CHAPTER 3

REVIEW OF LITERATURE AND RESEARCH METHODOLOGY
This chapter mainly deals with nature and significance of the study, the study of literature on capital markets and its efficiency. It also includes the entire synopsis like need for the study, objectives, methodology, period of the study and scope and limitations of the study.

3.1. NATURE OF THE STUDY
The research study is descriptive in nature. It involves investigation of which event is most or least sensitive towards influencing of the firms share prices in efficient capital market. The study involves collecting secondary data through web sources of BSE and NSE listed companies historical share prices by taking pre and post event implementation. The purpose of this doctoral study is to ascertain the impact of new corporate information released on the security performance. This chapter does present brief description of the background and scope of the study, followed by objectives and Hypotheses of the study. The study relies on data collection, data tabulation, for application of statistical tools, to find out whether event study methodologies are really significant in helping the understanding of price movements. It concentrates mainly on the impact of event (such as Dividend announcement, Bonus issues, Right issues, Mergers and Acquisitions, etc) on firms share prices by taking pre event historical values and post event historical values to formulating the data in the required format and to apply statistical tools like T-test, Beta, Intercept, Mean, Co-variance, Standard Deviation, Regression, etc, to find out whether the share prices are influenced by form of capital markets are really significant in helping the users or not and to convey the same to the end users.

3.2. SIGNIFICANCE OF THE STUDY
The issue of capital market efficiency is significant for the investment management in the investment community. Greater market efficiency implies a lower profitability that an investor will be able to consistently identified misprice securities. Consequently the more efficient in the security market, the lower is expected pay off to investors who buy and sell securities in search of abnormally high returns. Event studies can be carried out to see just how fast security prices actually react to the release of new information in semi-strong form of capital market efficiency.

3.3. REVIEW OF LITERATURE

Introduction:
There is a vast body of literature by eminent scholars and financial experts on different aspects of the capital market. The literature available on capital market mainly deals with various aspects such as stock market efficiency, stock pricing, stock valuation and stock market operations. Event study analysis has remained one of the most fascinating fields of research in finance. It has enticed many researches to engage in research and as a result, the various dimensions of Event studies have been investigated. Event study considers the influence of event information on security performance in semi-strong form of capital market efficiency. Some of the event studies conducted by various authors in efficient capital market are explained as follows:

**Remya Ramachandran, (2013)**\(^1\), in his study on semi-strong efficiency of Indian stock market examines the efficiency of Indian Stock market by studying stock price and trading volume reaction resultant upon the corporate action information. If the market is efficient prices fully reflect all information and to evaluate there is no scope for abnormal returns and dramatic increase in the traded volume consequent upon such release of information.

**Ananthi and Dinesh (2012)**\(^2\) attempted to test the efficiency of Indian stock market with respect to corporate announcement by LIC housing finance limited. The chief objectives of this study are to assess the pricing behavior of the events in LIC housing finance limited, to assess the risk of the stocks in selective index, to identify the effect of those events in the whole market. The study carried as event study under the semi strong form of market efficiency using rate of return, beta, excess return, and average excess return, pivot point, and t-statistics as tool to test market efficiency. The major findings of the study are Indian overseas bank has identified the high return security during the period of December 2010 and the security of LIC housing finance limited has earned high market return among the selected securities during February 2011.

**Vishal Kutchu, (2012)**\(^3\), in his study testing semi-strong efficiency by taking Union budget 2012 on 6 selected stocks. After the Budget speech by the Finance Minister, several reports crop up on the Internet, newspapers as well as on satellite TV channels including News and Business news channels. The reports appearing in these media construe the possible impact of the Budget on various industrial sectors.

**Bloomfield, Libby and Nelson, (2011)**\(^4\), in their study entitled, “Confidence and the Welfare of Less Informed Investors”, has highlighted that less informed investors are over confident in investments. Providing additional information to professional investors only could harm the
welfare of less informed investors if less informed investors are not conscious of the extent of their informational disadvantage.

Gñana Desigan. C (2011)\textsuperscript{5}, in their study, “Women Investors Perception towards Investment–An Empirical Study”, identified the investment pattern, preference, influencing factors and problems of women investors in Erode town. The findings of the study disclose that, women investors prefer to invest in bank deposits and jewelers, they are influenced by safety and liquidity and the problems faced by them are cumbersome procedures and formalities, commission and brokerage.

Mart Grinblatt and Matti Keloharju, (2011)\textsuperscript{6} in their study, “The Investment Behaviour and Performance of Various Investor Types: Study of Finland’s Unique Data set”, assessed the degree to which past returns determine the propensity to buy and sell. The study discovered that foreign investors tend to be momentum investors, buying past winning stocks and selling past losers. Domestic investors, particularly households contradicted the same. This difference in Investor behaviour was consistent in regular intervals. The portfolios of foreign investors outperformed the portfolios of households, even after controlling the behavior difference.

Asbell and Bacon(2010)\textsuperscript{7} attempted to test the semi-strong form efficient market hypothesis by analyzing the effects of insider trading on the risk adjusted rate of return of the firms’ stock prices for a sample of 25 firms. Using standard event study methodology in the finance literature, this study tested the impact of a random sample of insider purchases on the risk adjusted rate of return of the firms’ stock prices. The results show slight positive reaction prior to the announcement and a significant positive reaction after the announcement.

Khan and Ikram(2010)\textsuperscript{8} attempted to test the efficiency of the Indian Capital Market in its semi-strong form of Efficient Market Hypothesis (EMH). The study attempted to test the relation between the movement of FII and two major stock exchanges of India, BSE and NSE. The study used the monthly averages of NSE & BSE for the period from 2000 to 2010. The study used the Karl-Pearsons’ Product Moment Correlation Coefficient (Simple Correlation) and linear regression equations to analyze and determine the degree and direction of the relationship between the variables involved. The results suggest that the FII’s do have significant impact on
Indian Capital Market, which leads to the conclusion that Indian Capital Market is semi-strong form efficient.

Shobana. V.K. and Jayalakshmi. J, (2010), in their study entitled, “Investor Awareness and Preferences”, studied the investors’ preferences, the level of investor awareness and the factors influencing investor awareness of 100 respondents in Salem District. The study reveals that real estate, bank deposits and jewelry were the preferred investments. Investors above 50 years of age, post graduates and professionals had high level of awareness. Age and education do not have any significant influence over investor awareness but occupational status leads to difference in the awareness level of people.

Santi Swarup. K, (2010), in his survey entitled, “Measures for Improving Common Investor Confidence in Indian Primary Market: A Survey”, analyzed the decisions taken by the investors whilst investing in primary markets in the first part: secondly the factors affecting primary market situation in India was analyzed and finally the survey evaluates various revitalization measures available for improving investor confidence. The survey was conducted in 10 cities in India by mailing questionnaire. The survey results of 367 investors revealed that the investors give importance to own analysis and market price as compared to broker’s advice.

Maruthu Pandian. P, Benjamin Christopher, (2010), conducted a study entitled, “A Study on Equity Investor Awareness” in order to study the stock market literacy of the investors about the company, stock exchanges as well as capital market regulatory bodies. The primary data using multiple regression, path analysis and chi-square test along with ANOVA clearly revives difference in the awareness among the investors. The research work established that the awareness index is high among young male investor, post-graduates and meticulous business men.

Jais and Karim and Funoka and Abidin (2009) examined the effect of dividend announcements on stock market reaction in Kuala Lumpur Stock Exchange. Using an event study approach, the evidence showed that dividend increase announcements are greeted positively by investors, while there are some evidences suggesting that the investors react negatively prior to dividend decrease announcements.
Shivkumar Deene, Madari D.M and Gangashetty, (2009)\textsuperscript{13}, in their paper, “Capital market Reforms: some issues”, capital market is essential for the development and strength of economy. A strong and vibrant capital market assists corporate world initiatives, finance and exploration of new processes and instruments facilitates management of financial risk. Retail investor is the backbone of the capital market. But with the expansion of the capital market, scams and anomalies, also multiplies. It ultimately leads to the dilution of the faith of the small investor, mutual funds, pension funds, Foreign Institutional Investor and insurance companies in the capital realizing that the government made different as capital market reforms. This includes educating capital market participants concerning their rights and duties for proper functioning of capital market.

Diptendu Simlai, (2009)\textsuperscript{14}, in his paper, “An inquiry into the origin and growth of the capital market in India”, India’s modern capital market did not emerge in a day. This market, since its inception in the 18th century with the establishment of the Bank of Hindustan (1770) in Calcutta, laid the foundation of the modern capital market in India according to A. K. Sur, a noted stock market economist of his time (Sur, Evolution of Capital Market in India, Economic Affairs, Nov-Dec/1960). The objective of this paper is to trace the evolution of this market right from the late 18th century up to our times. For purposes of their study the entire time span has been divided into four periods. The first covers the 18th and 19th centuries. The second extends from the early 20th century up to 1947, the year of Independence. For the vast impact of the economic reforms upon the capital market, the post-Independence era has been divided into two periods: one ending with 1990 and the other starting with 1991.

Sudershan kuntluru and D. Mohd Akbar Alikhan, (2009)\textsuperscript{15}, in their article, “Financing pattern of foreign and domestic owned pharmaceutical companies in India”, foreign Direct investment has often seen as major source of long term capital which provides bundle of other benefits to the host county company. In this paper, they made an attempt to examine the financing pattern of foreign and domestic owned pharmaceutical companies in India. It has been hypothesized that there is no significant difference between the financing pattern of domestic and foreign owned companies.

HorstRaff and Michael J.Ryan, (2008)\textsuperscript{16}, in their paper entitled, “Firm-Specific Characteristics and the Timing of Foreign Direct Investment Projects”, has used a proportional hazard model to
study foreign direct investment by Japanese manufacturers in Europe between 1970 and 1994. They divided each firm’s investment total into a series of individual investment decisions and analyzed how firm-specific characteristics affect each decision. They found that total factor productivity is a significant determinant of a firm’s initial and subsequent investments. Parent-firm size does not have an important influence on the initial decision to invest. Large firms simply have more investments than smaller firms. Other firm-specific characteristics, such as the R&D intensity, export share and keiretsu membership, also play a role in the investment process.

Som Sankar Sen and Santanu Kumar Ghosh, (2008), in their paper, “Stock Market Liquidity of BSE and NSE: A Comparative Study (1995-2005)”, this study compares between BSE and NSE in terms of Stock Market Liquidity during the study period of January 1995 to December 2005. The study reports that mean liquidity of NSE is higher than that of the BSE during this period. It also reveals that in most of the months BSE remains more vulnerable than NSE during this span of time in terms of liquidity. A monthly pattern of liquidity could be observed in case of NSE but no such monthly pattern is there in case of BSE. Finally, a positive correlation between these two exchanges has been reported indicating no significant movement of volume from one exchange to another.

Viswambharan A.M, (2008), in his article entitled, “Indian Primary Market – Opportunities and Challenges”, has examined the recent trends in primary market, the current IPO system – book building process, opportunities for investors, problems faced by the investors and has suggested that investors should rely on long term investment than speculation. Investor education shall be strengthened. Commercial banks may take-up investment consultancy for their clients to improve investor participation.

Kameswari. P, (2008), in his article, “Foreign Direct investment and its role in developing Indian economy”, has stated that investment is an important factor in influencing the economic development of a country. Developing countries like India have investment requirements far greater than their domestic savings can meet. Their investment deficits can be bridged by foreign capital flows in the form of Foreign Direct Investment and Portfolio Investment. But the huge flows of foreign capital may introduce some problems like inflation. In the interest of future economic growth and development a developing economy has to institute some safeguards in its national interest while welcoming the foreign investment. This article studies how India is faring
in its efforts to attract foreign direct investment and in channelizing the flows for the growth of economic development.

Jeff Madura (2008)\(^{20}\) has decisively proved that due to integration of the stock markets throughout the globe, the state of the economy or performance of a company may not necessarily get reflected in the market price. ‘Since a given market partially reflects the current and/or forecasted state of its country economy and economies do not move in tandem, particular stocks of the various markets are not expected to be highly correlated. Stock price movements among international stock markets are integrated to a degree as some economic factors affect all markets.’

Kakade V.B. and Patil J.F. (2007)\(^{21}\) have observed that there is still a requirement to market based system of finance. There is a greater role expected from the market in providing industrial finance. ‘In terms of the broad framework of industrial financing, there is sufficient room for a greater role from market financing. At the same time, this does not mean that Indian Economy is ready for a shift to a market based system of finance.’

Avadhani V.A. (2006)\(^{22}\) further gives various sources of funds applicable for the multinationals in the international capital markets. ‘Funds are raised by the multinationals by various methods in the international capital markets namely public issue, bought out deals, private placement, securitized debt, merger, acquisitions, takeovers etc. The instruments/bonds of countries having poor credit rating, they are sold at high discounts.

Gupta and Kundu (2006)\(^{23}\) examined the impact of Union Budgets on Sensex group of stocks from 1991 to 2005 covering 17 Budgets. They found that Investors can earn super profits during the short-term and medium term periods around the budget (up to 15 days) and also face the risk of abnormal losses if the investors’ expectations are not met from the budget.

Mishra A.K. (2005)\(^{24}\) examined 46 bonus issues from June 1998 to August 2004 and his results indicated that there are significant positive abnormal returns 5 days prior to the event but post event within two days the market corrects the speculation built up with prices fully reflecting the public announcement available. His study shows that Indian stock market is semi-strong efficient.
ICFAI University (2005)\textsuperscript{25} an overview of capital market stressed upon the reforms in the financial sector and its impact on the capital market of India. ‘The capital market reforms have been at the forefront of the reforms agent of various governments since 1991. As greater faith was placed on the allocative efficiency of the markets, they progressively liberalized controls that had created severe distortions and impeded market functioning in the past. Of late, disintermediation, institutionalization, globalization and modernization are being observed in the capital markets in India.’

Desai Vasant (2005)\textsuperscript{26} has briefly explained the development of the Indian capital market. According to him, liberalization of the stock market operations is necessary for the further development of the markets. ‘The Indian capital market has developed to a large extent but is still in a process of evaluation. Various measures have been taken to develop a healthy and mature capital market. These measures include liberalization of stock market operations, opening up of the stock exchange membership to financial institutions, encouraging banks and financial institutions to go in for mutual funds. However one more area which requires serious attention is the scope for a multitier market.’

Srivastava R.M. (2005)\textsuperscript{27} has commented on role of SEBI in a situation of crisis. He has also expressed his concern over excessive speculation in the Indian stock markets. ‘As a result of rampant manipulation, Indian stock market has already been turned into a ‘healing market’ characterized by disorderly behavior, excess speculation, high volatility and recurrent market crisis. The SEBI’s role is like a ‘riot police’. It acts after the crisis.’

Bhasin Niti (2004)\textsuperscript{28} Indian financial system stresses on the need of efficient capital market as a backbone of sound financial system. At the same time it is also warned that the scams may keep the investors away from the market.

Gordon and Natarajan (2003)\textsuperscript{29} also gave an account of various remedial measures taken by the regulatory authorities to protect the interest of the investors. ‘Many steps are being taken to broaden the market and make it function with greater degree of transparency. Some of the developments in this direction are regulation of intermediaries (through SEBI), prohibition on insider trading, protection of investors interest, setting up credit rating agencies, introduction of depository system, etc.’
The Institute of Chartered Accountants of India (2002)\(^{30}\) expects that more innovations would come in the Indian capital market and there would be a job to be done in the hands of brilliant finance managers in the days to come. ‘Indian capital markets are undergoing a phase of tremendous growth and associated innovations. But looking at the developed economies and role of capital markets being played there, this is just the tip of the iceberg. More innovation will come and merchant bankers and brilliant finance managers would contribute.’

Ormos, Mihaley (2002)\(^{31}\) empirically tested the efficiency of Hungarian Capital Market in its semi-strong form. The investigation was based on the capital market data over the period 1991 to 2000, which was analyzed by employing event study. The study concluded that strong form of efficiency of capital market does not completely hold true, thereby supporting that Hungarian Capital Market is semi-strong form efficient.

Madhumati R. (1998)\(^{32}\) has pointed out the mindset of the investors of Indian capital market. He also stressed that the risk is an important element which dominates investment decisions among the investors. ‘Preferences of the investors and their perception about the risk in Indian market can be presented as follows: Three classes of investors have been identified based on risk perception namely, risk seekers, risk bearers and risk avoiders. The majority of investors in India are risk bearers. The risk perception influences the investment decisions of the investors.’

Shanmugham R. and Muthuswamy P. (1998)\(^{33}\) have put forward their observation about the profile of the investors as well as features of the markets. They have also given an analysis of the investors with reference to the objective, education, nature of income etc. ‘One of the notable features of development of Indian capital market has been the growth of number of investors. Investors in shares are mainly from salaried group, young and mostly first generation investors. Their preference for fundamental analysis and long term orientation supports the fact that they are not speculators. Educational level and occupational category has an impact on the use of technical analysis and fundamental approach.’

Below and Johnson (1996)\(^{34}\) examined the differential share price reaction to change in dividend announcements with respect to market phase. The study found that market phase has a significant impact on abnormal returns around the announcement and it appears that more
information is conveyed by dividend change announcements which run counter to market phase and these results are consistent with the information content of dividends hypothesis.

Gupta L.C. (1991)\(^{35}\) has given a suggestion to the markets that it must keep in mind the investor’s objectives. He also warns that excessive speculation in the market may lead to loss of genuine investors which is not a good sign for healthy development of the market. ‘The stock exchange should be investor driven. The market not driven by investment interest but by speculative forces lead to almost total apathy towards genuine investment interests and problems related thereto like lack of liquidity, delay in deliveries and payments.’

Easton and Sinclair (1989)\(^{36}\) had found statistically significant negative stock market return after cash dividend announcement. The negative relationship between stock market return and cash dividend announcement is attributed to income tax effect and the positive relationship between stock market return and cash dividend announcement is attributed to information effect of dividend.

Eades, Hess and Kim (1985)\(^{37}\) had found evidence that the average daily return around cash dividend declaration date was abnormal, even though the researchers did not find any confirm evidence of sluggish market reaction.

Kalay and Loewenstein (1985)\(^{38}\) had found evidence that the daily stock returns surrounding announcement dates (three day) were statistically significant from the return predicted by market model and from the recent realized average daily return.

Sharma and Kennedy (1977)\(^{39}\) compared the behavior of stock indices of the Bombay, London and New York stock exchanges during 1963-73 using run test and spectral analysis. Both runs test and spectral analysis confirmed the random movement of stock indices for all the three stock exchanges. They concluded that stocks on the BSE (Bombay Stock Exchange) follow random walk and are weak-

form efficient.

Fama, Fisher, Jensen and Roll , (1969)\(^{40}\) have used event studies to study the semi-strong form of market efficiency. Using financial market data, an event study measures the impact of a specific event on the value of a firm. The usefulness of such a study comes from the fact that,
given rationality in the marketplace, the effects of an event will be reflected immediately in security prices. Thus a measure of the event’s economic impact can be constructed using security prices observed over a relatively short time period.

**Baumol (1965)** makes an important contribution to a better understanding of the performance of the stock market. His book represents a synthesis of past research and current thinking on the subject. It analyses in considerable detail both the short-run and long-run price equilibrating processes and points out important departures from the competitive ideal and the implications of these departures to stock market efficiency. Besides, Baumol offers his own hypothesis on the pricing of securities, and he sheds new light on the overall efficiency of the stock market as a mechanism for allocating the nation’s capital resources.

### 3.4. NEED FOR THE STUDY

In Indian capital market resource mobilization is mainly from two important stock exchanges namely NSE and BSE. To protect the interest of the investors in the capital market the efficient markets play a vital role. Capital market efficiency has important issues in an investment management community. At stake are Billions of dollars in investment management fees, professional reputations, and some would disagree even the effective functioning of our capital market. The Basic factors necessitating the need for the study is changes in the global financial markets and changing investor’s knowledge level towards capital market forms. A number of company’s securities now available in capital markets. The income of the investors and their saving habits are also undergone a lot of changes in recent period. The investor’s conception levels are also increased rapidly. Once, they used to selected securities only considering on the basis of risk and returns. But now it is not the case. The investors are giving more significance to considering all events and patterns which influences the share price movement in stock market. The technical analysis of event study provides information to the investor to take decisions in their investment patterns. The events influencing the security price may either controlled operations by the business or uncontrolled operations forced by external factors. Internal events influencing the share price are earnings announcement, stock split, dividend announcement, renovation, expansion, diversification, mergers and acquisitions, etc. others are external events such as budget announcement, monetary and fiscal policy, Government policy, inflation, socio-political and economic reforms, etc.
Event study can be carried out to see just how rapid security prices actually react to the release of new information. Do the security prices react rapidly or slowly? Are the returns after the announcement date abnormally high or low? Are they simply normal? Whether the market is efficient or inefficient? Are the securities overreacting or under reacting to the new information? Whether the stock markets are in semi-strong form efficient? Whether the event announcement is significant or insignificant? Note that the answer to second question requires a definition of a normal return for a given security. The present research answers to these questions and communicate the same to the users of information.

3.5. SCOPE OF THE STUDY
The scope of the study is reasonably broader and includes capital market evaluation by considering the internal events such as issue of bonus shares, Dividend announcement, Rights issue, Mergers and Acquisitions in both listed companies of BSE and NSE. The scope of the study is confined to 80 events such as Dividend announcement, issue of bonus shares, Rights issue, Mergers and Acquisitions, influence on daily closing prices of securities. To make the study meaningful, pre-event 15 days, event day and post-event 15 days (thus event window consists of 31 days) of daily closing value of stock by taking S&P BSE SENSEX and S&P CNX NIFTY as the benchmarks. Event-study analysis of semi-strong form of capital market efficiency has been conducted by collecting the secondary information of various events during the period of 2010 April 1st to 2015 March 31st.

Further the scope of the research is vast and can extend by taking other internal events that are not covered. Is the effect of event announcement more on companies with particular type of shareholding pattern or are there any other company-specific factors? Is the effect of event announcement more or less on particular sector(s) i.e., any industry-specific factors? The research in this area can be made more comprehensive and conclusive by conducting more such studies. It can also extended by taking external event-study.

3.6. RESEARCH METHODOLOGY
Methodology is the key facet which governs the outcome of the research. It encompasses and directs the researcher to conduct the research in a systematic process which ensures and facilitates the accuracy of the outcomes. The present research study strictly abides by conceptual
frame work of research process. All elements in various stages of research process are explained henceforth. Event study methodology, which tries to measure the effect of an event and how quickly these events are reflected in asset prices, is used to analyze the effect of the selected events. The analysis centers on the “Event Window” or test period when evidence of abnormal behavior in market is sought. In this study the event window is 15 days before the event date, event announcement date and 15 days after the event. Thus total event window is 31 days.

3.6.1. Normal versus Abnormal Returns:

If financial markets are not efficient, then strategies would exist that can systematically earn above or below normal returns, referred to as abnormal returns. However, in order to essentially calculate any abnormal return for any given asset, we first need some Asset Pricing Model such as the Capital Asset Pricing Model that gives us an estimate or idea of what the normal or expected return to that asset should have been.

Abnormal Return = Actual Return observed – Expected Return

3.6.2. Market Model:

The market model says that the return on a security depends on the return on the market portfolio and the extent of the security's responsiveness as measured by $\beta$. The return also depends on conditions that are unique to the firm. The market model can be graphed as a line fitted to a plot of asset returns against returns on the market portfolio. This relationship is sometimes called the single-index model. The market model, which is used for evaluating the expected return, is mathematically expressed as:

$$ER_{it} = \alpha_i + \beta_i R_{mt} + e_{it}$$

$R_{mt}$ is the market’s rate of return at time $t$ (BSE SENSEX). $\alpha_i$ is the average rate of return the stock would realize in a period with a zero market return. This is the estimate of the intercept of a straight line or alpha coefficient of $i$ security. $\beta_i$ measures the stock sensitivity to the market return which is the slope of a straight line or Beta coefficient of $i$ security. $e_{it}$ is known as residual which is the stock’s return over and above what one would predict presumably due to the event in question. Hence the above equation provides a decomposition of expected return into market and firm specific factors. There is an assumption inherent in the market model that $e_{it}$ is unrelated to the overall market and has an expected value of zero.
3.6.3. Statement of the Problem
In the economic development of nation Capital market play vital role. Many parties are interested in knowing the efficiency of the capital market. If their securities in the market are appropriately priced, the small and medium investors can be motivated to save and invest in the capital market. The information content of events and its diffusion determine the efficiency of the capital market. That is how quickly and correctly security prices reflect these information show the efficiency of the capital market. Many research studies in the developed countries have been conducted to test the efficiency of the capital market with respect to information content of events. Whereas in developing country like India, very few studies have been conducted to test the efficiency of the capital market with respect to internal event announcements, even after these studies have been conducted with different industries with different periods. Hence present study is an attempt to test the efficiency of the Indian capital market with respect to information content of internal events announcement by listed companies of BSE and NSE during the period (Apr 1, 2010 – Mar 31, 2015).

A market is efficient with respect to a particular set of information, if it is impossible to make abnormal profits (other than by chance) by using this set of information to study the firm’s pre and post event. In an efficient market a set of information is fully and immediately reflected in market prices. An event-study analysis considers, what happens in an efficient market when new information is released? And also explains whether the event announcement is significant or insignificant? Are the capital markets semi-strong efficient? To find the answers to the above questions the present study has undertaken by the researcher.

3.6.4. Sampling Plan
The study is based on convenient sampling technique. The researcher has selected the events in various industries based on the occurrence in during period (April 1st 2010 – March 31st 2015). The selected company may have more than one internal event announcements in that period.

3.6.5. Sample Size
The sample size of events taken for the study is 80, of which 60 events from BSE listed companies and other 20 events taken from NSE listed companies. The events chosen for the study are Dividend, Bonus shares, Right issues, Mergers and Acquisitions announcements.
3.6.6. Sample Unit
The sample unit taken for the study is 80 events of BSE & NSE listed companies share prices movement influenced by internal events such as Dividend, Bonus shares, Right issues, Mergers and Acquisitions announcements, has taken as sample unit.

3.7. OBJECTIVES OF THE STUDY

Primary Objective
To evaluate the impact of internal events announcement on security prices in Semi-strong form of capital market efficiency.

Secondary Objective
1. To evaluate the impact of ‘Bonus shares announcement’ on security prices of listed companies in BSE & NSE.
2. To evaluate the impact of ‘Dividend announcement’ on security prices of listed companies in BSE & NSE.
3. To evaluate the impact of ‘Mergers and Acquisitions announcement’ on security prices of listed companies in BSE & NSE.
4. To evaluate the impact of ‘Right issues announcement’ on security prices of listed companies in BSE & NSE.

3.8. HYPOTHESES

Primary Hypothesis
\( H_0 \): Internal event announcement does not fully reflect the security price.

Secondary Hypothesis
\( H_{01} \): ‘Bonus shares announcement’ does not fully reflect the security prices.
\( H_{02} \): ‘Dividend announcement’ does not fully reflect the security prices.
\( H_{03} \): ‘Mergers and Acquisitions announcement’ does not fully reflect the security prices.
\( H_{04} \): ‘Right issues announcement’ does not fully reflect the security prices.

3.9. DATA SOURCES
According to the objectives and hypotheses of the study, the researcher is chosen the stocks listed on the BSE and NSE as the field of analysis. The study on efficiency of Indian capital market, particularly on the leading stock exchange of India BSE and NSE attracts the attention of researchers and analysts in view of recent fluctuations in portfolio investments levels and the global financial confusion.

3.9.1. Primary Data
The data collected for the present study comprises of only secondary source of data. There is no primary data is required.

3.9.2. Secondary Data
In order to fulfill the needs of the study, data is collected from the various secondary sources. The data pertaining to various forms of capital markets and selected security and indices values are collected from the major sources of data being SEBI reports, BSE & NSE reports, company reports and web services such as moneycontrol.com. In addition, secondary data is collected from various magazines, journals, Survey reports and reference books etc.

3.10. STATISTICAL TOOLS APPLIED
The data collected through the secondary sources has been analyzed by using T-test, which is used to understand the impact of event announcement in semi-strong form of capital market efficiency by taking share prices movement of pre and post event study.

**Paired-T-test:** A paired t-test is used to compare two population means where you have two samples in which observations in one sample can be paired with observations in the other sample. Paired-T- test can use Before-and-after event on the same data. In testing the null hypothesis that the populations mean is equal to a specified value \( \mu_0 \), one uses the statistic

\[
t = \frac{\bar{x} - \mu_0}{s / \sqrt{n}}
\]

Where \( \bar{x} \) the sample mean, ‘s’ is the standard deviation of the sample and \( n \) is the sample size. The degrees of freedom used in this test are \( n - 1 \). Although the parent population does not need to be normally distributed, the distribution of the population of sample means, \( \bar{x} \), is assumed to be normal.
Paired-T- test is used for the purpose of testing the influence of an event announcement on the firm’s share prices by using pre and post event information. On the other hand, the test has been administered to study the influence of particular event on share price movement in semi-strong form of capital market efficiency. The question of whether the excess returns around the announcement date are different from zero is answered by estimating the T value for each event. T statistics is used to compare the returns of the stocks 15 days before and 15 days after the event. In this study the researcher has taken 5 % level of significance. The other simple statistical tools applied for the analysis of the data are Intercept, Slope, Mean, Variance, Co-variance, Standard deviation, Coefficient of Correlation, Coefficient of Determination, Graphs, etc.

3.11. LIMITATIONS OF THE STUDY
A research study of the nature could not be carried without any limitation. Hence this research study is limited to 80 events selected from the BSE and NSE listed companies in proportion of 3:1. The study is confined to 15 days of pre event, event date and 15 days of post event historical share price. S&P BSE SENSEX and S&P CNX NIFTY are taken as benchmark to study the firm’s share price movement with indices during 2010 to 2015 (i.e. 01-04-2010 to 31-03-2015). The assumption of event study poses a serious issue because it assumes that there is no other announcement during the period. However, to get all the news and announcement data was not feasible. The patterns are drawn based on share price movement in this period. The researcher considered only internal event information which is publicly available such as announcements of Dividend, Bonus issue, Right issue and Mergers and Acquisitions. Despite the above limitations, the researcher put in all his best efforts to overcome the limitations and completing the study.

3.12. CHAPTER SCHEME
To meet the academic requirements of the dissertation the whole research is presented in nine chapters. To present briefly the contents of each chapter the following paragraphs will help to understand the content of each chapter.

Chapter I
This chapter deals with the introductory part of capital market efficiency in India, meaning, definition, forms of capital markets, and types of returns. In addition, internal events considered for the analysis such as Bonus, Dividend, Rights, Mergers and acquisitions announcements.
Chapter II
This chapter includes an overview of Indian capital market, origin and growth of capital markets, capital markets in other countries. It also includes regulations of capital market in India, Major stock exchanges in India such as BSE and NSE. This chapter also consists of origin of SEBI, powers and functions of SEBI and also SEBI guidelines to stock market.

Chapter III
This chapter includes nature and significance of the study, the review of literature on capital market forms and its efficiency. It also includes the entire synopsis like need for the study, objectives, methodology, period of the study and scope and limitations of the study.

Chapter IV
Impact of Bonus shares announcement on security price performance in BSE and NSE listed companies are dealt as part of objective one comprehensively in this chapter. It ascertains the significance of event announcement in semi-strong form of Indian capital market efficiency.

Chapter V
Internal information i.e. dividend issue announcement influence on the share price of the company before and after implementation of the event is dealt as part of objective two in this chapter. It analyses the significance of dividend announcement on selected firms listed in BSE and NSE.

Chapter VI
The firm’s share price movement on pre and post event implementation in BSE & NSE listed companies is dealt as part of objective three in this chapter. It analyses the significance of Mergers and Acquisitions announcement on selected firms listed in BSE and NSE. It quantifies the firm’s share price movement of pre and post event implementation by taking S&P BSE SENSEX and S&P CNX NIFTY as benchmark.

Chapter VII
The firm’s share price movement with the announcement of right issues in BSE and NSE listed companies is dealt as part of objective four in this chapter. It analyses the significance of right
issue announcement on security returns. It quantifies the firm’s share price movement of pre and post event implementation by taking S&P BSE SENSEX and S&P CNX NIFTY as benchmark.

**Chapter VIII**
This chapter deals with summary of findings given by statistical treatment of collected data and test of significance of the formulated hypothesis. It explains statistically significance of internal event announcement in BSE and NSE listed companies.

**Chapter IX**
This chapter deals with summery of conclusions given by statistical treatment of collected data. It shows the conclusions of internal event announcement impact on share price behavior.

**REFERENCES**


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