

Impact of Dividend Announcements on Stock Returns- An Empirical Study of Indian Companies

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Abstract

The purpose of this study is to shed light on the impact of dividend payout policies on stock performance of 80 large-cap businesses listed on the Bombay Stock Exchange (BSE) from 2004 to 2020. The study used *t*-test and Event Study Methodology with a 25-days event window period, and the results revealed that the dividend distribution policies adopted by the companies had a significant impact on the sample companies' stock returns. In the vast majority of situations, abnormal stock gains began to decline sharply on day '+1'. The results showed that stock trading was at its peak on the day of the public announcement of dividend payments. The study suggests that whatever dividend payout philosophy the sample companies adopt, they should be meticulous in their considerations of an efficient approach in order to maximize their shareholders' wealth while also meeting the needs for additional investments in profitable projects.

Keywords- Dividend announcements, Stock returns, Dividend payout policy, Event study methodology.

1.Introduction

Dividend distribution is one of the most important financial decisions that businesses must make in the twenty-first century, as it affects shareholders' wealth, the company's capital structure, and the company's savings, future investments, and so on. The declaration of a dividend is a significant event that can affect stock values, causing price swings and returns from investments. The declaration of a dividend is a significant event that can have an impact on stock values, resulting in price swings and profits from those variations. Observing the movement of stock prices is a field of financial research that has attracted the interest of many academics, scholars, and investors in recent years. The movement of stock values can be caused by a variety of economic and non-economic events and causes, which are investigated using event-study analysis. The company's dividend announcements, to some extent, highlight the company's liquidity status. A dividend is a portion of a company's net earnings that is delivered to its shareholders. Dividends represent the cost of equity capital to equity owners in a nutshell. Since the formation of joint stock companies and the establishment of stock exchanges, dividend policy has been a topic of discussion in the financial literature. Dividend announcements and payments are regarded excellent news by investors and most analysts, who hold and applaud them; on the other hand, dividend cutbacks and reductions are seen as bad news, implying approaching financial calamity. The "Dividend puzzle" is a term used to describe this inconsistency. One of the most typical activities corporations take to attract new investors is to announce a dividend, whether it's a surprise or an increase from the previous dividend percent.

Company dividend announcements are typically viewed as a sign of financial strength, indicating that the company has a significant amount of excess capital. The current study presents actual evidence of how the market reacts to dividend announcements and how they affect stock performance. The study enables a better insight of the markets' perceptions of dividend payments, allowing for a better knowledge of the dividend distribution policies of chosen Bombay Stock Exchange Large Cap companies. The current research is not just looking for a link between a company's dividends and its stock market success but it is an attempt to study the impact on the basis of the impact on the basis of the impact on the basis of the stock market reactions on the event day, the day of dividend announcements, which is referred to in this paper as the 'actual period,' and

finally, the second fold is the 'consequence period' the days after the announcements before the ex-dividend. Furthermore, this work used the Average Security Returns Variability Test, or ASRV test, to conduct the aforementioned research, which is the most powerful test for capturing rapid time reaction to dividend declarations and distribution as per record date. The paper is broken into sections to achieve this goal. The following section of the study evaluates the literature that has been published thus far on topics related to the one under consideration, followed by a description of the testable data and technique employed. The results and analysis of the findings are presented in the final part, followed by a summary and conclusion.

2. Review of Literature

Several earlier researches have looked at how the stock market reacts to company dividend announcements and found that there are favourable correlations between dividend policy announcement changes and stock price fluctuations.

The semi-strong variant of efficient market hypotheses (EMH), according to Mehndiratta and Gupta, (2010), says that stock prices reflect all publicly available information instantly and accurately. Increased dividends usually indicate larger future earnings, which is viewed as a sign of strength by the investing community. Investors do not acquire much value in the period preceding and on the day of the dividend announcement, according to Neetu and Shuchi, (2010), but they can gain the most value in the post-dividend announcement period. Nonetheless, data suggests that increasing dividends leads to higher positive anomalous returns, supporting the Efficient Market Hypothesis. Bitok et al., (2011) found that daily price changes in the NSE are strongly linked to investor moods, and that their psychology may be a factor in market share price changes. This suggests that investor reaction has a significant impact on the stock price. As a result, stockholder reaction to dividend announcements and anticipation is seen to have the largest impact on stock price. Alayemi and Adebayo, (2013) investigated the relationship between dividend payout and stock prices of some Nigerian food and beverage companies, finding a positive correlation between dividend policy and stock prices, but a negative correlation between market share price and profitability of the sample companies. In this way, Dharmarathne, (2013) looked at firms on the Colombo Stock Exchange and discovered that stock prices react positively in the market, and market investors react favourably to dividend announcements.

MajangaByson's, (2015) research tries to see if there is a direct link between a company's dividends and its stock price, with a focus on the Malawi stock exchange. According to the findings of this study, the dividend valuation methods of calculating stock prices boast a considerable positive association between dividends and stock price. Lindman, (2016) discovered a link between OMX Helsinki Stock Exchange share price volatility and dividend policy metrics such as dividend yield and dividend payout ratio. The analysis revealed that there was a negative link between dividend policy measures (yield and ratio) and share price volatility across the companies studied using Pearson Correlation Coefficient in SPSS. Prakash, (2018) tested five sample companies and discovered that only two of them reacted positively over the mean period, while the other two were significantly different from zero magnitude of return, implying that the market does not react quickly to dividend information and thus cannot lead the market. As a result, the result demonstrates that declaring dividends is standard procedure for any company that cannot change the market's leading trend and fashion.

Miller and Modigliani's (1961) Irrelevance Theory states that dividends are "irrelevant" under ideal capital market assumptions, rational investors, and no taxes or bankruptcy costs. In a perfect capital market, all traders have free and equal access to information, and the market is efficient, meaning no arbitrage is possible. There are no transaction, bankruptcy, or taxation expenses. Investors that are rational prefer more wealth versus less wealth, which implies they don't care if the wealth comes through cash payments or an increase in the market value of their stock. The investing community as a whole has access to the same data, suggesting that everyone is aware of each company's return on investment and future earnings.

Following a study of past research, it was discovered that few writers have taken as many as 80 businesses to watch and measure daily share price reactions to dividend announcements of BSE listed Large Cap businesses by market capitalization. These large cap firms, including Sensex businesses, are financially sound and have international investors such as FIIs and FIs, and their performance has a substantial impact on the Indian capital

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market. There are a few similar studies on BSE businesses, but this one focuses on the impact of actual dividend announcement information on stock performance over a 16-year period utilizing Event Study Methodology.

3. Objectives of the Study

The objective of this study is to investigate impact of dividend announcements on stock performance.

4. Hypothesis

H₀: There is no significant impact of dividend announcements on stock performance of the sample companies.

5. Problem Statement

A company's dividend payout strategy is a critical financial decision that affects how earnings are distributed to shareholders. Many of India's high-performing enterprises need to seize high-profit investment opportunities in order to expand and diversify their products and services, as well as their strategic business units. Interest rates and dividend-related taxes have fluctuated over the years, which is one of the reasons why businesses aim to reinvest the majority of their profits in productive initiatives. Due to interest rate and other concerns, equity share capital has traditionally been seen as a low-cost source of funding for Indian businesses. However, a review of the literature revealed that the majority of Indian shareholders are dividend sensitive, meaning that they prefer to receive dividends as soon as feasible rather than risk capital appreciation in the future. This might be due to fear of risk associated with Indian capital market.

In India's stock market, which is controlled by foreign institutional investors, speculating is frequent (FIIs). Over-speculation in the stock market causes stock values to fluctuate constantly. Indeed, according to investing experts, the Indian stock market is one of the most volatile in the world. Individual investors' investing decisions are influenced by the highly volatile character of the Indian stock market. Investors are undecided about whether to invest based on growing stock prices or historic dividend history of corporations. Some domestic and international institutional investors purchase the maximum number of shares in a few firms, resulting in an artificially inflated share price designed to profit in the near term. Individual investors will often have access to a relatively limited number of shares. Excessive speculating has the negative impact of creating surplus cash for a few enterprises while leaving others with little or no liquidity.

From the year 2000-01 until the present, the Indian financial market has seen hundreds of financial and political frauds, many of which have impacted regular stock market investors and firms in some way. Insider trading is a prevalent unfair behaviour in the secondary market in which traders who are insiders to a company abuse and misuse unpublished sensitive information. This unethical activity is popular in India, where share prices are fraudulently manipulated to benefit insiders. Before investing, some investors consider the company's net profit or dividend history. But the truth is that no single determinant analysis can guarantee a positive dividend yield. The questions that arise at the discretion of the potential investors' are- What are the influencing determinants of dividend payment policies of firms in India? What are the influencing drivers of dividend payout policies of firms in India? Is there any correlation between dividend payment and stock prices? And, if so, to what extent do dividend announcements have an impact on stock returns?

6. Significance of the Study

The current study on the effects of dividend announcements on stock returns will provide useful information to both investors and corporations in making dividend payout decisions, as well as highlight the potential for abnormal returns as a result of such events. Dividend payout policies reflect a company's financial strengths and shortcomings, as well as having specific implications for stock prices. It is important at both the micro and macro levels in businesses. It is critical for investment and financial decision-making at the micro level. At the macro level, corporate dividend payout policy aids in the formulation of appropriate policies for achieving national aggregate savings and their sector-by-sector distribution in accordance with the National Credit Plan's aims (Bhole, 1980). It also plays a key role in fostering a favourable investment atmosphere and influencing the saving pattern in a country's economy in order to achieve rapid economic growth. Dividend distribution has a significant impact on household savings. All of these savings aid in the creation of capital and are of critical relevance to economic planners in the long run. Dividend announcements serve as a statement to shareholders

and the financial community about a company's future income prospects, as well as assisting the company in attracting and retaining the type of buyers who will result in a stable shareholder base and share price. The conclusions of this study will enlighten investors and corporations as to whether dividend announcements have an impact on the value of stock prices and returns. Dividend payment policy is a critical financial choice that is influenced by a variety of factors, and such decisions have an impact on market share values. As a result, the primary goal of this research is to look at the effects of dividend distribution policies on market share price, share volume, total trades, and total stock turnover in a few Indian companies. This study has considered the top BSE-500 index companies by market capitalization, whose shares are mostly traded in the stock market. These companies represent more than twenty major sectors in India that have significant contributions to the GDP growth of the economy.

7. Research Methodology

This section presents the research design, the population, sample frame and procedure of selecting the sample, data collection procedure, research instruments, expected outputs of the study and the economic models used in order to examine the impact of dividend announcements on stock returns.

7.1 Research design: In order to examine the impact of dividend announcements on stock returns, analysis was done through 't'-test, Anova and through the use of Event Study Methodology. The evaluation of the collected data was done by considering the following six variables for the tests:

- 1) Shares high prices
- 2) Shares low prices
- 3) Shares average prices
- 4) Volume of shares
- 5) Number of trades
- 6) Total Turnover

The daily data on dividend payouts, high and low shares prices, average share prices, volume of shares, number of trades and total turnover of shares of the sample companies have been collected for the entire study period in order to analyze if their dividend announcements have impact on these variables. Thus, the collected data is analyzed in a number of closely related operations according to the nature of information by using various tools and techniques of both accounting and statistical for the period 2004 to 2020. The entire data has been fed to the system, the Statistical Package, (SPSS) and MS Excel for estimation of various regression parameters.

7.2 Population and Sample Frame: The sample contains 80 large cap companies taken from BSE-100 index chosen based on their market capitalization. Here, the companies with *consistent flow of profit, continuous dividend payouts, and continuous operation* are considered for the study.

7.3 Data Collection: For the study period of 2004 to 2020, secondary data was acquired from the official website of the Bombay Stock Exchange, www.moneycontrol.com, The Economics Times, annual reports of the companies, research papers, dissertations, books, articles and journals. The articles from Scopus and other highly indexed journals like Australian Business Deans Council have been referred to get insights into the style and procedures of writing and for the techniques of analyses.

7.4 Methods for Empirical Test: Before analysis of data it is necessary to ascertain that the given data sets are normally distributed. Normality testing of data of all the selected variables was done in SPSS through Kolmogorov-Smirnov and Shapiro-Wilk tests hypothesized with p value above alpha value 0.05. Different researchers used different event window time frames, such as 21 days (Apostolos Dasilas, 2011), 41 days (Dar-Hsin, Chen, (2009)), and 71 days (E.B. Del Brio et al, (2002)), according to the literature. It is obvious from these studies that there is no uniformity or standard in the choosing of the event window timeframe. As a result, the researcher chose a total of 25 days of window period in order to fully comprehend and examine the dividend influence on market share prices. The estimation window period was 50 days ahead of the 'day -12' of the event window period. Thus, total number of days considered for the study was 75 days.

In order to examine the impact of dividend announcements on stock returns, daily stock values were obtained to calculate the Actual Returns by using the formula:-

$$R_{it} = (P_{it} - P_{it-1}) / P_{it-1} \quad (1)$$

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Where, R_{it} is the actual rate of return on stock 'i' at day 't'. P_{it} is the value of the stock 'i' on the day 't' and P_{it-1} is the value of the stock 'i' on the day 't-1'. The expected return is estimated by employing the market model parameters-

$$E(R_{it}) = \alpha + \beta \times R_{mt} + \varepsilon \quad (2)$$

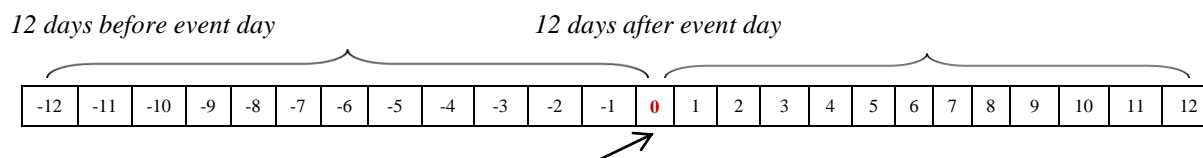
Where, $E(R_{it})$ and R_{mt} are the expected returns of the stock 'i' and of the market index at time 't'. $R_{mt} = (I_t - I_{t-1}) / I_{t-1}$, where I_t is the value for the market index at time 't'; I_{t-1} is the value of the market index at time 't-1'. ' ε ' is the error term with mean and standard deviation which is constant during time period 't'; while α and β are alpha coefficient and beta coefficient of i^{th} security of the equation.

The abnormal return is defined as the difference between actual return and expected normal return on stock 'i' at time 't'. The abnormal return (AR_{it}), has been calculated for 12 days before the event and 12 days after the event in the event window according to the equation as follows:- $AR_{it} = R_{it} - E(R_{it})$. (3)

The average abnormal return (AAR_{it}), has been calculated across the sample companies by using the formula:- $AAR_{it} = (1/N) AR_{it}$; where N is the number of observation. Thus, the abnormal returns are divided by the number of days to find out average abnormal returns. Then, cumulative average abnormal return for the sample companies has been calculated as under:- $CAAR = \sum AAR_{it}$; where 't' is the total time period i.e., 16 years in this study.

8. Findings and Analysis

The t-test was used to conduct the analysis, with the mean changes in stock returns calculated 12 days before and 12 days after the dividend announcements day by the sample companies. In addition, we used an Event Window of 24 days plus the day of dividend announcements, which is referred to as the event day, or day 'zero,' as shown below:



Dividend Announcement Day (Event Day)

The day "0" is the date on which the sample companies announced their dividends. The days from '-1' to '-12' are the days leading up to the dividend announcements, while the days from '+1' to '+12' are the days after the dividend announcement event day. The table below displays the Average Abnormal Return (AAR) and Cumulative Average Abnormal Returns (CAAR) of share prices, volume of shares, number of trades, and total turnover of sample companies in percentage (%), with the event day set to zero, 12 days before the event day, and 12 days after the event day.

Event Time	Shares Prices		Volume of Shares		No. of Trades		Total Turnover	
	AAR	CAAR	AAR	CAAR	AAR	CAAR	AAR	CAAR
-12	0.06	0.06	-2.81	-2.81	-0.37	-0.37	7.2	7.2
-11	-0.03	0.03	-6.78	-9.59	-2.60	-2.97	-14.8	-7.6
-10	0.00	0.03	4.99	-4.60	1.34	-1.62	18.7	11.1
-9	-0.05	-0.02	-4.32	-8.92	-3.17	-4.79	8.7	19.8
-8	-0.17	-0.20	-1.39	-10.32	-2.24	-7.03	-19.5	0.3
-7	-0.07	-0.27	0.50	-9.82	0.65	-6.38	6.9	7.2
-6	0.21	-0.06	3.01	-6.81	-3.72	-10.10	-1.6	5.6
-5	0.01	-0.06	-2.87	-9.68	2.49	-7.61	-8.3	-2.6
-4	0.16	0.10	-3.16	-12.84	3.20	-4.41	4.2	1.6
-3	0.00	0.10	11.09	-1.75	-1.35	-5.77	6.7	8.3
-2	0.15	0.25	-4.78	-6.53	-2.71	-8.47	-0.2	8.1
-1	0.16	0.41	-5.87	-12.40	3.39	-5.08	14.6	22.8

0	0.71	1.12	61.66	49.26	70.65	65.57	47.4	70.1
1	-0.77	0.35	-20.27	28.99	-15.27	50.30	-36.8	33.3
2	-0.08	0.26	-15.00	13.99	-22.74	27.56	14.8	48.1
3	-0.12	0.15	3.62	17.61	-4.78	22.78	-26.0	22.1
4	-0.18	-0.04	-16.01	1.60	-5.71	17.07	-15.8	6.3
5	-0.16	-0.20	2.93	4.53	-4.76	12.31	5.3	11.6
6	-0.11	-0.31	-4.55	-0.01	-3.36	8.94	-0.2	11.3
7	-0.03	-0.34	-1.63	-1.64	0.43	9.38	4.6	15.9
8	-0.06	-0.40	0.15	-1.49	-6.10	3.28	-4.8	11.1
9	-0.06	-0.46	10.47	8.98	9.56	12.83	1.4	12.6
10	0.33	-0.12	-7.37	1.61	-6.47	6.36	-10.9	1.7
11	0.07	-0.05	-3.77	-2.16	-3.56	2.80	-0.6	1.1
12	0.05	0.00	2.16	0.00	-2.80	0.00	-1.1	0.0

(Source: compiled from collected data)

A. Calculation of Abnormal Returns from Shares Prices

The *t*-test analysis of share prices of the sample companies is shown in the table below.

Table No: 1.1 Samples Test (Share Prices)									
		Paired Differences				<i>t</i>	<i>df</i>	<i>Sig.</i>	
		Average Mean	Standard Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
1	BASP - AASP	-4.88	4.852	1.401	-7.95983	-1.79375	-3.482	11	0.005**

(Source: compiled from collected data, measuring at 0.05 = * and 0.01 = ** significance level)

Before Announcement Shares Prices (BASP) and After Announcement Shares Prices (AASP) are the terms used here. As per the above *t*-test table, the statistical result is presented as $t(11) = -3.482, p < 0.01$, meaning to say that due to the average means of market shares prices and as per the direction of *t*-value, it can be stated that there was statistically significant change in the share prices of the sample companies before dividend announcement (average mean of 1037.615 ± standard deviation of 3.055) and after dividend announcement (average mean of 1042.492 ± standard deviation of 3.544) ($p < 0.01$) and thus, the null hypothesis stands rejected leading to the conclusion that the amount of dividend announcement had significant impact ($p=0.005$) on the Share Prices of the sample companies.

• **Event Study Analysis of Shares Prices for the sample companies:**

A bar diagram has been used to display the Average Abnormal Returns (AAR) and Cumulative Average Abnormal Returns (CAAR) for the Shares Prices of sample firms, as shown below.

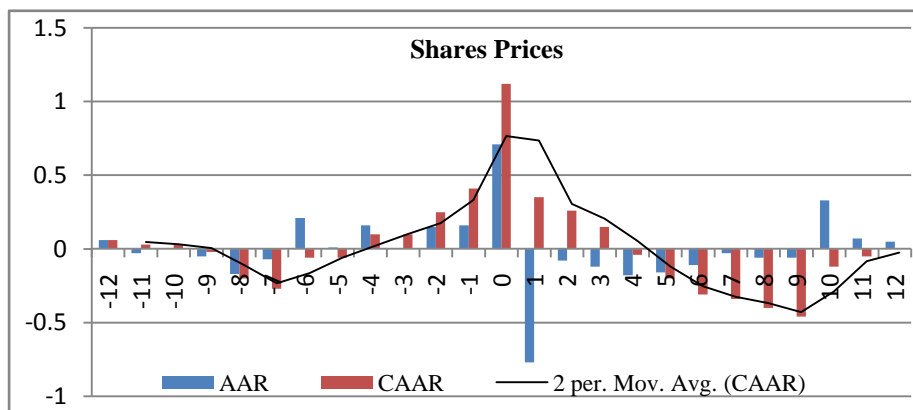


Figure 1.0: Average Abnormal Return and Cumulative Average Abnormal Return of Shares Prices for the sample companies.(Source: Compiled from collected data)

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The AAR and CAAR relevant to Shares Prices of the sample corporations both exhibited a considerable increase on the event day (0), i.e., when the dividend announcements were made by these businesses (AAR climbed 343.75 percent from the day ‘-1’ to the day ‘0’). However, after the sample Large Cap businesses of the BSE 500 index announce a dividend, the AAR and CAAR slope downward. This suggests that the share prices after the dividend announcement day have a negative unusual return. Both the Average Abnormal Returns and the Cumulative Average Abnormal Returns are extremely high on day ‘-2’ and day ‘-1’ of the event window, as shown in the above bar diagram. This indicates that there is a risk of asymmetric information about a company's policies among company insiders. The AAR indicated a negative return on day ‘+1’, and the CAAR showed a decreasing trend on day ‘+2’. The overall findings from the above table and bar diagram show that abnormal returns are particularly high on the day of dividend announcements; this suggests that more shares were bought as a result of the dividend announcement, resulting in an increase in share prices, and therefore greater abnormal returns.

B. Calculation of Abnormal Volume of Shares

The t-test analysis of the sample companies' volume of share is shown in the table below.

Table No: 1.2		Samples Test (Volume of Shares)				t	df	Sig.		
		Paired Differences								
1		BAVS – AAVS	Average Mean	Standard Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
						Lower	Upper			
			-32421.76	36199.53	10449.90	-55421.84	-9421.68	-3.10	11	.010**

(Source: compiled from collected data, measuring at 0.05 = * and 0.01 = ** significance level)

From the t-test analysis table of volume of shares, it can be seen that $t(11) = -3.103$, $p < 0.05$, and due to the means of Volume of Shares and the direction of t- value, it can be stated that there is statistically significant change in the Volume of Shares before dividend announcement (average mean of 186398.056 ± standard deviation of 9125.806) and after dividend announcement (average mean of 218819.816 ± standard deviation of 33247.557), ($p < 0.05$) and therefore the null hypothesis stands rejected. Following the sample firms' dividend announcements, the abnormal volume of shares outstanding surged significantly. The acronyms BAVS and AAVS stand for Before Announcements Volume of Shares and After Announcements Volume of Shares, respectively.

- **Event Study Analysis of Volume of Shares of the sample companies**

A bar diagram is used to represent the Average Abnormal Volume of Shares (AAVS) and Cumulative Average Abnormal Volume of Shares (CAAVS) for the Volume of Shares of the sample companies.

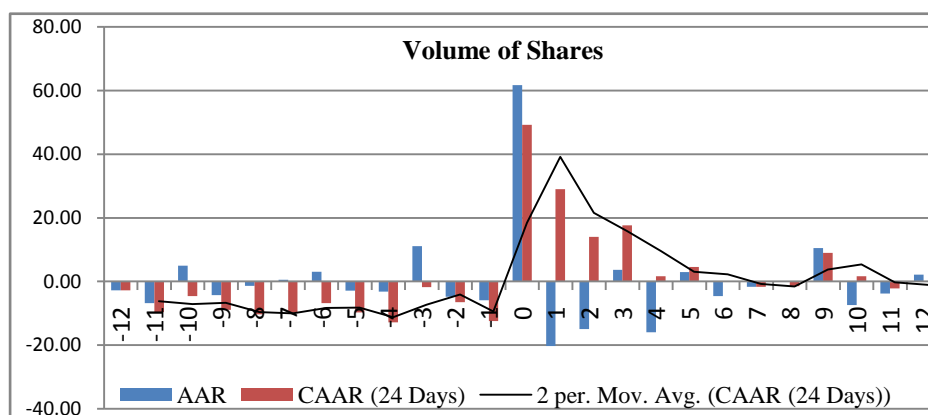


Figure 1.1: Bar diagram showing Average Abnormal Volume of Shares and Cumulative Average Abnormal Volume of Shares (2004 to 2020). (Source: Compiled from collected data)

Both the Average Abnormal Volume of Shares (AAVS) and the Cumulative Average Abnormal Volume of Shares (CAAVS) of Large Cap Companies exhibited a large increase on the event day (0), as shown in the above bar diagram. i.e., when the dividend announcements were made by these companies (AAVS increased 1150.43% from the day ‘-1’ to the event day ‘0’). From the diagram it can also be seen that on the day ‘-2’, and ‘-1’ of the event window, the Average Abnormal Volume and Cumulative Average Abnormal Volume are negative i.e., before the dividend announcements were made. However, the AAVS turns negative and the CAAVS slopes downward after the announcement of dividends by the sample Large Cap companies of BSE sorted by market capitalization.

C. Calculation of Abnormal Number of Trades

The *t*-test analysis output is as under-

		Paired Differences					<i>t</i>	<i>df</i>	<i>Sig.</i>
		Average Mean	Standard Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
1	BANT – AANT	-747.22	769.76	222.21	-1236.301	-258.141	-3.363	11	0.006**

(Source: compiled from collected data, measuring at 0.05 = * and 0.01 = ** significance level)

From table 1.3, the statistical test result is being represented as $t(11) = -3.363, p < 0.05$, which means, due to the means of Number of Trades and the direction of *t*-value, it can be stated that there is statistically significant change in the total Number of Trades before dividend announcement (average mean of 2984.236 ± standard deviation of 122.245) and after dividend announcement (average mean of 3731.456 ± standard deviation of 710.519), with ($p = 0.006$) less than the alpha level and thus the null hypothesis stands rejected in this case.

• **Event Study Analysis of Number of Trades for Large Cap Companies**

The Average Abnormal Number of Trades (AANT) and the Cumulative Average Abnormal Number of Trades (CAANT) for the Number of Trades of Large Cap companies has been represented with the help of a bar diagram as given below.

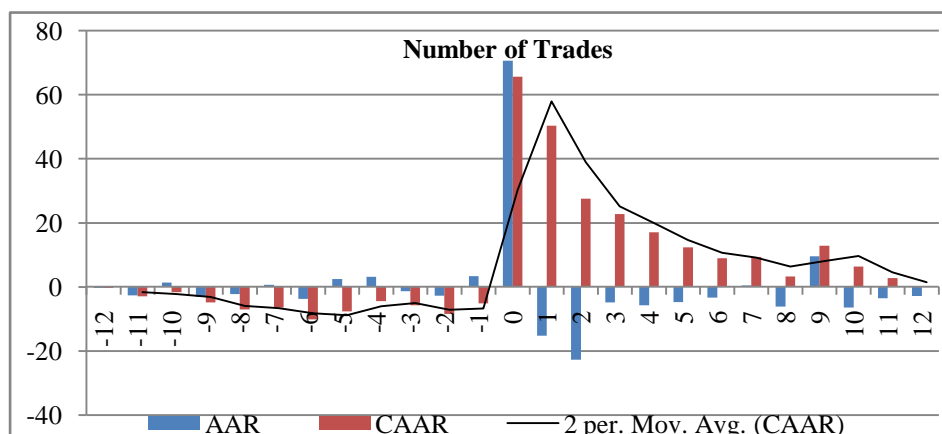


Figure 1.2: Bar diagram showing Average Abnormal Number of Trades and Cumulative Average Abnormal Number of Trades (2004 to 2020). (Source: Compiled from collected data)

Similar to the findings of Volume of Shares, the bar diagram of Number of Trades shows that on the event day, both the Average Abnormal Number of Trades (AANT) and the Cumulative Average Abnormal Number of Trades (CAANT) of the Large Cap businesses increased significantly. On the day of dividend announcements AANT increased to 1984.1% from the day ‘-1’ to the event day ‘0’. It means that on the day of the dividend announcements, the buying and selling of sample companies stocks grew to an extremely high level, with extremely large returns. The diagram also shows that the Average Abnormal Returns and Cumulative Average

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Abnormal Returns are negative on days ‘-2’ and ‘-1’ of the event window, i.e. before the dividend announcements. However, after the sample Large Cap businesses of the BSE 500 index announce dividends, the AANT turns negative and the CAANT slopes downward.

D. Calculation of Abnormal Turnover

The *t*-test analysis output is as under-

Table No: 1.3 Samples Test (Total Turnover)								
	Paired Differences					t	df	Sig.
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
BATT - AATT	-1610167.43	20177647.52	5824785.11	-14430433.03	11210098.16	-.276	11	.787

(Source: compiled from collected data, measuring at 0.05 = * and 0.01 = ** significance level)

From the table 1.3 the *t*-test result can be represented as $t(11) = -0.276, p > 0.05$, which means due to the means of Total Turnover and the direction of *t*-value, it can be stated that there is no statistically significant change in the Total Turnover before dividend announcement (average mean of 67619256.0342 ± standard deviation of 6274938.20906) and after dividend announcement (average mean of 69229423.4683 ± standard deviation of 18527394.49539), ($p > 0.05$) and thus the null hypothesis is accepted, indicating that there was no major differences in the returns of total turnover before and after the dividend announcements. Before Announcements Total Turnover is abbreviated as BATT, and After Announcements Total Turnover is abbreviated as AATT.

- **Event Study Analysis of Total Turnover for Sample Companies**

With the use of a bar diagram, the Average Abnormal Returns (AAR) and Cumulative Average Abnormal Returns (CAAR) of Turnover of Large Cap businesses have been displayed.

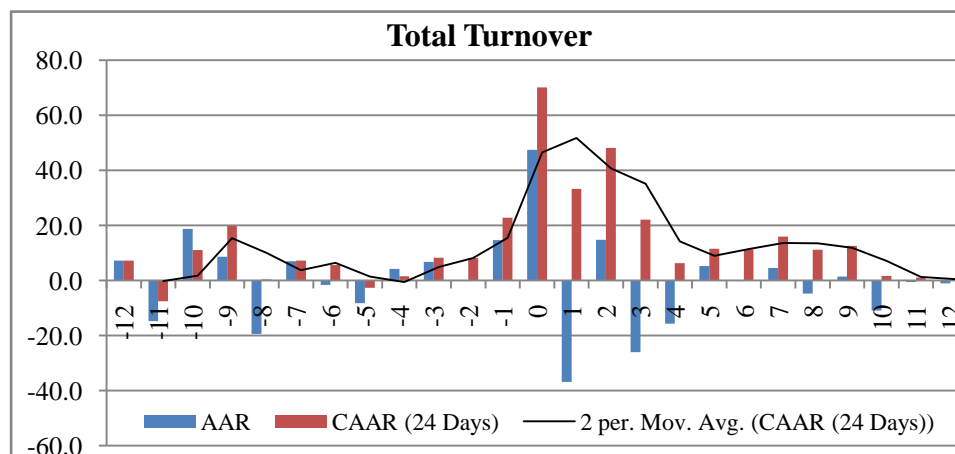


Figure 1.3: Bar diagram showing Total Turnover Average Abnormal Return and Cumulative Average Abnormal Return (2004 to 2020). (Source: Compiled from collected data)

The above bar diagram shows that the Average Abnormal Returns (AAR) and the Cumulative Average Abnormal Returns (CAAR) experienced a significant increase on the day of dividend announcements made by these companies (AAR increased 224.7 % from the day ‘-1’ to the event day ‘0’). The graph also shows that following the event day, the Average Abnormal Returns is negative, and the Cumulative Average Abnormal Returns has collapsed. This suggests that the sample companies' dividend announcements had a considerable positive impact on Total Turnover returns.

9. Conclusion, Suggestions and Policy Implications

The main conclusion of this research is that dividend announcements made by the sample large cap businesses have a significant impact on stock returns. Except in the case of total turnover, *t*-test analysis revealed significant differences in stock returns before and after dividend announcements. However, using event analysis methods, it was discovered that on the day of dividend announcements, stock returns were quite positive and significantly high in every variable undertaken in this study, including shares prices, volume of shares, number of share, and total turnover. It can be concluded that from the Event Study Analysis of Shares Prices for sample companies (*Figure 1.0*), both the AAR and CAAR increased significantly on the event day (0), i.e., when the companies announced their dividends (AAR increased 343.75 percent from day '-1' to the day '0'). It can also be seen that the Average Abnormal Returns and Cumulative Abnormal Returns are notably high on days '-2' and on day '-1' of the event window i.e., one or two days before dividend announcement day. These indicate that the insiders of the corporations might have used the asymmetric and confidential information about the companies' dividend payout decisions and might have purchased their own company shares using different accounts and through others account. While the AAR exhibited a negative return on day '+1', the CAAR also showed a downward trend on day '+2', indicating that the dividend announcement had a significant impact on share prices only on the event day. It also highlights that the market gave quick reaction to dividend news bringing abnormal returns, which turns negative on the very day after the news.

The Event Study Analysis revealed a large increase in the volume of shares of sample firms (*Figure 1.1*) on the event day (0), i.e., when these businesses announced dividends (AAVS = 1150.43 percent rise from day '-1' day '0'). The diagram also shows that the Average Abnormal Volume of Shares and Cumulative Average Abnormal Volume of Shares are negative on days '-2' and '-1' of the event window, i.e., before the dividend announcements. However, after the sample Large Cap businesses of the BSE 500 index announce dividends, the AAVS turns positive and the CAAVS slopes upward. It suggests that investors acquired more shares, particularly on the day these example companies announced dividends. The sample firms' Number of Trades (*Figure 1.2*) showed a similar trend (AANT grew to 1984.1 percent from the day '-1' to the day '0'). In other words, it can be concluded that the dividend announcements by the sample companies increased the total number of shares and the number of buying and selling transactions.

In a similar manner, the Average Abnormal Returns (AAR) and Cumulative Average Abnormal Returns (CAAR) of turnover pertaining to sample companies increased significantly on the day of dividend announcements (where AAR increased to 224.7 percent from the day '-1' to the day '0'), as shown in the bar diagram of Total Turnover. The graph also shows that following the event day, the Average Abnormal Returns is negative, and the Cumulative Average Abnormal Returns has plummeted. This suggests that the sample companies' dividend announcements had a strong positive impact on Total Turnover. As a result, an overall conclusion can be taken that abnormal returns from stocks increased significantly on the day of the dividend announcement, while the market was normal throughout the pre-event and post-event days of the event window. In the vast majority of situations, anomalous stock gains began to decline sharply on day '+1'. It is obvious from this that stock trading was at its peak on the day of the event, i.e. the day of the public announcement of dividend payments.

The investors should not only opt for large cap companies, but can go for emerging mid and small cap companies too. The growing companies' share values might increase even faster than that of some matured companies. This in one way could reduce the risk related to stock investment. For instance, the share value of a small company like Aarti Drugs was about Rs.17 per share in the year 2000, which has turned to Rs. 470 per share in the year 2018 (about 2664.7% increment in share value in 18 years). The stock traders (especially the intraday traders) base their purchase and sell of shares on some financial news such as dividend announcements, merger and acquisition, Government declarations etc. Among them dividend announcements is one such event where an investor can earn share price differences as well as dividend amount. In nutshell, we can conclude that the findings of this research showed tremendous increase of abnormal returns and abnormal volume and number of shares on the event day of dividend announcements by the sample companies from Bombay Stock Exchange.

Impact of Dividend Announcements on Stock Returns- An Empirical Study of Indian Companies

Whatever ideology the sample companies adopt in dividend payout decision-making, the study suggests and recommends that they be diligent in their thoughts on common algorithms in order to maximise their shareholders' wealth while also meeting the needs for further investments in viable ventures such as the introduction of new product mix and product line, among other considerations. Moreover, SEBI and other Government authorities need to create stronger regulations for the shareholders against the fear of risk from financial scams, frauds, and motivate them constantly. The majority of citizens in emerging economies like India are economically insecure, which is one of the reasons why people with a moderate income level are hesitant to engage in stock markets. The Indian Government should take more steps in order to encourage smaller Indian companies to expand their operations in overseas markets and to get listed in top stock markets like NYSE and NASDAQ. This will enable them to raise funds from overseas capital market and gradually set up more strategic business units in those markets. The Indian multinational companies saw business upturns after trading in NYSE and NASDAQ and flourished better than other domestic companies. For instances, Dr. Reddy's Laboratories, listed in the year 2001, HDFC Bank listed in the year 1995, ICICI Bank listed in the year 1999, Axis Bank, Infosys, Eros STX Global Corporation and others (www.m.dailyhunt.in; www.topforeigstocks.com).

Normally, consumers seek out investing opportunities that are both quick and risk-free. Investing in risk-free mutual funds, for example, may not be good option for everyone because the returns are low and slow. Long-term stock market investments, on the other hand also carry chances of loss. This could be an important research topic (using primary data) where the respondents can be asked about the times they experienced loss, and whether investors are ready to take risks in emerging economy like India and in other South East Asian Countries.

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Appendix

The tables below depict the mean and standard deviation of Stock returns before and after the event day for the sample companies using paired samples *t*-test.

Paired Samples Statistics (Shares Prices)					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	BAHP	1037.6152	12	3.05514	0.88194
	AAHP	1042.4920	12	3.54366	1.02297

Paired Samples Statistics (Volume of Shares)					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	BAVS	186398.0559	12	9125.80559	2634.39316
	AAVS	218819.8162	12	33247.55750	9597.74314

Paired Samples Statistics (No. of Trades)					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	BANT	2984.2358	12	122.24533	35.28919
	AANT	3731.4564	12	710.51954	205.10932

Paired Samples Statistics (Total Turnover)					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	BATT	67619256.0342	12	6274938.20906	1811418.63208
	AATT	69229423.4683	12	18527394.49539	5348398.09965