Chapter 1

Introduction

1.1 Introduction to the Equity Risk Premium

In Finance, the first common question that arises in the mind of the investor before investing in the Indian Capital Market is “What is the future of the Stock Market and what will be the investor’s expectations from the stock market in the years ahead?” This is no doubt a critical question for the investors to invest their surplus capital and make their portfolio in the mix of equity, debt and other investments and also in what proportions. Also it is the question for the different demographic investors, like the pension fund manager has to seek the safety and stability of the future expected returns whereas the young investors want to earn high returns with the capability to bear the high risk in his investments.

The expected returns on the stocks play a significant role in determining the cost of capital for the firm, therefore it is important for the company to decide the hurdle rate that it should employ while taking the capital budgeting and valuations decisions. Also, understanding and estimating the equity returns is crucial for the value creation process. Most of the companies have the equity financing in their total market capitalization. The managers of the company should estimate the Equity Risk Premium (ERP) to determine the cost of capital and select the projects that increase the shareholder’s wealth and valuation of the target companies in case of acquisitions.

This study attempts to answer this critical question and predicts the expected future stock returns in the Indian Capital Market by estimating the Equity Risk Premium Expectations of the investors in the Indian Capital Market. It has been found from the literature that there are short term fluctuations and variations in the stock prices with likely booms and crashes which are also likely to occur in future with the unpredictable timing of their occurrence. So, the investors demand the premium for the risky equity investments in the long run which determines the future stock return expectations for the various investors. In the long run, the equity investors demand a minimum rise in the stock returns to compensate for their investment in the risky equity market which becomes the minimum returns given by the Government bonds or the treasury bills. In addition, there are short term variations called the random noise in each equity investment.
depending upon the environment in which that stock is trading which depends upon the economy, industry or the individual company conditions. So, the investor demands the returns higher than the minimum government bond return to bear this risk of short term fluctuations and random noise in the daily stock returns. This component of the equity returns is called the Equity Risk Premium which is the expected return demanded by the investors in addition to the risk free return. This research helps to identify and quantify the factors that may cause these short term fluctuations and variations in the equity returns which measure the equity risk premium expectations for the investors in the Indian Capital market.

1.1.1 Equity Risk Premium

As discussed above, the difference between the return on the common stock and the return on the government securities is called the equity risk premium. The equity risk premium can be measured with respect to any government security which is free from any default risk and gives the return with virtually zero risk. But it is measured mainly with respect to the short term treasury bill, mostly the 1 month T-Bill as it is considered as the least risky instrument as because of the short term nature the investor can also predict the stability of the returns.

The Equity Risk Premium is defined both in historical or ex-post sense and forward looking or ex-ante sense. In ex-post sense the ERP is calculated by measuring the difference between the average stock returns and the average government security returns of the same period. This can be measured for the different periods in the past and each period determines the different Equity Risk Expectations of the investors depending upon the conditions of that period.

The ex-ante ERP is the forward looking risk premium which determines by looking and seeking the factors that affect the return and risk expectations of the investors in the future and then analyzing the impact of these factors on the future ERP expectations of the investors. This is the challenging work to quantify the factors that affect the ERP expectations as future predictions and forecasting are always not too easy to implement. This is the major goal of this study to predict the ex-ante risk premium expectations of the investors by measuring the various factors that may have the probable effect on the equity risk premium expectations.

The Expected returns on the equity is the function of the three components: the expected rate of inflation, the expected real rate of interest and the expected equity risk premium. The former two

Factors are not required to be forecasted since they comprise the returns on the government securities, so therefore the forecasting of equity risk premium becomes critical to predict the future expected returns on equity.

1.1.2 Uses Of Equity Risk Premium

- The equity risk premium plays an important role in many of the financial decisions. The most obvious is the asset allocation decisions. Each investor has the objective of allocating their investments in fixed income securities, stock, real estate, mutual funds and other investment avenues and in which proportion. So, the investor has to evaluate the risk and return opportunity of each type of the investment, depending upon that he can make a decision to allocate his overall portfolio. The equity risk premium plays an important role in calculating the risk and return expectations for the investors, mainly for the stock and equity market.

- It also plays an important role in planning decisions for the pension funds and retirees. The pension fund managers and the retirees have the different objective of their investment as they demand the safety in their future investments so their expectations are different for the equity risk premium. For the fixed income securities, the forecasting of the future returns are not difficult as the returns are certain with the certain risk but in case of equity investments, the future returns and risk are uncertain, and ERP becomes critical for forecasting the returns in the future capital market.

- The ERP also plays an important role in the corporate investment and decision making. The companies accept the projects which have the positive net present value which depends upon the discount rate to which the cash flows of the project are discounted. The estimate of the discount rate makes the project acceptable or not with the same cash inflows and outflows. The discount rate is determined by the equity risk premium expectations as the expected returns to the investors become the cost of equity to the corporate. So, The ERP plays an important role in company investment and valuation decisions.

- The equity risk premium is the critical determinant of the level of the stock prices. As if the equity risk premium falls, the discount rate falls and the level of the stock prices rises. At equilibrium condition, the returns expected by the investors are equal to the returns...
required by the investors. If the two returns are not equal to each other, the investors start increasing or decreasing their holding of the asset. As the group of investors cannot reduce or increase their holdings, the price of the asset rises or falls until the equilibrium condition is reached. Therefore the required rate is termed as the cost of capital and hence the discount rate. So, ERP determines the stock prices level in the future in the Capital Market.

1.1.3 Determinants of the ERP

There are various methods in which the equity risk premium expectations are determined mainly classified as the ex post risk premium and the ex ante equity risk premium.

The ex post equity risk premium depends on the past premium expectations and calculated through the historical data of the returns earned in the past and projected in the future, which becomes the basis for the future ERP expectations assuming the same conditions prevailing in the future as were in the past. This method has the major disadvantage of its basic assumption of the same environment of the stock market in the future as was in the past, because the stock market is dynamic and is changing time to time, being the Indian Capital Market is developing and hence grown and developed to a large extent, so the ERP expectations of the investors are also dynamic and are fluctuating with time. Secondly, the ex post equity premium can be calculated by averaging the past ERP expectations of the different periods. The choice of the period and the averaging method also plays a critical role in determining the ERP expectations. The past ERP can be averaged through the arithmetic mean or the geometric mean which gives the different estimates of the future ERP Expectations with the same historical ERP’s. (These issues are considered in Damodaran (2001)\(^1\). For example, he shows that the risk premium obtained using data from 1928-1999 is as low as 6.05% (using geometric average and treasury bonds) and as high as 8.73% (using arithmetic average and treasury bills). So, these are the various problems and challenges in implementing and calculating the ex post equity risk premium, which makes the ex post equity risk premium irrelevant in deciding the future equity risk premium for the investors in the Indian Capital Market.

The ex ante equity risk premium is more relevant in deciding the future expectations of the investors as it is the forward looking approach at the future expectations of the equity risk
premium of the investors in the developing Indian capital markets. The ex post risk premium becomes only the base for the equity risk premium calculation, and the ex ante risk premium can be calculated by various approaches by surveying the equity premium demanded by the expert financial advisors, professors etc (Graham & Harvey (2009), Fernandez (2009), Harris, R.S. Marston (2001), Goyal & Welch (2003)) in the future or by superimposing the effect of the various variables on the ERP expectations of the investors. So, this ex ante ERP expectations become more relevant and accurate predictions as it incorporates the current market conditions of the stock market and not solely depends upon the past and historical data.

The various approaches by which the ex ante equity risk premium can be estimated are as follows:

1.1.3.1 Dividend Discount Model

In this method, the cost of equity of the stock is calculated by discounting the expected future dividends and comparing it by the current market price of the stock. The dividends are projected by the expected payout ratios of the companies depending upon the past records of the company regarding the distribution of the dividends from the total earnings in the different periods. The total earnings are forecasted by taking either the perpetual uniform growth rate equivalent to the long term GDP growth rate of the country or by taking the two step growth rate, in the first stage, the company is in the introduction phase, and hence has the higher growth rate sustaining for a certain period of time, and then transiting to a stable and lower perpetual growth rate which is equivalent to growth rate of the GDP of the country.

\[
\text{Current Market Price of the stock} = \sum \frac{\text{Dividend}_t}{(1 + \text{Cost of Equity})^t}
\]

where \( t \) is the total time horizon,

\[
\text{Dividend of the next period} (\text{dividend}_{t+1}) = \text{dividend}_t + g
\]

where \( g \) is the growth rate of the company.

Subtracting the risk free short term treasury bill from the dividend discounted cost of equity, determines the ERP estimates for the future for the investors.
This method has the major drawback that this depends upon the current market price of the share which is changing very rapidly and hence the ERP estimates. Also, it highly depends upon the future dividend and cash flow estimates which may also not true estimate as all these are based on the assumptions.

1.1.3.2 Constant Sharpe Ratio Method

It is evident from the portfolio theory that the investor demands the excess returns per unit of the risk, which is measured by the Sharpe Ratio as the ratio of portfolio market risk premium and the volatility in the returns of the portfolio. The Sharpe ratio determines the amount of return required by the investor by taking the one unit of risk in his portfolio. Thus sharpe ratio determines the equity risk premium for the investors investing in the portfolio of the stocks.

Sharpe Ratio = Equity Risk Premium of Portfolio / Volatility in the ERP

Volatility measures the risk involved in the investment as the volatility in the returns signifies the risk involved in the security. More the volatility, greater the risk in the portfolio and greater the ERP expectations of the investors. It has been estimated that in the long run, the estimate of the Sharpe ratio is constant, so therefore the ERP expectations can be found by multiplying the volatility of the company stock prices with the Sharpe Ratio, which can be measured by the volatility of the BSE SENSEX Index for the required time horizon period.

This method has the major drawback regarding the its serious assumptions of constant Sharpe ratio which may also change over time instead of remaining constant, which alters the ERP estimates and give the wrong estimates of the Equity Risk Premium.

1.1.3.3 Dividend Yield Method

In this method, the equity return expectations are estimated using the dividend yield by assuming the constant rate of growth of dividends forever... the cost of equity can be determined using the dividend yield by

Cost of Equity = (Dividend\textsubscript{1} / Market Price) + g

Where dividend\textsubscript{1} = dividend\textsubscript{0} + g
And $g$ is the constant growth rate of the dividends.

The cost of equity is estimated which determines the equity risk premium expectations of the investors investing in the Capital Markets. This model has the serious problem in determining the ERP is the constant growth rate of growth of the dividends which may only be possible in some dividend heavy sectors and that do not represent the whole population of the Indian stock market. Because the companies and Indian Capital Market are under developing phase, the companies do not declare dividends each year, in spite of the fact they are earning profits, as they are retaining their profits for the future expansion and not declaring as dividends. At some moment of time they are declaring huge dividends, and at sometimes they even do not declare dividends at all. So, there is always fluctuating rate of dividend growth in any company seeing the future wealth maximization objective of the shareholders. It is evident from the Walter’s and the Gordon’s Model of the Dividend Policy that declaring dividends become effective for the investors only and only if the internal rate of investment of the company is less than the external rate of investment. So, as long as the internal rate of investment of the company is greater than the external rate of investment, the company tries to retain their earnings to increase the overall wealth of the shareholder and making his equity risk premium expectations on the lower side.

1.1.3.4 Survey Method

Another method of estimating the Equity Risk Premium is to survey the market participants for their rationales about the ERP Expectations. The participants can be academicians who have researched in this field, investors and other corporate managers like CFO’s who practiced various valuations of shares and estimated the cost of equity for investment in the equity market.

Several studies like Welch Survey, John Graham & Campbell Harvey of Duke University conducted on the survey approach for estimating the Equity Risk Premium, which estimates the different forward looking expectations in different periods in U.S. the biggest advantage of this method is that the participants are experts in their fields and give the proper in sights regarding the implied ERP rather than the ex post return expectations depending upon the dynamic investment environment, as all the previous methods results in the estimates of the ERP based on the historical past data.
But this also suffers from the serious drawbacks with wide differences of opinion of various participants which may be too extreme to implement practically and fails in the objectivity of the particular problem. These surveys are subjective in nature, so the biggest problem is that the results depend upon the individual to individual and case to case and a general estimate of ERP is not possible.

It also gives the different estimates of equity return expectations for the different periods depending upon the survey results conducted in different periods. Based on the responses from the 13 FEI/Duke CFO Outlook Surveys from June 2000 to June 2003, the following estimates of ERP were drawn which showed that the ERP expectations estimated by this method is dynamic and the standard deviation of the 1 year returns are much higher than the 10 years risk premium. The results were as follows:

<table>
<thead>
<tr>
<th>Survey date</th>
<th>Responses</th>
<th>1 year Premium</th>
<th>10 years Premium</th>
</tr>
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<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>Median</td>
</tr>
<tr>
<td>June 6, 2000</td>
<td>160</td>
<td>1.92</td>
<td>1.8</td>
</tr>
<tr>
<td>Sept 7, 2000</td>
<td>161</td>
<td>3.03</td>
<td>3.9</td>
</tr>
<tr>
<td>Dec 4, 2000</td>
<td>198</td>
<td>2.67</td>
<td>2.9</td>
</tr>
<tr>
<td>Mar 12, 2001</td>
<td>124</td>
<td>1.34</td>
<td>0.7</td>
</tr>
<tr>
<td>June 7, 2001</td>
<td>147</td>
<td>2.60</td>
<td>1.4</td>
</tr>
<tr>
<td>Sept 10, 2001</td>
<td>137</td>
<td>1.67</td>
<td>2.2</td>
</tr>
<tr>
<td>Dec 4, 2001</td>
<td>228</td>
<td>4.58</td>
<td>3.3</td>
</tr>
<tr>
<td>Mar 11, 2002</td>
<td>225</td>
<td>4.49</td>
<td>3.4</td>
</tr>
<tr>
<td>June 4, 2002</td>
<td>310</td>
<td>3.10</td>
<td>2.8</td>
</tr>
<tr>
<td>Sept 16, 2002</td>
<td>356</td>
<td>3.34</td>
<td>3.3</td>
</tr>
<tr>
<td>Dec 2, 2002</td>
<td>277</td>
<td>5.32</td>
<td>4.5</td>
</tr>
</tbody>
</table>


| Mar 19, 2003 | 181 | 3.21 | 3.7 | 179 | 3.68 | 3.3 |
| June 16, 2003 | 361 | 6.63 | 5.8 | 367 | 3.89 | 4.4 |
| Average of Quarters | 220 | 3.38 | 3.05 | 241 | 3.83 | 3.71 |
| Standard Deviation | 1.52 | 1.34 | 0.52 | 0.57 |

Source: CFO Outlook Survey

1.1.3.5 CAPM Model

Seeing all the drawbacks of the previous methods, there is the need of some method to accurately estimate the equity risk premium for the investors investing in the Indian Capital Market. One of the basic models to estimate the equity return expectations is the CAPM model. (Capital Asset Pricing Model), which says the return expectations are based on the market beta of the stock, which is the measure of the sensitivity of the stock returns variations with the variations in the market returns (BSE SENSEX returns). CAPM model says that higher the beta that is higher the sensitivity of the stock returns variations with the market returns, higher the returns are demanded by the investors as they are perceived as the risky investment opportunities by the investors and hence demanding the higher equity risk premium for such stocks.

However, the assumptions of the CAPM model made this model inefficient as it fails to prove the return expectations of the investors for majority of the cases. The validity of the CAPM model is discussed in the subsequent chapter and it was found that the beta is not the only factor that effects the equity return expectations of the investors. So, this CAPM model is challenged by the number of studies (discussed in the subsequent chapter) which found that there are other factors/variables also that determine the ERP for the investors other than beta, which becomes important before investing in the Indian Capital Market.

1.1.3.6 Arbitrage Pricing Theory and Multifactor Model

These models are the extension of the basic CAPM Model which somehow balances the assumptions of the CAPM model. In these models the return expectations are measured against
not only by the beta of the security alone but by the many unspecified and specified macroeconomic risk factors, making these models the better techniques for estimating the Equity Risk Expectations of the investors for investing in the Indian Capital Market.

1.1.4 Exploring the factors that have effect on the ERP Expectations

Various studies proved that there are number of factors that determine the ERP expectations of the investors ranging from the behavioral, psychological and the other financial factors in the different markets and in the different time zones.

Investors grown up in different cultures have different attributes towards the risk, leading to the variations in the equity premium across various cultures. **Hofstede (2011)**\(^6\) classified cultures into six dimensions like individualism, uncertainty avoidance, power distance, masculinity, and long term orientation. The individual living in the culture of high uncertainty avoidance is reluctant to invest in the high book to market value firms if the future prospects of these firms are highly unambiguous and demands the higher premium for investing in these firms. Also, individualism refers to the extent in which people tend to take decision independently rather than taking collective decision and was found that the independent investors are prone to be more overoptimistic and over confident about their abilities, and hence are more willing to take higher risk and demanding less premium for the larger risk.

Several other authors/researchers studied various other factors that have the probable effect on the ERP Expectations. Bhandari (1988), analyzed the effect of debt equity (D/E) ratio in estimating the stock returns in US market from 1948 to 1979.

**Nicholson (1960)**\(^7\), demonstrated the P/E (Price to Earning) effect. He took the 100 industrial stocks over five year period from 1939 to 1959 and found that the stocks with low P/E outperform the stocks with the high P/E values, and hence investors demand less equity risk premium in the low P/E multiple companies. In the low P/E stocks, the purchaser seeks the greater productivity and hence demanding the less premium.

**Kothari & Shanken (1999)**\(^8\), reviewed the effect of the beta and the Book value to the Market Value (B/M) of the equity by empirically testing the determinants of the expected returns. They
found that the B/M multiple is a weak determinant of the cross sectional variation in the average returns among the large firms.

Kim (1997)\(^9\) reexamined the explanatory power of the beta, firm size, book to market equity and the E/P (Earnings to Market Price Multiple) for average stock returns by removing the errors in the variables bias. Regardless of the presence of the firm size, B/M and E/P ratios, betas have significantly higher explanatory power for average stock returns.

Kothari & Shanken (1997)\(^10\), found the reliable evidence that both the B/M and the dividend yield track the time series variation in the expected real stock returns over the period 1926 – 1991 in which B/M is stronger and plays a significant role in estimating the ERP and in the sub period 1941-91, the dividend yield is the stronger variable in estimating the ERP.

Chan, Louis et al (1991)\(^11\), found the cross sectional differences in the returns on Japanese stocks on four variables that were earnings yield, size, book to market multiple and cash flow yield from the year 1971 to 1988. They took both the manufacturing and non manufacturing firms from Tokyo Stock Exchange in their sample and proved a significant relationship between the variables and the expected return in the Japanese market. Further they found that the book to market multiple (B/M) and cash flow yield have the most significant impact on the expected returns than the other variables.

Fama & French (1993)\(^12\) studied the joint role of market beta, size, Earnings to Price Multiple (E/P), leverage and book to market value of the equity in the cross section of average stock returns. They found that the beta has the little information about the average returns and size, E/P, leverage and B/M multiple have explanatory power in explaining the return of NYSE (New York Stock Exchange) for the period 1963 – 1990.

Rahmani et al (2006)\(^13\), identified the effect of the variables like size, Debt Equity Ratio (D/E), Book to Market Multiple (B/M), Earnings to Price (E/P) and Sale to Price ratios other than beta to predict the equity returns in the Tehran Stock Exchange in the period 1997 – 2003. They observed that there is a significant relationship between the stock return and the S/P ratio. E/P ratio and size and book to market ratio demonstrated great variation in the results. Also, they
found that there was no significant relation between the Beta and the D/E ratio in predicting the equity returns.

So, on the basis of the views of the above authors a more comprehensive technique of estimating the equity risk premium expectations of the investors of Indian Capital Market is practiced and introduced to extend the basic CAPM Model and seek the extent of the other factors other than the beta of the stock in estimating the accurate measures of the future Equity Risk Premium Expectations. Some of the factors taken in the study based on the above previous studies which may have the probable effect on the ERP Expectations of the investors are the Net Profit Margin, Return on Assets, Current Ratio, Debt Equity Ratio, Dividend Payout Ratio, Beta of the stock, Earnings per Share, Price to Earnings Multiple and Price to Book Value Multiple.

The effect of these factors is examined in the research to seek the significant effect of these variables on the ERP Expectations of the investors in the Indian Capital Market. This helps in estimating the accurate measures of the equity risk premium expectations of the investors and the identification of the factors that are responsible for shaping the ERP Expectations of the investors.

1.2 Introduction to the Indian Capital Market

1.2.1 Capital Market
Capital Markets are the markets which deal in the all type of the long term and the medium term funds. It includes all the long term financing and investment opportunities. It mainly provides the market for the smooth flow of capital from the surplus units to the deficit with the objective of achieving the financial profits for both the parties. It consists of all those institutions that are required for the lending and the borrowing of the funds. The demand of the funds arises from the private business corporations, government companies and the private companies in order to expand their capacity and enhance their productivity. They can raise the funds from the capital market either by borrowing the funds that is debt capital by taking the long term loans from the financial institutions like banks, special financial institutions like ICICI, HDFC, IDBI etc and government or by raising the shares to the individual and institutional investors which is known as the equity capital. The equity capital is the permanent source of capital for the company and remains with the company until the dissolution of the company. The equity share holders of the
company are termed as the owners of the equity and are responsible for any profits and losses in the company. The investors invest in the equity market to get the returns in form of capital gains or the dividends in case of the increase profitability in the company, but the reverse can also happen, they have to bear the losses also if there are losses in the company as they are the owners of the company. The Capital market provides the link between the corporations and the individual investors to raise the equity capital from investors in the form of the primary and the secondary market, which are discussed later in this chapter.

1.2.2 Evolution of the Indian Capital Market

India is a developing country and so as the Indian Capital Market. The Capital Market of India is evolved from 1875 to till date in the different phases. The capital markets are still evolving and developing day to day in terms of the different trading mechanisms. The evolution of the capital markets are divided into four phases categorized into the following four periods.

- Phase 1 (1875 -1919)
- Phase 2 (1920 – 1946)
- Phase 3 (1947 -1991)
- Phase 4 (1991 – till date)

Phase 1 (1875 – 1919):

The Indian Capital market evolves back to the last 200 years when the securities of the East India Company were traded. In the first phase, in 1884 at the end of the American Civil War, the brokers found a street in Mumbai called the “Dalal Street” where they came and started to negotiate on a piece of a paper which later on took the form of a share certificate. In 1887, the brokers formed the “Native Share and Stock Exchange Association” which was purely informal and given any separate business entity. In 1895, the stock exchange acquired the premises in the same street and the Bombay Stock Exchange was inaugurated in the year 1899.

In this period, the various regional stock exchanges were established to strengthen the trade of that particular region. For example, the Ahmedabad Share and Stock Brokers Association was set up in 1894 as more new cotton mills were coming up in Ahmedabad. Likewise to strengthen
the business of jute, tea and the coal industries in and near Calcutta, the Calcutta Stock Exchange Association was set up in 1908.

In the nineteenth century, the industrial revolution took place in the different parts of the world. At this time, India was under the British rule and India was not an emerging industrial country, but there was the industrial revolution in Europe and being India rich in the natural resources like jute, cotton, tea, sugar, paper etc became the major source of raw materials to the developed countries mainly the Europe. Thus, in the first phase, to strengthen the industrial growth and trading of the raw materials, various regional and Bombay Stock Exchange were set up to facilitate the trading and financing of the funds for these development units.

**Phase 2 (1920 – 1946):**

In the second phase also, many new regional exchanges were set up for the same reason to strengthen the regional businesses.

In 1937, with the increase of textile mills and the plantation companies in the South India, the Madras Stock Exchange Association Pvt. Ltd was set up by the 100 members, which was later named as Madras Stock Exchange Limited.

In 1934, the Lahore Stock Exchange was setup, but due to the division it got merged with the Punjab Stock Exchange which was established in the year 1936 at Ludhiana.

The world war broke out in 1939. There was an immediate decline in the growth of the capital market as the parties got fear of repeating the world war, but the situation improved after 1943, and due to the restricted controls on the cotton, seeds and the other commodities, these companies found their presence in the stock exchanges as they could raise the funds from these stock exchanges.

Therefore, some more new regional stock exchanges were set up during this period like Uttar Pradesh Stock Exchange Limited in 1940, Nagpur Stock Exchange Limited in 1940 and Hyderabad Stock Exchange Limited in 1944. The two separate exchanges were also established in Delhi- Delhi Stock and Share Broker’s Association Ltd. and the Delhi Stock and Share Exchange Limited.

After the World War II, there was a great expectation of depression and majority of the stock exchanges suffered a lot from this depression. Also, in this period, India got independence and there was development on the political front. After independence and partitioning of Pakistan, the Lahore Stock Exchange was merged with Delhi Stock Exchange.

The first Act of Securities Contracts (Regulation) Act, 1956 was passed in 1956 which regulate and recognize the exchanges of India. The 6 exchanges of India: Mumbai, Calcutta, Madras, Delhi, Hyderabad, and Indore got regulation under this act. During the early 1960’s there were only 8 exchanges left in India which got regulation from the Securities Contract Act 1956. In 1980’s, the new more exchanges were turned up for strengthening the businesses of the specific regions. Some of the exchanges that turned up in this period were:

- Cochin Stock Exchange set up in 1980 in Kochi, Kerala.
- Pune Stock Exchange Limited set up in 1982 in Pune, Maharashtra.
- Saurashtra Kutch Stock Exchange Limited set up in 1989 in Rajkot, Gujarat.
- Vadodra Stock Exchange Limited set up in 1990 in Baroda, Gujarat.
- Coimbatore Stock Exchange Limited set up in 1990 in Coimbatore, Tamil Nadu.

In the 1990, there were 21 recognized exchanges with the potential growth in the securities market as more and more companies got listed in these exchanges and started raising capital from the public through these exchanges to strengthen and expand their businesses. There were also favorable government policies towards the securities market, which became the motivation...
factor for majority of the traders to trade in the Capital markets during this phase. The following Table 1.2 shows the growth of the stock Exchanges in this phase from 1946 – 1991.

### Table 1.2: Growth of the Stock Exchanges in India

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<td>Number of Stock Exchanges</td>
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<td>7</td>
<td>8</td>
<td>8</td>
<td>9</td>
<td>14</td>
<td>15</td>
<td>19</td>
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<tr>
<td>Number of Listed Companies</td>
<td>1125</td>
<td>1203</td>
<td>1599</td>
<td>1852</td>
<td>2265</td>
<td>4344</td>
<td>5841</td>
<td>5968</td>
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<td>Number of Stock Issues of Limited Companies</td>
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<td>2111</td>
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<td>3230</td>
<td>3697</td>
<td>6174</td>
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<td>Capital of Listed Companies (in crores)</td>
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<td>753</td>
<td>1812</td>
<td>2614</td>
<td>3973</td>
<td>9723</td>
<td>21465</td>
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<tr>
<td>Market Value of the Capital of Listed Companies (in crores)</td>
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<td>2675</td>
<td>3273</td>
<td>6750</td>
<td>25302</td>
<td>51379</td>
<td>70521</td>
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<td>Capital per Listed Companies (in Lacs)</td>
<td>24</td>
<td>63</td>
<td>113</td>
<td>141</td>
<td>175</td>
<td>224</td>
<td>367</td>
<td>465</td>
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<tr>
<td>Market Value of the Capital per listed Companies (in lacs)</td>
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<td>167</td>
<td>177</td>
<td>298</td>
<td>582</td>
<td>880</td>
<td>1182</td>
</tr>
</tbody>
</table>

Source: BSE (Bombay Stock Exchange)

The above table shows that there was the tremendous growth in the number of exchanges, number of companies listed in these exchanges and the capital trading in these exchanges, which proved that the Indian Capital Market is developing and more and more participants started participating in the Capital Market.

**Phase 4 (1991 to till date):**

In the fourth phase of the Indian Capital Market, liberalization and globalization broke out in 1991, which opened the boundaries of the country for trading with any other countries of the world. This was the major reason for the qualitative development of the Indian Capital market to
make the standards of the Indian Capital Market at par with the International Standards. The globalization and liberalization lead to the establishment of the business from the MNC’s in India and they started raising the capital from the Indian Markets also. The use of technology, variety of products that suite the large variety and volume of traders and the focus on the investor’s protection came into existence during this period as there were many Capital Market scams and frauds took place during this phase. Due to the speedy development of the capital market, there emerged many limitations like the lack of liquidity, lack of transparency, imperfections in the information and the long settlement periods etc which were the main challenges of this phase.

In this phase, one more National Stock Exchange (NSE) was set up in Mumbai in 1992. The main objective of the establishment of the NSE was to raise the standards of functioning of the Indian Capital markets. In NSE, the investors could trade in both the equity and the debt market under the Cash Market and the Wholesale Debt Market respectively. The screen based trading system was first introduced by NSE and NSE was meant for the use of technology in trading the securities which somehow solved the challenges faced during this phase.

1.2.3 Evolution of the Trading Mechanism

Before the establishment of the NSE, there was all physical trading as NSE was the first one to introduce the screen based trading system in Indian capital Market. The screen based trading system made the trading of the securities simpler and faster and reduced the settlement period to the great extent. The physical trading became the biggest challenge as the number of participants of the Capital Market increased manifolds in 1991 after liberalization. The physical trading system took place through the open outcry system. The trader who was willing to trade in the securities, had to physically visit the exchange or had to send his representative. The trader had to shout and made gestures to search for the counter matching deal to implement the transaction. This made the trading time consuming and inefficient.

In the screen based trading system, the traders are given with the computer logins and the passwords through their registered brokers and provided with the personalized trading account with the exchange. The trader can punch the volume of shares he want to sell or purchase and at which price in the computer window sitting anywhere, may be at his workplace or at home
without visiting physically the exchange. This increases the efficiency as it removes the distance challenge and any buyer can get a seller of the similar counter deal from various geographical areas. The transaction is executed as soon as he gets the counter matching deal from any other trader with the same price and same volume on the common market platform at which both buyers and sellers are trading their securities. There is the complete transparency in the system, since the current prices of the shares are determined by the current demand and supply of the particular securities. All the securities are traded through these exchanges only, so the exchanges can determine the current demand and supply of the securities at any time and hence discovers the current price of the securities at which the securities can be traded in the market. This provides the transparency to the investors and increases the investor’s confidence in the trading system.

To reduce the probability of the default risk, the exchange incorporated the clearing house mechanism by establishment of the National Securities Clearing Corporation Ltd. (NSCCL) in 1996 in which traders have to keep the margin money in their trading account so that in case of any default, the exchange can withdraw the money from their margin money account and the traders have to maintain this balance at all times.

There is also a remarkable difference in the current trading mechanism system. The paper form of the shares is converted into the electronic form by dematerialization of the shares converted by the two national depositories: NSDL (National Securities Depository Limited) and CDSL (Central Depository Securities Limited). The dematerialization of the shares lead to the faster settlement as it eliminates the need of transfer of physical shares and the problem of non deliveries of shares etc.

The shares are credited /debited in the Demat Account of the trader, and the respective funds are debited/ credited in the Bank Account of the trader which is linked to the trading account with the broker.

Therefore, the trading mechanism is very much improved for the efficient functioning and implementation of the trading in the modern times with huge volume of transactions in the Capital market and the demand of the speedy settlement.
The trading mechanism in India is still improving day to day as Indian Capital market is in developing phase and new insights are introduced to solve any challenges that arise in the Capital Market.

1.2.4 Classification of the Capital Market

The Capital Markets are classified on the basis of the following three parameters shown in the Figure 1.1, with each type of capital market deal with the different product and with the different mechanism with the ultimate objective of mobilizing the long term funds from the surplus units to the deficit units.

The Capital Markets are classified on the basis of:

- Type of Capital
- Type of Institutions
- Type of Markets

All the types of the Capital Markets with the further sub categories of the Capital Market are discussed in the chapter below:

Figure 1.1 Classification of the Capital Market

1.2.4.1 On the basis of the type of Capital
• **The Debt Capital Market:** In this type of Capital Market, the companies raise the long term funds through the borrowed capital called the debt either from the banks, other financial institutions or by raising debentures from the public. In this, the companies have to give the fixed interest on the debt with the fixed obligation to pay the interest and the principal to the lenders. The company is provided with the funds for the defined period for which the term loan has been raised. The debt capital market helps the companies and the investors to borrow and lend the funds respectively for the long term at the appropriate cost of capital for the borrowers and the adequate return for the investors in order to earn the financial profits for both the parties. The Central Bank of India, RBI controls all the activities of the Debt Capital Market like setting of the PLR (Prime Lending rate), issuing of the prospectus by the corporate before raising the debentures etc and the other mandates to participate in the Debt Capital Market so that the large companies cannot exploit the individual investors who make their small surplus in mobilization by lending them to the deficit units. The returns in the Debt Market are comparatively lower than the Equity Market as they are perceived as less risky being the fixed income securities are traded in this market.

• **Equity Capital Market:** In this type of Capital Market, the companies raise the long term funds by issuing the equity shares to the public and made them the owners of the company by giving the stake of the company to the individual or the institutional investors and therefore called as the owned capital. The companies receive the perpetual capital up to the dissolution of the company as the company does not have to return the capital to the investors until the liquidation of the company. The Equity Capital Market helps the companies to issue shares to the public and make the funds available from them. In Equity Market transactions, the investors become the owners of the companies to the extent in which they purchase the shares of the companies, therefore they are entitled to share the profits and losses of the company. The company has no obligation to pay the dividends or the principal to the investors as they are now the owners of the company. In spite of the fact that equity is perceived to have higher risk due to the more uncertainties involved, the individual or institutional investors prefer to invest in the equity because of the more return expectations from the companies. So, they demand the higher equity risk premium for investing in the equity.
market as compared to the debt market. The equity market trading can be done in two ways that is in the primary market or in the secondary market which is discussed later in the chapter. The SEBI (Securities Exchange Board of India) controls all the activities of the Equity market like avoidance of the insider trading, issuing of the prospectus before going public, efficient disclosure of the company financial and corporate exposures etc so that the large corporate cannot exploit the small investors. The equity market is also the win-win situation for both the corporate and the investors as the investors are expecting higher returns from the equity market as compared to the debt market.

1.2.4.2 On the basis of Type of Institution

In this classification, the capital market is classified on the basis of the various institutions involved with the special purpose of the particular institution in mobilizing the long term funds.

- **Gilt Edged Market:** It is the market for the government and the semi government securities trading in the Gilt Edged Market bearing a fixed rate of interest and RBI plays an important role in regulating this market. The investors who are risk averse and prefer safe returns in their investments invest in these Gilt Edged securities.

- **Industrial Securities Market:** It is the market for trading the industrial securities in which the existing shares and debentures of the industrial companies are traded and also the new shares and debentures are sold and purchased directly by the investors. The industrial securities market is not very well established in India as compared to the other industrialized economies in which there are many industrial companies whose shares are traded in the market.

- **Development Financial Institutions:** Some special development financial institutions are set up in the Indian Capital Market to meet the specific requirements of long and medium term funds for the specific industry, trade and agriculture. For example, some of the institutions that got set up in India for the development of the particular sector are as follows:

  - **IFCI (Industrial Finance Corporation of India):** It is the Indian Government owned development bank which cater the long term funds requirements of the industrial sector in India.
○ **ICICI (Industrial Credit and Investment Corporation of India):** It is the institution established in 1955 as the public limited company with the objectives of providing financing to the industrial projects in the private sector, promotion of the new industries and aids the industries for the future expansion and modernization to increase their overall production.

○ **IDBI (Industrial Development Bank of India):** It is established in 1964 as the wholly owned subsidiary of RBI particularly set for coordinating the activities of the institutions involved in financing, developing and promoting the new and existing industries in India. It also has the objective of purchasing and underwriting of the debentures and shares of the industrial units to help them in raising capital and increase their productivity.

○ **SIDBI (Small Industrial Development Bank of India):** It is established in 1990 initially as the wholly owned subsidiary of the IDBI and currently owned by the 33 government owned/controlled institutions with the ultimate objective of providing the growth and development of micro, small and medium-scale enterprises (MSME) in India.

○ **UTI (Unit Trust of India):** It was created in 1963 by the UTI Act passed by the parliament and basically it deals with the investment in the capital market by issuing the mutual funds under the UTI mutual fund. For more than two decades the UTI becomes the sole vehicle for the Indian Investors to invest in the capital markets, before the introduction of the mutual funds under the UTI mutual fund.

○ **LIC (Life Insurance Corporation):** It was established in 1956 as the state owned insurance group and the investment company. Its main objective is to provide the life insurance as the risk cover and investment opportunities for the investors in Indian Capital Market. Their main products are insurance plans, pension plans, unit-linked plans, special plans and group schemes etc.

○ **HDFC (Housing Development Finance Corporation):** It was established in 1977 as the first specialized mortgage company in India which caters the housing development investment of the investors in the capital Market.

There are many such specialized development financial institutions that meet the specific funds requirements of the specified sectors.
• **Financial Intermediaries:** There are several other financial institutions which include the merchant bankers, leasing and hire purchase companies, financial institutions, mutual funds and the stock exchanges which are also the part of the Indian Capital Market as they help in mobilizing the savings and supplying the funds in the Capital Market.

1.2.4.3 **On the basis of Type of Market**

In this, the Capital Market is classified on the basis of the types of market in which the debentures, shares and the government securities are traded in the Capital Market. The trading can be done in the following two markets.

• **Primary Market:** In the primary market, the securities are bought or sold directly between the investors and the companies. It is the first issue of the securities by the companies to the public in the form of initial public offering. In the primary market, the company raises the funds by selling the securities to the public and raised their long term funds which the company does not have to return till the dissolution of the company.

• **Secondary Market:** In the secondary market, the investors do not purchase the shares or debentures directly by the company but by the existing shareholders who have already purchased the shares in the IPO from the primary market. This is the second hand purchase that is why it is called as the secondary market transactions. The company receives the capital at the time of the IPO, but if the investors purchase or sell the securities from the secondary market, there is no effect of cash flows to the company as the securities are interchanged between the buyer and seller externally. If the investors want to purchase the shares or debentures of the company after the IPO, they can purchase in the secondary market and if the existing security holder want to sell his holding and requires liquidity, he can sell his securities to the other investor who wants to purchase the same. The two Central Stock Exchanges, the Bombay Stock Exchange and the National Stock Exchange and the other state stock exchanges in the Indian Capital Market play a significant role in the secondary market in implementing the buying or selling of the securities. The prices of the securities are highly dominated
on the secondary market transactions as if at any time there is more selling of a particular security, the supply of that security in the market increases, which makes the market price of these securities to go down and vice versa. So, the buying or selling of the securities in the secondary market due to any behavioral or fundamental reasons of the investors plays a significant role in deciding the valuations of the shares of the companies.

### 1.2.5 Importance of the Capital Market

The efficient working of the Capital Market is very much essential for the overall economic development of the country. As economy is all about the mobilization of funds and capital markets play an important role in mobilizing the long term and medium term funds from the surplus units to the deficit units so that the units raise the funds for their future expansion and modernization. Also, with the efficient Capital Markets, the individual or the institutional investors earn the handsome returns which increase the overall wealth of the investors, which also increases the economic development of the country. The importance of the Capital Markets is discussed as follows:

- **Mobilization of Savings & Capital Formulation:** The efficient Capital Market operations lead to the effective mobilization of the savings of the individual investors which are otherwise not circulating and not contributing to the growth of economy and also provide the returns to the investors through earning the interest in the fixed income securities and the dividends or the capital gains in the equity. The banks can create the capital by providing the loans from the deposits made by the investors in the form of their small savings which can be utilized by any development unit to increase their productivity and contributes to the GDP growth of the country.

- **Raising the Long Term Capital:** In the Capital Market, the companies can raise the permanent long term capital by issuing the shares which is the permanent capital raised by it up to the dissolution of the company. The investors who want to retrieve their investment can sell their shares to the other investors in the secondary market but the company capital remains unaffected. This is the major advantage of the capital market for the long term financing of the projects by the companies.
• **Industrial Growth Promotion:** In the Capital markets, through venture capital financing, the new upcoming and growing businesses can raise the funds from the public in the form of venture capital and the investors can earn the handsome returns and profits by investing in the upcoming viable and profitable projects, which further increases the industrial growth and motivation to the budding entrepreneurs and proves the win-win situation to the investors and the corporate.

• **Continuous & Liquid Market:** It is the highly liquid market that any time the investors want to retrieve the investment and want to have liquidity; they can sell the shares or debentures through the exchange in the secondary market at the prevailing market price and get the liquidity. So, this market also plays an important part in maintaining the liquidity for the investors.

• **Technical Assistance:** The financial intermediaries in the Capital Market like the Stock Exchanges, RBI, SEBI etc help to provide the technical assistance by providing data to the investors regarding the company fundamentals and other related data to select the right companies and securities in their portfolio to earn the maximum return with the minimum risk, which is the ultimate objective of any investor to earn the handsome financial profits.

• **Proper Utilization of the Funds:** The Stock Exchanges in the Capital Market help to determine the current market price of the securities on which they can be traded in the market. This market price is purely dependent upon the demand and supply of the securities at any moment of time. As all the securities are traded through the exchanges, the exchange determine this current market price which provides the efficient benchmark for the investors to buy or sell the securities and hence makes the proper utilization of funds.

• **Provides a variety of services:** In the capital market, there are large varieties of services that are offered by the different participants of the Capital market, which includes the long term and medium term loans to the entrepreneurs, assistance in the companies promotions by raising the prospectus, providing the underwriting facilities, providing the venture capital financing, and also providing advisory services to the newly established corporate to lead them to the great heights.
- **Upliftment of the Backward Areas:** Capital markets help in the upliftment of the backward areas. The Capital Market raises the long term and medium term development loans to raise the growth of the agricultural sector in the rural areas and the other housing finance in the backward areas.

- **Generation of the Foreign Capital:** The efficient capital market attracts the flow of capital funds from the foreign countries in the form of cash inflows from bond and equities called as FDI and FII. These FII and FDI increase the foreign capital of the country thereby decreasing the foreign currency deficit in the balance of payments of the country which is responsible for the overall development of the economy of the country. Also, FDI and FII attract the foreign technology which further increases the productivity and efficiency of the manufacturing and the service sectors in India.

Thus, the efficient Capital Markets are very necessary for the effective growth of the economy of the country and the overall development of the country.

1.2.6 References:


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