.

1.8 Securities Market Operations

The Securities Markets in India is considered as market for trading on Equity, Debt and Derivatives (a new inception since June, 2000). The Debt Market, in turn is divided into three parts, viz., the Government Securities Market, the Corporate Debt Market, and the Money Market. The major participants, the nature of activities they perform are summarized and presented below in table 1.4;

Table 1.4

Participants in the Securities Market

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Particulars</th>
<th>Nature of Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Regulators</td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>The company law board (CLB)</td>
<td>Responsible for the Administration of the Companies Act, 1956.</td>
</tr>
<tr>
<td>b.</td>
<td>The Reserve Bank of India (RBI)</td>
<td>Responsible for supervision of banks, money market, and government securities market.</td>
</tr>
<tr>
<td>c.</td>
<td>The Securities and Exchange Board of India (SEBI)</td>
<td>Responsible for the regulation of the capital market.</td>
</tr>
<tr>
<td>d.</td>
<td>The Department of Economic Affairs (DEA)</td>
<td>An arm of the government, concerned with functioning of the financial markets as a whole.</td>
</tr>
<tr>
<td>e.</td>
<td>Department of Company Affairs (DCA)</td>
<td>An arm of the government, responsible for the administration of corporate bodies.</td>
</tr>
<tr>
<td>2.</td>
<td>STOCK EXCHANGES - Deal with different types shares</td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>Listed Securities</td>
<td>Securities that are listed on various stock</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>b.</strong> Depositories</td>
<td>exchanges eligible for trading are called listed securities. Presently about 10,000 securities are listed on all the stock exchanges in India.</td>
<td></td>
</tr>
<tr>
<td><strong>c.</strong> Brokers</td>
<td>Registered members of the stock exchanges through whom investors transact. There are about 10,000 brokers in India</td>
<td></td>
</tr>
<tr>
<td><strong>d.</strong> Foreign Institutional Investors</td>
<td>Institutional Investors from abroad who are registered with SEBI to operate in the Indian Capital Market are called foreign institutional investors. There are about 600 of them and they have emerged as a major force in the Indian market.</td>
<td></td>
</tr>
<tr>
<td><strong>e.</strong> Merchant Bankers</td>
<td>Firms that specialize in managing the issue of securities are called merchant bankers. They have to be registered with SEBI</td>
<td></td>
</tr>
<tr>
<td><strong>f.</strong> Primary Dealers</td>
<td>Serve as underwriters in the primary market and as makers in the secondary market for government securities, appointed by the RBI.</td>
<td></td>
</tr>
<tr>
<td><strong>g.</strong> Mutual Funds</td>
<td>A mutual fund is a vehicle for collective investment. It pools and manages the funds of investors. There are about 30 mutual funds in India.</td>
<td></td>
</tr>
<tr>
<td><strong>h.</strong> Custodians</td>
<td>A custodian looks after the investment back office of a mutual fund. It receives and delivers securities, collects income, distributes dividends, and segregates the assets between schemes.</td>
<td></td>
</tr>
<tr>
<td><strong>i.</strong> Registrars</td>
<td>Known as a transfer agent, a registrar is</td>
<td></td>
</tr>
</tbody>
</table>
1.9 Equity Markets and its Operations in India

Equity capital represents ownership capital, equity shareholders collectively own the company. They equity shares appear to be the most romantic. While fixed income investment avenues may more important to most of the investors, equity shares seem to capture their interest the most. The potential rewards and penalties associated with equity shares making them an interesting, even exciting, proposition.

The amount of capital that a company can issue as per its memorandum represents the authorized capital. The amount offered by the company to the investors is called the issued capital. That part of the issued capital that has been subscribed to by the investors is called the subscribed capital; the actual amount paid is called the paid up capital.
Typically the issued, subscribed, and paid-up capitals are the same. The *par value* is stated in the memorandum and written on the share scrip.

**1.9 (a) Primary Market for Equities in India**

Although the equity market in India has been functioning since the late nineteenth century, the primary equity market, also called the new issues market, remained rather dull and inactive, barring occasional but brief burst of activity, till 1991. In 1992, the control of capital issues act was abolished and SEBI was entrusted with the responsibility of regulating the primary market. A series of initiatives taken by SEBI, along with a more conductive environment that emerged in the wake of economic reforms, imparted a strong fillip to the primary market. Some of the important changes introduced by SEBI are worth mentioning.

- **Free Pricing:** companies have been given freedom in pricing their equity shares and determining the interest rate structure on their debt securities.

- **Disclosure and investor Protection (GIP) Guidelines:** issues of securities have to conform to fairly elaborate disclosure requirements, so that investors can take more informed decisions. DIP guidelines and their continual improvement have made Indian disclosure requirements comparable to best international practices. Of course, this has made the offer document quite voluminous.

- **Efficient Delivery** Mechanism: SEBI has made it mandatory for all new IPOs to be issued only in the dematerialized form. Further, the time lapse between the closure of an issue and the listing of shares has been compressed.

There are three ways in which a company may raise equity capital in the primary market:

- Public issue
- Rights issue
Public Issue

By far the most important method of issuing securities, a public issue involves sale of securities Act, 1956, SEBI guidelines on investor protection, and the listing agreement between the issuing company and the stock exchanges. The companies act describes the procedure to be followed in offering shares to the public and the type of information to be disclosed in the prospectus and SEBI guidelines impose certain conditions on the issuers besides specifying the additional information to be disclosed to the investors.

- Approval of the board of directors
- Approval of shareholders
- Appointment of the lead manager
- Due diligence by the lead manager
- Appointment of other intermediaries like co-managers, advisors, underwriters, bankers, brokers, and registrars.
- Preparation of the draft prospectus
- Filing of the draft prospectus with SEBI
- Applications for listing in stock exchanges
- Filing of the prospectus (after incorporating any modifications suggested by SEBI) with the Registrar of companies
- Promotion of the issue
- Printing and distribution of applications
- Statutory announcements
- Collection of applications
- Processing of applications
- Determination of the liability of underwriters
Finalization of allotment
Giving of DEMAT credit and refund orders
Listing of the issue

The merchant banker handling a public issue plays a multifaceted role. The merchant banker advises the issuing company, performs due diligence on the company, coordinates the work of all agencies involved in the issue, serves as a watchdog for statutory compliance, and protects the interest of investors in a fiduciary capacity.

1.10 Equity Portfolio Management

There are two broad approaches are followed in managing an equity portfolio: passive strategy and active strategy.

- **Passive strategy** investors, who view that the market is efficient, adopt passive strategy.

The commonly followed passive strategies are: buy and hold strategy, and indexing strategy.

- **Buy and Hold Strategy** very simple strategy where buy a equity portfolio stocks using some method and hold over the investment horizon.

- **Indexing strategy** it replicates a well-defined index of equity stocks such as Nifty-50 or BSE-National Index.

- **Active strategy** followed by most investment professionals and aggressive investors who strive to earn superior returns. The four principal vectors of an active strategy are;
  01. Market Timing
  02. Sector Rotation
03. Security Selection

04. Use of a specialized Investment Concept

1.11 Portfolio Management Process

The security analyst when faced with the problem of making a buy or hold or sell decision, must first evaluate the past performance of the security coupled with his personal experience, predict future performance and relative market position. The detailed data available to the analyst for this task far exceed his human capabilities of assimilation. The analyst therefore, will normally base his predictions on several basic attributes of the security and modify these results in the light of his intuitive beliefs. In accordance he constructs a portfolio which can ensure him with above normal returns in commensuration with the risk he undertakes. The portfolio construction and management process is summarized and presented below;

01. Specification of Investment objectives and Constraints: the typical objectives sought by investors are current income, capital appreciation, and safety of principal. The constraints arising from liquidity, time horizon, tax, and special circumstances.

02. Choice of the Asset mix: the most important decision in portfolio management is the asset mix decision. This is concerned with the proportions of ‘stocks’ (equity shares and units/shares of equity oriented mutual funds) and ‘bonds’ (fixed income investment vehicles in general) in the portfolio. The appropriate ‘Stock-Bond Mix depends on the risk tolerance and the investment horizon of the investor.

03. Formulation of Portfolio Strategy: an appropriate portfolio strategy has to be hammered at once a certain mix is chosen. Two broad choices are available: an active portfolio strategy or a passive portfolio strategy. An active portfolio strategy strives to earn superior risk-adjusted returns by resorting to market
timing, or sector rotation, or security selection, or some combination of these. A passive portfolio strategy involves holding a broadly diversified portfolio and maintaining a pre-determined level of risk exposure.

04. **Selection of Securities:** generally, investors pursue an active stance with respect to security selection. For stock selection, investors commonly go by fundamental analysis and/or technical analysis. The factors considered in selecting bonds are yield to maturity, credit rating, term to maturity, tax shelter, and liquidity.

05. **Portfolio Execution:** this phase concerned with implementing the portfolio plan by buying and/or selling specified securities in given amounts. This is an important practical step that has a bearing on investment results.

06. **Portfolio Revision:** the value of portfolio as well as its composition the relative proportions of stock and bond components may change as prices of stocks and bonds fluctuates. Of course, the fluctuation in stock prices is often the dominant factor underlying this change. In response to such changes, periodic rebalancing of the portfolio is required. This involves a shift from stocks to bonds or vice versa. In addition, it may call for sector rotation as well as security switches.

07. **Performance Evaluation:** the performance of a portfolio should be evaluated periodically. The key dimensions of portfolio performance evaluation are risk and return and the key issue is whether the portfolio return is commensurate with its risk exposure. Such a review may provide useful feedback to improve the quality of the portfolio management process on a continuing basis.

**1.12 Factors Influencing Indian Equity Market:**

A stock exchange has been defined by the Securities Contract (Regulation) Act, 1956 as an organization, association or body of individuals established for regulating, and controlling of securities.
The Indian equity market depends on the following factors -

- Funding into equity from all over the world
- Inflation
- BOP (Balance Of Payments)
- CPI (Consumer Price Index)
- WPI (Wholesale Price Index)
- Political Instabilities
- Industry performance
- Corporate houses performance

The Indian market has 23 stock exchanges

An India is home to an economy, which is big, active and growing. The Indian market is made up of various important sectors and industries including pharmaceutical industry, IT/Software, Foreign Investment, Telecommunication, Stock Market, Manufacturing and Construction, Hospitality Industry, Bond Market, Loan Market, Pharmaceutical Sector, Real Estate, Aviation and Automobile Industry. The growth of all these industries has helped India become a major economy in the world.

The economist makes us to believe that the price in security markets is determined by the forces of demand and supply in a free economy. Even if we accept the economists’ view, it becomes essential for assessing factors that influence demand and supply, investors response towards the same and the Price that are prevailing the market and the right price that the investor will have to pay for procuring the shares that would fit into his investment portfolio in accordance with the objectives established by them. Securities market, whether primary or the secondary market, the price of equity significantly
influences the investment decision few of the indicators of right price are; Earnings Per Share, Book Value of the firm, Dividend Per Share, Price Earnings Ratio and Dividend Per Share (Gompers, Ishii & Metrick, 2003) etc.

1.13 Performance of Equity Market – Global Scenario

World equity markets registered their worst month in history as investors lost a probable $5.79 trillion during October 2008. Measured in dollar change to investor held equity accounts, Standard & Poor's data shows that the October loss of the 52 global equity markets was 45% above that of September when markets lost a then record $4.0 trillion. Standard & Poor's estimates that investors have lost $16.22 trillion year-to-date through October 2008. The Bombay Stock Exchange too has been massively hit by the crisis with being predominantly dependant on FII flows.

1.14 Major Stock Market Crisis reported by the Markets across the World

Though there are a number of factors that have concerned the markets globally it terms of major crisis, few of the important factors are enlisted below;

01. Mortgage crisis
02. Credit default swaps.
03. UTI crisis
04. GTB(Global Trust Bank) crisis
05. Enron corporation
06. Major stock market crisis across India
07. Sensex crisis
08. How European and western crisis affected Indian markets
1.14 (a) Derivative Markets in India:

Derivative markets though in its unorganized form are present in India for many decades; organized trading was started in June 2000 by introduction of Index Futures by NSE, India. This was followed by introduction of Equity derivatives by BSE, India and a number of financial innovations have been seen in the market and a larger platform for trading is created in Indian Capital Markets. Latest of inclusion of derivative instruments being Currency Derivatives

Forms of Derivatives:

**Equity Futures:** Equity futures are of two types:

- Stock index futures
- Individual stock futures

The National Stock Exchange and the Bombay and Bombay Stock Exchange have introduced stock index futures. The National Stock Exchange has a stock index futures contract based on S & P CNX Nifty Index; the Bombay Stock Exchange has a stock index futures contract based on Sensex

**Stock Index Futures** - are future contract written on Stock Market Indices such as the standard & poor’s 500 in the US or Nifty in India. Because it is very inconvenient to deliver the index, stock index futures contracts are settled by cash amount which is equal to the difference between the contracted futures prices and final index value times a multiplier that scales the contract size

**Individual Stock Futures** are futures on individual stocks. The list of stocks on which futures contracts are permitted may be specified by the exchange or the regular body

Individual stock futures may be settled by delivery or by cash. Futures on individual securities were introduced in India in 2001. The list of securities in futures contracts are permitted is specified by Securities Board of India. The National Exchange and the Bombay Stock Exchange have introduced Future on Individual Securities
**Interest Rate Futures**: A futures contract on an asset whose price depends solely on the level of interest rates is called an interest rate futures contract. There are interest rate futures contracts on assets like Eurodollars, Treasury bills, Treasury notes, and Treasury bonds.

The conversion factor is based on the value of the bond on the first day of the delivery month on the assumption that the interest rate for all maturities is equal to 8 percent per annum. To illustrate this procedure, let us consider a 10 percent coupon bond with a maturity of 18 years. Working with a standard of $100 face value, the value of the bond can be calculated, using a discount rate of 8 percent.

**Foreign Exchange Futures**: Exchange rates between currencies fluctuate over time and often considerably. This variability bothers anyone engaged in international operations. To cope with the exchange rate risk, forward and futures contracts may be employed.

The forward market in foreign exchange is a somewhat informal network of banks and brokers that enables customers to enter into forward contracts to buy or sell currency in future at a price fixed today. Forward contracts in currencies are customized. There is no marking to market and execution takes only at the maturity date. Futures contracts in currencies take place in formal markets such as the Chicago Mercantile Exchange (International Monetary Market) and London International Financial Futures Exchanges. On such markets, contracts are standardized by size and marking to market is done on a daily basis. Further, standard clearing arrangements allow traders to reverse positions.

**1.15 Regional performance of World Exchanges**

The global equity markets are classified into four zones, each reporting their respective performance compared to the other regional exchanges. The same is reported by the world federation of Exchanges every year; the following table indicates the zonal performance of equity markets followed by a brief analysis to appraise their performance.
Table: 1.5

Domestic Equity Market Capitalization performances of Regional and Global Markets as per WFE (World Federation of Exchanges) at year-end 2012 against 2011

<table>
<thead>
<tr>
<th>Time Zone</th>
<th>USD bn End 2012</th>
<th>USD bn End 2011</th>
<th>% change in USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas</td>
<td>23,193(42.50%)</td>
<td>19,789(41.74%)</td>
<td>17.2%</td>
</tr>
<tr>
<td>Pacific</td>
<td>16,929(31.02%)</td>
<td>16,929(35.72%)</td>
<td>15.4%</td>
</tr>
<tr>
<td>Europe Africa Middle East (EAME)</td>
<td>14,447(26.47%)</td>
<td>12,942(27.30%)</td>
<td>11.6%</td>
</tr>
<tr>
<td>Total Performance</td>
<td>54,570(100%)</td>
<td>47,401(100%)</td>
<td>15.1%</td>
</tr>
</tbody>
</table>

Source: www.wfe.com, accessed on 19th of June 2013 at 4.30 p.m

Note: Figures shown in parenthesis is % to total performance of equity markets during their respective years

A close observation of the above table reveals the following;

01. Where the overall equity market performance reports a net growth of 15.1%, American markets report a maximum growth of 17.2%, as compared to Pacific Markets (15.4%) and EAME (11.6%) being observing the least growth

02. Further, when we look into the total reported trading each year against the total equity market trading during the same year, it could be evidenced that during 2011 where American markets reported 41.74% of world trading, it reported 42.50% of world equity trading during 2012. During the same period EAME reported 27.30% of world equity trading during 2011 saw a decline of 3.04% and reported 26.47% of world equity trading. Asia Pacific Markets being greatly hit due to lack of economic inconsistencies reported by these markets and the same can be evidenced in the reported data, and it can be observed that, where during 2011 Asia Pacific markets reported 35.72% of world trading has saw a decline of 13.16% and reported a mere 31.02% of world equity trading
03. It is hence evidenced that the APAC (Asia Pacific Markets) are experiencing a greater risk and the regulators here are to be taking up necessary measures to regulate and provide for efficient trading platforms in the market ensuring greater market stability and stimulate gro

04. wth. Though American markets have always experience greater turmoil in the recent past still they have been successful in protecting the growth trends (though not phenomenally).

Equity Market Capitalization when observed in terms of their Domestic Operations it would help the investors to understand the financial feasibility they offer for undertaking investment decision. In this background an effort is made to identify the largest equity capitalization reported by the global exchange during the year 2011 – 12 in terms of their respective domestic currency value in table 1.6 below;

### Table 1.6

**Largest Domestic Equity Market Capitalizations at year-end 2012 and 2011**

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Exchange</th>
<th>USD bn End-2012</th>
<th>USD bn End-2011</th>
<th>% change in USD</th>
<th>% change in local currencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>NYSE Euro next (US)</td>
<td>14 086</td>
<td>11 796</td>
<td>19.4%</td>
<td>19.4%</td>
</tr>
<tr>
<td>02.</td>
<td>NASDAQ OMX (US)</td>
<td>4 582</td>
<td>3 845</td>
<td>19.2%</td>
<td>19.2%</td>
</tr>
<tr>
<td>03.</td>
<td>Tokyo Stock Exchange Group</td>
<td>3 479</td>
<td>3 325</td>
<td>4.6%</td>
<td>17.6%</td>
</tr>
<tr>
<td>04.</td>
<td>London Stock Exchange Group</td>
<td>3 397</td>
<td>3 266</td>
<td>4.0%</td>
<td>2.4%</td>
</tr>
<tr>
<td>05.</td>
<td>NYSE Euro next (Europe)</td>
<td>2 832</td>
<td>2 447</td>
<td>15.8%</td>
<td>14.0%</td>
</tr>
<tr>
<td>06.</td>
<td>Hong Kong Exchanges</td>
<td>2 832</td>
<td>2 258</td>
<td>25.4%</td>
<td>25.2%</td>
</tr>
<tr>
<td>07.</td>
<td>Shanghai SE</td>
<td>2 547</td>
<td>2 357</td>
<td>8.1%</td>
<td>7.0%</td>
</tr>
</tbody>
</table>
From the above table it is very alarming to observe that none of the Indian Stock Exchanges have been successful in appearing in the list of top exchanges. The major economic inconsistencies due to policies inconsistency and the increased exchange rate risk creating inflationary trend in the market would be the cause for such downturn in their performance.

1.16 Classification of Equity Share

Equity Shares traded on Organized Stock Exchanges are classified either based on the nature of Industry they belong to or based on the Nature of Markets they serve. A brief description of the same is made in table 1.7 below;

**Table 1.7**

**Classification of Equity Shares**

<table>
<thead>
<tr>
<th>Market Classification</th>
<th>Peter Lynch’s Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blue Chip shares</strong></td>
<td>Shares of large, well</td>
</tr>
<tr>
<td></td>
<td>established and financially</td>
</tr>
<tr>
<td></td>
<td>strong companies with an</td>
</tr>
<tr>
<td></td>
<td>impressive record of</td>
</tr>
<tr>
<td></td>
<td>earnings and dividends.</td>
</tr>
<tr>
<td></td>
<td>Slow Growers</td>
</tr>
<tr>
<td></td>
<td>Large and ageing companies</td>
</tr>
<tr>
<td></td>
<td>that are expected to grow</td>
</tr>
<tr>
<td></td>
<td>slightly faster than the</td>
</tr>
<tr>
<td></td>
<td>gross national product.</td>
</tr>
<tr>
<td><strong>Growth shares</strong></td>
<td>Shares of companies</td>
</tr>
<tr>
<td></td>
<td>that have a fairly</td>
</tr>
<tr>
<td></td>
<td>entrenched position in a</td>
</tr>
<tr>
<td></td>
<td>growing market and</td>
</tr>
<tr>
<td></td>
<td>which enjoy an above</td>
</tr>
<tr>
<td></td>
<td>average rate of growth</td>
</tr>
<tr>
<td></td>
<td>Stalwarts’</td>
</tr>
<tr>
<td></td>
<td>Giant companies that are</td>
</tr>
<tr>
<td></td>
<td>faster than slow growers</td>
</tr>
<tr>
<td></td>
<td>but are not agile</td>
</tr>
<tr>
<td></td>
<td>climbers.</td>
</tr>
</tbody>
</table>
**Theoretical overview**

<table>
<thead>
<tr>
<th>Shares of companies that have a fairly stable operations, relatively limited growth opportunities, and high dividend payout ratios.</th>
<th>Fast growers</th>
<th>Small, aggressive new enterprises that grow at 10 to 25 percent a year.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares of companies that have a pronounced cyclicality in their operations.</td>
<td>Cyclical</td>
<td>Companies which are steeped in accumulated losses but shows signs of recovery. Turnaround companies have the potential to make up lost ground quickly.</td>
</tr>
<tr>
<td>Shares of companies that are relatively unaffected by the ups and downs in general business conditions.</td>
<td>Turnarounds</td>
<td></td>
</tr>
<tr>
<td>Shares that tend to fluctuate widely because there is a lot of speculative trading in them.</td>
<td>Asset plays</td>
<td>Companies that have valuable assets which have been somewhat overlooked by the stock market.</td>
</tr>
</tbody>
</table>


### 1.16(a) Rights of Equity Share Holders

Following is the summary of rights that are bestowed in the hands of the share holders for the contributions made by them towards their share holders

01. Equity shareholders have a residual claim income to the income of the firm. The profit after tax less preference dividend belongs to equity share holders. The
board of directors decide split between dividends and retained earnings. Dividends provide current income to equity share holders and retained earnings tend to increase the intrinsic value of equity shares.

02. Equity shareholders elect the board of directors and have the right to vote on every resolution placed before the company. The board of directors, in turn appoints the top management of the firm. However equity shareholders- scattered, ill-organized, passive, and indifferent as they often are fail to exercise their collective power effectively.

03. Equity shareholders enjoy the pre-emptive right which enables them to maintain their proportional ownership by purchasing the additional equity shares issued by the firm. The law requires companies to give existing equity share holders the first opportunity to purchase, on a pro rata basis, additional issue of equity capital.

04. As in the case of income, Equity shareholders have a residual claim over the assets of the company in the event of liquidation. Claims of all others—debenture holders, secured lenders, unsecured lenders, preferred shareholders, and other creditors— are prior to the claim of Equity shareholders.

1.17 Investment Alternatives offered by Indian Capital Markets

Indian Capital Markets offers a number of investment alternatives for its participants to fit into the individual investment objectives. The following is the summary of the various investment alternatives available in the market (Non Marketable Financial Instruments and Marketable (Liquid) Financial Instruments);

1. **Non Marketable Financial Assets**;
   a. Bank Deposits
   b. Post Office Deposits
   c. Company Deposits
   d. Provident Fund Deposits
2. **Equity Shares**: It represents ownership capital and as shareholder he will have ownership stake in the company, this means residual income and wealth. Equity shares are classified into the following broad categories by stock market analysts;
   a. Blue Chip Shares
   b. Growth Shares
   c. Income Shares
   d. Cyclical Shares
   e. Speculative Shares

3. **Bonds**: Bonds are Debentures represent long-term debt instruments. The issuer of a bond promises to pay a stipulated stream of cash flow. Bonds may be classified into;
   a. Government securities
   b. Savings bonds
   c. Government agency securities
   d. PSU bonds
   e. Debentures of private sector companies
   f. Preference shares

4. **Money Market Instruments**
   Debt instruments which have a maturity of less than one year at the time of issue are called money market instruments. They are;
   a. Treasury bills
   b. Commercial paper
   c. Certificates of deposit

5. **Mutual Funds**: Instead of directly buying equity shares or fixed income instruments, investments can be made in various schemes floated by mutual funds, which in turn invest in equity shares and fixed income securities. There are three broad types of mutual fund schemes;
   a. Equity schemes
   b. Debt schemes
   c. Balanced schemes
6. **Life insurance**: It is an investment where Insurance premiums represent sacrifice and the assured sum, the benefit. The important types of policies are;
   a. Endowment assurance policy
   b. Money back policy
   c. Whole life policy
   d. Term assurance policy

7. **Real Estate**: Most of the investors’ important asset in their portfolio is a residential house. The more affluent investors are likely to be interested in the following types of real estate;
   a. Agricultural Land
   b. Semi-Urban land
   c. Commercial Property
   d. A resort home
   e. A second home

8. **Precious Objects**: are items that are generally small in size but highly valuable in monetary terms. The important precious objects are;
   a. Gold and Silver
   b. Precious Stones
   c. Art Objects

9. **Financial Derivatives**: A financial derivative is an instrument whose value is derived from the value of an underlying asset. The most important financial derivatives from investors point of view are;
   a. Options
   b. Futures

1.18 **Equity Valuation – a need for Investment Decision Making**

Valuation in this study refers to equity market value. Equity valuation is a central question which the fund managers, investment advisors, and stock brokers in the field of Capital markets are trying to address through different angles with various clues. As most of the fund managers, individual investors and investment advisors in the process of valuation facing challenges in determining the right avenue for investment. In this regard
they try to analyze the fundamental factors which are related to economy such as GDP growth, inflation related factors majorly, and then start analyzing industry related factors, to choose a specific company for investment, and there starts a need, for investment managers to collect the company specific information (accounting variables) relating to companies for assessment of equity valuation. In this background they undertake a number of valuation tools that can facilitate them in assessing the right potential and information about the price of securities that the trader will be waiting for taking various investment decisions like buying of shares, selling of shares or for holding of shares.

1.18 (a) Importance of Equity Valuation

Equity valuation is a central question which the academicians and researchers in the field of capital markets are trying to address through different angles. At the same time, the practitioners in the field of stock trading have been working through different clues. The 20th century international flows of capital. However till eighties it was predominantly debt capital in form bank loans and bond issues. The international new issues market with globally syndicated offerings emerges during eighties.

Valuation – an assessment process

01. Valuation helps in determining the price of a security, where price of a security indicates the value that the investor has to surrender for buying a security of his choice. Further, the price of a security also indicates the potential that these securities carry in their respective markets of trading.

02. Valuation is the process states the true or intrinsic value of an asset which is based on cash flows that the investor expects to receive in the future from owning the asset and it also helps to identify the mispriced securities.

03. Valuation is the process of assigning a rupee value to a specific share. It states the true or intrinsic value of an asset. An ideal valuation technique would assign an accurate value to all shares. In general valuation is a complex topic, no single valuation model can truly predict the intrinsic value of a share and no valuation model can predict with certainty how the price of a share will vary in future.
However valuation models provide a basis to compare the relative merits of two different shares.

The valuation of equity instruments are discussed with their interpretation and applicability in the stock market.

The valuation task is relatively straightforward in case of bond and preference share, because benefits are generally constant and reasonably certain. Equity valuation is different, because the return on equity is uncertain and can change from time to time. It is the size of the return and the degree of fluctuation (risk) which together determined the value of a share to the investor. Therefore forecasting abilities of the analyst are far more crucial in the equity analysis.

Equity valuation has occupied an important position for taking various investment decisions like buying of shares, selling of shares or for holding of shares.

There are few techniques to assess equity valuation;

01. Balance sheet technique
   a. Book value
   b. Liquidation value
   c. Replacement cost

02. Discounted cash flow technique
   a. Dividend discount model
   b. Free cash flow model

03. Relative valuation technique
   a. Price earnings ratio
   b. Price -book value ratio
   c. Price – sales ratio

01. Balance sheet technique

   a. **Book value**: To know the value of the investments, we study the book value of a company. Book value is the value of own funds of a company per share. To calculate the book value one shall divide the net worth (value of own funds-which is equal to paid up equity capital plus reserves and surplus) of a company by the number of shares in the market.
b. **Liquidation value:** The liquidation value of a company is equal to what remains after all assets have been sold and all liabilities have been paid. It differs from book value in that assets would be sold at market prices, whereas book value uses the historical costs of assets. This is considered to be a better floor price than book value for a company, because if a company drops significantly below this price, then an investor can buy enough stock to take control of it, and then liquidate it for a riskless profit. Of course, the company’s stock price would have to below enough to cover the costs of liquidating it and the uncertainty in what the assets would actually sell for in the marketplace.

Which helps investors to know the liquidity position in valuing firm, it is equal to

\[
\text{Replacement Value} = \frac{\text{Value realized liquidating Assets} - \text{Amount paid to External Creditors}}{\text{Value realized liquidating Assets} - \text{Amount paid to External Creditors}}
\]

c. **Replacement cost:** It is the cost considered by analyst in valuing a firm. This measure is based on the Premise that the market value of a firm cannot deviate too much from its replacement cost.

Although balance sheet analysis may provide useful information about book value, liquidation value, or replacement cost, to estimate the value of a firm as a going entity the analyst must focus on expected future dividends, earnings, and cash flows.

The cost to replace the assets of a company or a property of the same or equal value. The replacement cost asset of a company could be a building, stocks, accounts receivable or liens. This cost can change depending on changes in market value.

Also referred to as the price that will have to be paid to replace an existing asset with a similar asset.

The amount it would cost to replace an asset at current prices. If the cost of replacing an asset in its current physical condition is lower than the cost of replacing the asset so as to
obtain the level of services enjoyed when the asset was bought, then the asset is in poor condition and the firm would probably not want to replace it.

2. Discounted cash flow technique

   a) Dividend discount model

   According to the dividend discount model, conceptually a very sound and appealing model where the value of an equity share is equal to present value of dividends expected from the ownership plus the present value of the sale price expected when the equity share is sold. Investors try to estimate the value of shares on the basis of the following assumptions:

   1. Dividends are paid annually
   2. First dividend is received one year after the equity share is bought.

   **Single - period valuation model:** under this model the investor expects to hold the equity share for one year and the price of the equity share is expected to grow at a rate of ‘g’ percent. Based on the rate of growth, valuation is been done for shares by investors.

   **Multi - period valuation model:** as equity shares have no maturity period, they may be expected to bring a dividend stream of infinite duration under this model. Hence, the value of an equity share becomes more realistic and complex.

   **Zero growth model:** under this model investors create value assuming that the dividend per share remains constant forever, implying that the growth rate is nil.

   **Constant growth model:** as it is one of the most popular dividend discount model used by investors for valuation called as Gordon model, this model assumes that the dividend per share grows at constant rate ‘g’ per year forever.

   **Two stage growth models:** this model is an extension of the constant growth model and assumes that dividend per share grows at a constant extraordinary rate for a finite period, followed by constant normal rate of growth forever, based on this investors create a value.

   **H Model:** under this model the dividend per share currently growing at an above normal rate, experiences a gradual decline in growth for a while and thereafter, it grows at a constant normal rate.
(b) **Free cash flow model:** this model helps the investor to determine the value of the firm as a whole (this value is called the enterprise value) by discounting the free cash flow to investors and then subtracting the value of preference and debt to obtain the value of equity. The free cash flow is the cash flow available for distribution to capital providers (shareholders and debt holders) after providing for the investments in fixed assets and net working capital required to support the growth of the firm.

It involves the following procedure:

1. **Dividing the future into 2 parts, the explicit forecast period and the balance period:**
   - Explicit forecast period is usually 5 to 15 years during which the firm is expected to evolve and finally reach a steady state- a state in which return on invested capital, growth rate and cost of capital stabilize.

2. **Forecasting the free cash flow, year by year during the explicit forecast period:** is the cash flow available for distribution to capital providers (shareholders and debt holders) after providing for the investments in fixed assets and net working capital required to support the growth of the firm.
   
   \[
   \text{Free cash flow} = \text{NOPAT} - \text{Net Investment}
   \]
   
   Where,
   - NOPAT is net operating profit adjusted for taxes. It is equal to profit before interest and tax \((1-\text{tax rate})\).
   - Net investment is change in net fixed assets + change in net working capital

3. **Calculating the weighted average cost of capital:** is the blended post-tax cost of equity, preference and debt employed by the firm.

4. **Establishing the horizon value of the firm:** is the value placed on the firm at the end of the explicit forecast period.

5. **Estimating the enterprise value:** is the present value of the free cash flow during the explicit forecast period plus the present value of horizon value.

6. **Deriving the equity value:** this value is Enterprise value- preference value- debt value
7. Computing the value per share: the value per share is the equity value divided by the number of outstanding equity shares.

3. Relative valuation technique

**Price earnings ratio:** when the firm pays all its earnings and does not plough back anything OR it pays constant stream of dividends and hence its stocks are like perpetual bonds, hence the expected return on its stock is its dividend per share divided by the share price which is same as earnings per share divided by the share price.

For a growing firm the expected return can equal the E/P ratio if retained earnings earn a return equal to the market capitalization ratio.

**Price to book value ratio:** it is the net worth of the company (total assets minus total liabilities) divided by the number of equity shares issued. The book value is determined by economic events as well as accounting conventions.

\[
PBV\text{ Ratio} = \frac{\text{Market price per share at time } t}{\text{Book value per share at time } t}
\]

**Price to sales ratio:** It is calculated by dividing a company’s current stock price by its revenue per share for the most recent twelve months. It may be obtained by dividing the current market value of equity capital by annual sales of firm. This ratio reflects on what the market is willing to pay per rupee of sales.

1.18(b) Reasons for company to have negative earning

There are a number of reasons for a company to have negative earnings. Some of the reasons for negative earning can be listed as follows:

- Cyclical nature of industry
- Unforeseeable circumstances
- Poor management
- Persistent negative earning
Early growth stage
- High leverage cost

Random Valuation Model

The Random Valuation model begins with the premise that the next three years’ Growth of Earnings dividends, and price will be similar to those of the past ten years. This is similar to the Trend Valuation equation for estimating the rate return, $r$. In the random valuation model, the ten year growth rate of earnings and dividends is used, along with the ten-year P/E ratio.

1.19 Fundamental and Technical Analysis for Investment Appraisal

Investment analysis is all about assessing the opportunities that the market extend to the investor for optimizing their investment performance in light of the trends that are experienced by the respective industries to which the organization belongs and the economy where they carry out their operations. Further, selection of the right portfolio mix is considered more as an art than a mere science as it involves the analytical capabilities of the investment manager/portfolio manager/individual investors rather than the mere knowledge of the conceptual factors. The following paragraphs summarizes the tools that are used for appraising the market and instruments for investment decisions

**Fundamental Analysis:** While determining whether the security is worth buying, holding, or selling financial analysts employ fundamental analysis and technical analysis. Fundamental analysis looks at future earnings and dividends to assess intrinsic value, whereas technical analysis studies the past prices and volumes to determine the direction of price movement. But fundamental analysis is essential for testing market efficiency while technical analysis is not.

Fundamental analysts take two different approaches in search of mispriced securities. First approach involves estimating the intrinsic value and comparing the same with the prevailing market price to determine whether the security is underpriced or overpriced. The second approach involves estimating security’s expected return given its current
price and intrinsic value and then comparing with appropriate return for securities with similar characteristics.

1.19(a) Market value of an equity share: The market value of an equity share, as per the fundamental analysis broadly depends on three factors as follows:

   a. Economy Factors
   b. Industry Factors
   c. Company Factors

Economy factors include factors like GDP growth, favorable government policy, favorable agriculture production (if applicable), favorable industrial production and many more such factors.

Industry factors relate to the factors relating to the industry to which the company in question belongs. It includes the phase of industry life cycle, competition within the industry and such other related factors.

Company factors can be classified as financial and nonfinancial factors. But it is clear that nonfinancial factors can be translated into expected future financial factors. When it comes to financial factors, we have already given a list of accounting variables affecting market value of an equity share apart from earnings.

This study is focusing much on the accounting variables, such as Earning per share (EPS), Book value, Profitability (ROE), Growth of company, dividend per share, dividend payout ratio, are some of the variables used to explain through company financial statements for equity valuation:

1.20 Introduction to Earnings per Share

Earnings are the sole claimant to the net earning of the corporation after making upon the expected future benefit and risk associated with it. Higher the magnitude of expected payment of dividend to the preference share-holders. The earning per Share is one of the best measures of profitability. It also helps in projecting the value of
security, which depends future benefits, higher will be value of a security and vice-versa. The increasing earning per share generally indicates the growth of a company and resulting in high market price.

1.20(a) Definition:

EPS is defined as the ratio of profit after tax of the company for any financial year after payment of preference dividend if any, to the number of shares outstanding as on the last day of the financial year.

\[
\text{EPS} = \frac{\text{Profit after Tax}}{\text{Number of Outstanding Shares (NOS)}}
\]

1.20(b) Importance of EPS:

Earning is an important variable affecting the market value of equity share. Company producing and selling goods and services useful to citizens in a society and earning revenue covering its cost of production adds to its reserve and build up the same. Once a successful company starts building up reserves it will also look for expanding its scale of operations and thus increase its earnings. Once a company starts earning attractive sum, the equity share will have more and more demand which will result in increase in market value of the equity.

Earnings after interest, depreciation and tax belong to the equity shareholders. Earnings per share is computed by dividing earnings after interest, the depreciation and tax by total number of out standing shares. Dividend may be distributed out of these earnings. Whether it is distributed as dividend to shareholders or not, it belongs to the shareholders. Hence earning per share is a measure which the stock brokers and investors will watch carefully and consider it while deciding the market value of the equity share. In the above discussion, we have considered the effect of increase in earnings per share. The reverse will happen if the EPS falls down.

The earnings per share has a positive relationship with market price, i.e., higher the earning per share, higher will the market price. (Ball and Brown 1968). The earning
per share is an important measure of corporate performance for shareholders and potential investors. Earnings per share figures are commonly presented in prospectuses and other material sent to investors, press reports, and reports of equity analysts.

AS 20 sets out the requirements for computation of earnings per share.

1.20(c) Earning Per Share (EPS) (AS-20)

According to Accounting Standard - 20 earning per Share (EPS) is a financial ratio that gives information regarding earnings available to each equity share. It is very important financial ratio for assessing the state of market price of share. This accounting standard gives computational methodology for the determination and presentation of earning per share, which will improve the comparison of EPS. The statement is applicable to the enterprise whose equity shares or potential equity shares are listed in stock exchange

Types of EPS

There are two types of EPS, which are to be reported by the enterprises on the face of the statement of profit and loss account.

- Basic EPS
- Diluted EPS

Basic Earnings per Share

Earnings per Share (EPS) are reported only for equity share capital. The computation of earnings per share depends on a company’s capital structure. A simple capital structure consists only of equity share capital and has no securities such as convertible debentures, convertible preference share capital, and stock options that can increase the number of equity shares. A company which has a simple capital structure will have only equity share capital and perhaps non-convertible preference share capital. Basic earnings per share are calculated by dividing the net profit or loss for the period attributable to equity shareholders by the number of equity shares outstanding during the period.

\[
\text{Earnings per Share} = \frac{\text{Profit after Tax}}{\text{Number of Equity Shares}}
\]
Diluted Earnings per Share:

When a company has a simple capital structure, the computation of earnings per share is fairly straightforward. Many companies, however, have a complex capital structure that may be converted into equity share capital. The conversion, if effected, has the potential of reducing or diluting the earnings per share by increasing the number of equity shares. Examples of potentially dilutive securities include convertible preference shares, convertible debentures, options and warrants. Diluted earnings per share are computed under the assumption that all potentially dilutive securities were converted into equity shares. The net profit for the period is recomputed by adding back the after-tax amount of preference dividend; interest on convertible debentures any other changes that would result from the conversion of the potentially dilutive securities.

This is because after these securities are converted, the preference dividend, the convertible debenture interest and other similar items will no longer be incurred.

1.21 Introduction to Book Value

In this study, an accounting variable book value is used for valuation. As most of the investment managers while deciding about the investment avenue try to analyze various information related to company, through the financial statements disclosed. Use of book value as an accounting variable is used to explain equity value and equity return. Book value, along with book value, earning per share, dividend per share, dividend pay out ratio, Profitability (ROE), and growth are some of the other variables used to explain equity valuation.

As equity valuation is a central question where the fund managers and other investment advisors trying to address through different angles and clues. Use of accounting variables for equity valuation has seen lot of activities.
1.21(a) Meaning of Book Value:

Book value it shows worth of shareholders stake in a company. This includes equity capital and reserves and surplus. Capital reserve consisting of share premium, capital redemption reserves, investment allowance reserve and the like forms one part is not available for distribution to shareholders as dividends. Revenue reserve or free reserves arises from business operations of the company and can be distributed to shareholders as dividends.

\[
\text{Book Value} = \frac{\text{Networth}}{\text{Number of outstanding Shares}}
\]

As to know the value of the investments, we shall study the book value of a company, it is one of the important variable which affect the market value of equity share, it is the value of own funds of a company per share and it tells us the worth of each share in a company. Generally Book Value helps in fundamental analysis of shares. To calculate the book value one shall divide the Net worth (value of own funds) of a company by the number of shares in the market.

1.21(b) Importance of book value:

The book value is a reflection of the past earnings, dividend distribution policy of the company and investment decisions. A high book value indicates that a company has huge reserves and is a potential bonus candidate. A low book value signifies a liberal distribution policy of bonus and dividends, or a poor track record of profitability. Reinvesting retained earnings in profitable business opportunities of the company results in growth of the company. This in turn results in enhancement of equity market value. But book value gets depleted as a result of investment in new business opportunity. Also re-investing retained earnings in unprofitable business will adversely affect both equity market value and book value. Thus both dividend decision and investment decisions affect book value. Also both dividend decision and investment decisions affect equity
market value. Hence, what is the relationship between equity value and book value is a relevant question.

1.21 (c) Introduction to Dividend Per Share
Dividend Per Share acts as an important accounting variable from the point of view of different investment managers, while selecting the company for investment.

1.21 (d) Meaning of Dividend Per Share
Dividend is the portion of the profit after taxes, which is distributed to the share holders for their investment, and bearing risk in the company. It has a significant influence on the market price of shares.

The dividend per share is arrived as follows:

\[
\text{DPS} = \frac{\text{Total amount of dividend paid to equity holders}}{\text{Number of equity shares outstanding}}
\]

1.21 (e) Importance of dividend per share:
Dividend is the portion of the profit after taxes which are distributed to the shareholders for their investment and bearing risk in the company. The amount of dividend paid to the share holders depends upon the dividend policy pursued by a company. The stable dividend policy helps in resolving uncertainty from the minds of the investors and also plays an important role in creating a healthy investment climate. The dividend rate of a company has a significant influence on the market price of a share.

1.22 Introduction to Dividend Pay Out Ratio
This chapter analyses the importance of an accounting variable dividend payout ratio with respect to valuation of equities, as dividends are important variable to assess the ability of company, the decision making towards the payment of earning or to retain them for firm’s future financing activities.
1.22 (a) Meaning of Dividend Pay Out Ratio

It is the percentage of earnings paid to the share holders in the form of dividends.

\[ \text{DPR} = \frac{\text{DPS}}{\text{EPS}} \]

A major aspect of the dividend policy of a firm is its dividend payout (D/P) ratio; it is the percentage share of the net earnings distributed to the shareholders as dividends.

Dividend payout shows the percentage share of the net profits after taxes and preference dividend paid out as dividend to equity shareholders. It can be calculated by dividing the total dividend paid to the equity shareholders by the total profits/earnings available for them. Alternatively, it can be found out by DPS by EPS.

1.22 (b) Importance of dividend pay out ratio:

Dividend policy involves the decision to pay out earnings or to retain them for reinvestment in the firm. The retained earnings constitute a source of financing. The payment of dividends results in the reduction of cash and, therefore, in a depletion of total assets. In order to maintain the asset level, as well as to finance investment opportunities, the firm must obtain funds from the issue of additional equity or debt. If the firm is unable to raise external funds, its growth would be affected. Thus, dividends imply outflow of cash and lower future growth.

In other words, the dividend policy of the firm affects both the shareholders wealth and the long term growth of the firm. The optimum dividend policy should strike the balance between current dividends and future growth which maximizes the price of the firm’s shares. The D/P ratio of a firm should be determined with reference to two basic objectives- maximizing the wealth of the firm’s owners and providing sufficient funds to finance growth. These objectives are not mutually exclusive, but interrelated.

The firm’s dividend policy (D/P ratio) should be one which can maximize the wealth of its owner’s in the long-run. In theory, it can be expected that the shareholders take into account the long run effects of D/P ratio, that is, if the firm is paying low
dividends and having high retentions, they recognize the element of growth in the level of future earnings of the firm. However in practice, they have a clear cut preference for dividends because of uncertainty and imperfect capital markets. The payment of dividends can therefore, be expected to affect the price of shares. A low D/P ratio may cause a decline in share prices, while a high ratio may lead to rise in the market price of the shares.

Making a sufficient provision for financing growth can be considered a secondary objective of dividend policy. Without adequate funds to implement acceptable projects, the objective of wealth maximization cannot be achieved. The firm must forecast its future needs for funds, and taking into account the external availability of funds and certain market considerations, determine both the amount of retained earnings needed and the amount of retained earnings available after the minimum dividends have been paid. Thus, dividend payments should not be viewed as a residual, but rather a required outlay after which any remaining funds can be reinvested in the firm.

Linter (1956) linked dividend changes to earning while Shapiro valuation model (1962) showed dividend streams discounted by the difference in discount rate and growth in dividend should be equal to share price. This predicts direct relation between payout ratio and the price-earning multiple. Conversely it means that there is an inverse relation between payout ratio and share price changes.

1.22 (c) Introduction to Profitability

In this study, an accounting variable book value is used for valuation. As most of the investment managers while deciding about the investment avenue try to analyze various information related to company, through the financial statements disclosed. Use of Profitability as an accounting variable is used to explain equity value and equity return. Profitability, along with book value, earning per share, dividend per share, dividend pay out ratio and growth are some of the other variables used to explain equity valuation.
As equity valuation is a central question where the fund managers and other investment advisors trying to address through different angles and clues. Use of accounting variables for equity valuation has seen lot of activities.

1.23 Meaning of Profitability

Profitability defined as earnings in a period divided by the equity book value at the beginning of the period (ROE). It represents a firm’s ability to generate value from invested capital.

\[
\text{Profitability (R O E)} = \frac{\text{EPS}}{\text{Book Value}}
\]

Weston and Brigham defines:
Profitability as "the net surplus of a large number of policies and decisions."
The word 'profitability' is composed of two words, namely; profit and ability. The term ability indicates the power of a firm to earn profits. The ability of an enterprise also denotes its earning power or operating performance. Also, that the business ability points towards the financial and Operational ability of the business. So, on this basis profitability may be defined as – the ability of a given instrument to earn a return from its use"l Profit of an enterprise, reports about the financial and operational efficiency of the business. Whereas, profitability interprets the term profit in relation to other elements likely to affect these profits in order to help in decision-making.

1.23 (a) Importance of Profitability:

Where profit is the residual income left after meeting all manufacturing, Administrative expenses; profitability is the profit making ability of an enterprise. It has been aptly remarked that the role played by profits and profitability in a business enterprises is identical to the function carried out by blood and pulse in the human body. Profitability is the ability to earn profit from all the activities of an enterprise. It indicates how well management of an enterprise generates earnings by using the resources at its disposal.
Profitability is a measure of evaluating the overall efficiency of the business. The best possible course for evaluation of business efficiency may be input-output analysis. Profitability can be measured by relating output as a proportion of input or matching it with the results of other firms of the same industry or results attained in the different periods of Operations. Profitability of a firm can be evaluated by comparing the amount of capital employed i.e. the input with income earned i.e. the output. This is popularly known as return on investment or return on capital employed. It is regarded as the overall profitability ratio and has two components; net profit ratio and turnover ratio. That is:

\[
\text{Return on Investment} = \text{Net Profit Ratio} \times \text{Turnover Ratio}
\]

**1.23(b) Return on Equity:** This is a measure of profitability from the standpoint of the shareholders. The ratio measures the efficiency with which shareholders funds are employed. Since shareholders equity changes over the year due to factors such as share issues and buybacks, analysts generally use the average of beginning and ending amounts for the year. Shareholders expect managers to earn a ROE higher than the firms cost of capital. Competitors try and replicate a company’s special advantages in product offerings, cost efficiencies, innovation, technology, distribution network and brand equity. This adversely affects the ability of a firm to maintain a supernormal ROE. When the rate of return on assets is more than the rate of interest on debt, the benefit of the incremental return goes to shareholders.

**1.24 Introduction to Growth**

In this study, an accounting variable Growth value is used for valuation. As most of the investment managers while deciding about the investment avenue try to analyze various information related to company, through the financial statements disclosed. Use of Growth value as an accounting variable is used to explain equity value and equity return. Growth value, along with Growth value, earning per share, dividend per share, dividend pay out ratio and Profitability (ROE), are some of the other variables
used to explain equity valuation.

As equity valuation is a central question where the fund managers and other investment advisors trying to address through different angles and clues. Use of accounting variables for equity valuation has seen lot of activities.

1.24(a) Meaning of Growth

Growth though is measured using a number of factors, for the purpose of this study growth is referred in terms of rate of change in Net Sales (Credit Sales + Cash Sales) during any given period of evaluation. It is used as a parameter to study the potential of the company to generate revenue from their operations that can in turn offer reward for the stake holders and their vested interest in the company.

\[
\text{Growth} = \frac{\Delta \text{Netsales}}{\text{Netsales}}
\]

Increased Sales → Increased Revenue → Increased Profits → Increased Earnings → Increased Demand in the Secondary Market → Increased value for the investment held (Share holder Value Created)

1.25 Importance Of Economy, Industry And Company Analysis:

As most of the fund managers, individual investors and investment advisors in the process of valuation facing challenges in determining the right avenue for investment. In this regard they try to analyze the fundamental factors which are related to economy such as GDP growth, favorable government policy, favorable agriculture production (if applicable), favorable industrial production and inflation related factors majorly. Then start analyzing industry related factors, relating to the industry to which the company in question belongs. It includes the phase of industry life cycle, competition within the industry and such other related factors to choose a specific company for investment, and there starts a need, for investment managers to collect the company specific information (accounting variables) relating to companies for assessment of equity
valuation. An equity share apart from earnings. This study is focusing much on company related factors and other issues related to financial analysis.

1.25 (a) Company Analysis:

Analysis of a company consists of measuring its performance and ascertaining the cause of this performance. When some companies have done well irrespective of economic or industry failures, this implies that there are certain unique characteristics for this particular company that had made it a success. The identification of these characteristics, whether quantitative or qualitative, is referred to as company analysis.

Quantitative indicators of company analysis are the financial indicators and operational efficiency indicators. Financial indicators includes the accounting variables which is included in the study are earnings per share (EPS), book value (BV), dividend per share (DPS), dividend payout ratio (DPR), Profitability and Growth are different factors analysed through the income and Balance sheet statements.

The company analysis provides the investor several bits of information related to the company and evaluates the present and future values of the stock. To take better investment decisions the risk and return associated with the purchase of the stock is analyzed. The valuation process depends upon the investor’s ability to elicit information from the relationship and inter-relationship among the company related variables.

Operational efficiency indicators are capacity utilization and cost versus sales efficiency of the company, which includes the marketing edge of the company. This might not be revealed through financial statements, but can be inferred through the annual reports. An analysis of published statements provides an analysis of past.

Usually the formats published by companies might not be directly understandable by investors and fund managers. To overcome this, investors and fund managers has to identify factors/variables that are needed separately. To help in this task, many financial magazines, newsletters, and websites supply consolidated reports of
companies. This consolidated report would provide items such as Net Sales (NS), earnings per share (EPS), book value (BV), dividend per share (DPS), dividend payout ratio (DPR), Profitability, profit before tax, profit after tax, debt equity components, liquidity position of the company etc.

An analysis of future prospects of the company is also to be carried out. The budgets and cash flow statements give the investment managers an insight into the future functioning of a company. Future profitability and operational efficiency can be worked out from these statements. The performance indicators are also linked to the shares through ratio analysis to evaluate performance for investment purposes. The important measures which are used in this study are Earnings Per Share (EPS), Book Value (BV), Dividend Per Share (DPS), Dividend Payout Ratio (DPR), Profitability, as well as Growth factor and so on. A theoretical information about each accounting variable is specified in detail.

The company analysis provides the investor several bits of information related to the company and evaluates the present and future values of the stock. To take better investment decisions the risk and return associated with the purchase of the stock is analyzed. The valuation process depends upon the investor’s ability to elicit information from the relationship and inter-relationship among the company related variables. The present and future values are affected by a number of factors:

**The competitive edge of the company** – the competitiveness of the company studied with the help of the market share, the growth of annual sale, sales forecast and stability of sales.

**Earnings of the company** – influenced by costs and expenses of the company, earnings do not always increase with the increase in sales. The company’s sales might have increased but its earnings per shares may decline due to the rise in costs. The investor should analyze the income source diligently whether it is from sale of assets or it is from investor or it is from investments.
The investor should be aware that income of the company may vary due to following reasons – change in sales

- Change in cost
- Replacement cost of inventories
- Income taxes and other taxes
- Capital structure
- Preference shares
- Debt
- Management

In this background they undertake a number of valuation tools that can facilitate them in assessing the right potential and information about the price of securities that the trader will be waiting for taking various investment decisions like buying of shares, selling of shares or for holding of shares. In this process the fund managers start analyzing of financial statement includes the following simple analysis such as

1.25 (b) FINANCIAL STATEMENT ANALYSIS

Financial statements are an important source of information for evaluating the performance and prospects of firm. Financial statement can provide valuable insights into a firm’s performance.

Analysis of financial statements is of interest to security analysts, fund managers, investment advisor’s, investor’s and others. Financial statement analysis may be done for a variety of proposes, which may range from a simple analysis of the short-term to analyse the following:

1. Liquidity position of the firm to a comprehensive assessment of the

2. Strengths and weaknesses of the firm in various areas. It is helpful in assessing corporate excellence, judging creditworthiness, forecasting bond ratings, evaluating intrinsic value of equity shares, predicting bankruptcy, and assessing market risk.
1.25 (c) Financial Statements

Fund managers, Investment advisors, Stock Brokers, Shareholders, Creditors, and other interested groups want to know about the financial position of firms. Companies prepare three statements: the balance sheet, and the profit and loss account. The Companies Act, 1956 requires every company to prepare a balance sheet and profit and loss account.

**Balance Sheet**

The balance sheet shows the financial condition of a business at a given point of time. As per the Companies Act, the balance sheet of a company shall be in either the account form or the report form.

The Companies Act classifies liabilities as follows:

- Share capital
- Reserves and surplus
- Secured loans
- Unsecured loans
- Deferred tax liability
- Current liabilities and provisions

**Assets: consists of:**

- Fixed Assets
- Investments
- Current Assets, Loans and advances
- Inventories
- Sundry Debtors
- Cash and bank balances Other current assets
- Loans and advances
- Miscellaneous Expenditures and Losses
Profit and loss account: It is a financial statement that summarizes the revenues, costs and expenses incurred during a specific period of time - usually a fiscal quarter or year. These records provide information that shows the ability of a company to generate profit by increasing revenue and reducing costs. The P&L statement is also known as a "statement of profit and loss", an "income statement" or an "income and expense statement". It consists of:

- Net Sales
- cost of goods sold
- gross profit
- operating expenses
- Operating Profit
- Other Income
- Profit before Interest and Taxes
- Interest
- Profit Before Tax
- Income tax provision profit after tax

1.26 RISK

1.26 (a) Theoretical overview of risk:

People have many motives for investing. Some people invest in order to gain a sense of power or prestige. Often the control of corporate empires is a driving motive. For most investors, however, their interest in investment is largely pecuniary-to earn a return on their money. However, selecting stocks exclusively on the basis of maximization of return are not enough.

The fact that most investors do not place available funds into the one, two or even three stock promising the greatest returns suggests that other factors must be
considered besides return in the selection process. Investors not only like return, they
dislike risk. Their holding of an assortment of securities attests to that fact.

To say that investors like return and dislike risk is however, simplistic. To facilitate our
job of analyzing securities and portfolios within a return –risk context we must begin
with a clear understanding of what risk and return are what creates them, and how they
should be measured.

**1.26 (b) Risk Defined:**

The ultimate decisions to be made in investments are:

1. What securities should be held,
2. How many dollars should be allocated to each.

These decisions are normally made in two steps. First estimates are prepared of the return
and risk associated with available securities. This steps is known as *security analysis*.

Second, return risk estimates must be compared in order to decide how to allocate
available funds among these securities on a continuing basis. This steps comprises
*portfolio analysis, selection, and management*. In effect, security analysis provides the
necessary inputs for analyzing and selecting portfolios.

Security analysis is built around the idea that investors are concerned with two principal
properties inherent in securities. The return that can be expected from holding a security,
and the risk that the return that is achieved will be less than the return that was expected.

**1.26 (c) Risk an Historical Perspective**

Risk in holding securities is generally associated with the possibility that realized returns
will be less than that were expected. The source of such disappointment is the failure of
dividends interest and/or the security’s price to materialize as expected.

Forces that contribute to variations in return – price or dividend interest – constitute
elements of risk. Some influences are external to the firm, cannot be controlled, and
affect large number of securities. Other influences are internal to the firm and are controllable to a large degree. In investments, those forces that is uncontrollable, external Risk is the potential that a chosen action or activity (including the choice of inaction) will lead to a loss (an undesirable outcome). The notion implies that a choice has an influence on the existing outcome (or existed). Potential losses themselves may also be called “risks”. Almost any human endeavour carries some risk, but some are much more risky than others. Return on equity, free cash flow (FCF) and price-to-earnings ratios are a few of the common methods used for gauging a company's well-being and risk level.

1.26(d) Types of Risk

Risk is broadly classified into two;

- Systematic Risk
- Un Systematic Risk

Systematic Risk: as they are also called as unavoidable or non diversifiable risk, it affects the entire market. The economic conditions, political situations and the sociological changes affect the security market. Often we read that the stock market is bear hug or bull grip, this indicates that the entire market is moving in a particular direction either downward or upward. This risk is subdivided into;

a. Market Risk
b. Interest Rate Risk
c. Purchasing Power Risk

Jack Clark Francis has defined market risk as that portion of total variability of return caused by the alternating forces of bull and bear markets. When the security prices moves upward haltingly for a significant period of time, it is known as bull market. In the bull market, the index moves from low level to the peak. Bear market is just reverse to the bull market.
Interest Rate Risk is caused by the changes in the government monetary policy. The rise or fall in the interest rate affects the cost of borrowing.

Purchasing Power Risk by the loss of purchasing power of currency. Inflation, is the reason behind the loss of purchasing power. The rise in price penalises the returns to the investor, and every potential rise in a price is a risk to the investor.

**Un Systematic Risk:**

This risk is a unique risk, which is controllable, diversifiable and avoidable in nature. It stems from managerial inefficiency, technological change in production process, availability of raw material, changes in the consumer preference and labour problems.

This risk can be classified into;

- a. Business Risk
- b. Financial Risk

**Business Risk** is that portion of unsystematic risk caused by the operating environment of business. It arises from the inability of a firm to maintain its competitive edge and the growth or stability of earnings. It can be divided into Internal Business Risk and External Business Risk.

Internal Business Risk is associated with the operational efficiency of the firm;

- Fluctuations in the sales
- Research and Development
- Personnel management
- Fixed Cost
- Single Product

External Business Risk is the result of operating conditions imposed on the firm by circumstances beyond its control.

- Social and Regulatory factors
- Political Risk
- Business Cycle
**Financial Risk** refers to the variability of the income to the equity capital due to the debt capital. It is associated with the capital structure of the company.

### 1.27 Security Returns

Investors want to maximize expected returns subject to their tolerance for risk. Returns are the motivating forces and the principal reward in the investment process, and it is the key method available to investors in comparing alternative investments. Measuring historical returns allows investors to assess how well they have done, and it plays a part in the estimation of future, unknown returns.

In the language of investments there is a distinction between two terms – *realized return* and *expected return*. Realized return is after the fact return- return that was earned (or could have been earned). Realized return is history.

Expected return is the return from an asset that investors anticipate. They will earn over the same future period. It is a predicted return. It may be or may not occur. Investors should be willing to purchase a particular asset if the expected return is adequate, but they must understand that their expectation may not materialize.

### 1.28 Elements of Return

Return on investment consists of two components. The basic component is the periodic cash receipts (or income) on the investment, either in the form of interest or dividends. The second component is the change in the price of the difference between the purchase price at which the asset commonly called the capital gain or loss. This element of the return is the difference between the purchase price and the price at which the asset can be or is sold; therefore, it can be a gain or a loss.

The income from an investment consists of one or more cash payments paid at specified intervals of time. Interest payments on most bonds are paid semiannually; where as dividends on common stocks are usually paid quarterly. The distinguishing feature of these payments is that they are paid in cash by the issuer to the holder of the asset.
The term yield is often used in connection with the component of return. Yield refers to the income component in relation to some price for a security. Yield is not a measure of return from a security, the capital gain or loss must also be considered.

1.28 (a) Return measurement

The measurement of return incorporate both income and price change into a total return. Returns across time or from different securities can be measured and compared using total return concept. The total return for a given holding period relates all the cash flows received by an investor during any designated time period o the amount of money invested in the asset. It is defined as:

\[
\text{Total return} = \frac{\text{cash payments received} + \text{price change over the period}}{\text{Purchase price of the asset}}
\]

The price change over the period is the difference between the beginning price and the ending price. This number can be either positive (sales price exceeds purchase price) or negative (purchase price exceeds sales price).

A number of models developed for asset pricing are two variable models. For instance the

1.29 Capital asset pricing model (CAPM)

Capital asset pricing model (CAPM) developed by Sharpe (1964) considers the risk-free return and volatility of the risk-free return to market return as the determinants of asset price. Asset price as described by CAPM is linearly related to the two independent variables. Many studies have concluded that over the years assets were being underpriced (Smith, 1977; Loderer, Sheehan & Kadlec, 1991) and this raises the question of the adequacy of the various asset pricing models to ensure efficient asset pricing. Brav & Heaton (2003) alleges market indeterminacy, a situation where it is impossible to determine whether an asset is efficiently or inefficiently priced. Kang (2008) found that empirical tests of linear asset pricing models show presence of mispricing in asset pricing. Asset pricing is considered efficient if the asset price reflects all available market
information to the extent no informed trader can outperform the market and/or the uninformed trader.

CAPM as a factor for estimating the true price for the security that an investor will have to pay observes how much of the impact the market risk ($\beta$) has on the expected security performance in the market. This **study adopts this model to observe how the existing market risk is influencing the investors’ portfolio and their Returns.**

Following is the CAPM equation (SML) used for the study:

$$\bar{R}_p = R_f + \beta(\bar{R}_m - R_f)$$

Basically CAPM identifies to measure

- The relationship between risk and return for an efficient portfolio
- The relationship between risk and return for an individual security

The CAPM predicts the relationship between risk of an asset and its expected return. The relationship is very useful in two important ways, firstly; it produces a benchmark for evaluating various investments. Secondly, it helps us to make an informed guess about the return that can be expected from an asset that has not yet been traded in the market. As CAPM is considered as a centerpiece of modern financial economics, William Sharpe, its principal originator, was awarded the Nobel Prize in Economics.

The major implication of the model is that the expected return of an asset will be related to a measure of risk for that asset known as beta. The exact manner in which expected return and beta are related is specified by the Capital Asset Pricing Model (CAPM). This model provides intellectual basis for a number of the current practices in the investment industry and many of the practices are based on various extensions and modifications of CAPM.

The CAPM reduces the situation to an extreme case where everyone has the same information and agrees about the future prospects for securities. Implicitly this means that investors analyze and process information in the way. The markets for securities are
Perfect markets, meaning that there are no frictions to impede investing. Potential impediments such as finite divisibility, taxes, transaction costs, and different risk free borrowing and lending rates have been assumed away. This allows the focus to change from how an individual should invest to what would happen to security prices if everyone invested in a similar manner. By examining the collective behavior of all investors in the marketplace, the nature of the resulting equilibrium relationship between each security’s risk and return can be developed.

Portfolios which have returns that are perfectly positively correlated with the market portfolio are referred to as efficient portfolios. These are the portfolios that lie on the linear segment. So we can say that there is simple linear relationship between the expected return and standard deviation as efficient portfolios are concerned.

1.30 Conclusion

Capital Markets in India though are offering a number of potential opportunities for the investors to realize above normal returns for their investments and extending a diversified set of instruments that can fit into individual investment objectives; they are also exposing them to a number of risks due to vulnerable nature of markets and inconsistent policy and regulatory frameworks. Further, the investor expected performance are always felt in isolation due to inefficient market structure, as most of the times the investors decisions are based on limited knowledge about the market or the instruments that are traded. This chapter in this background envisaged to bring to light few of the important concepts that an investors or investment analyst should posses to take rational decision and allow the market to perform to its real potential, as most of the time the underperformance of the market is due to irrational and skeptical behaviour of its participants rather than poor market potential or regulatory failures. The subsequent chapter highlights the methodology that is adopted for the study and highlights the need and objective behind which the study is initiated by the researcher.