

## **A STUDY ON THE IMPACT OF SPECIAL DIVIDENDS ON SHARE PRICE IN INDIAN MARKETS**

**Sandeep Jella,**

Research Scholar,

Department of Business Management

Osmania University.

sandeepjella10@gmail.com

**Prof. V. Shekhar**

Professor, Department of Business

Management,

UCC&BM, OU

shesas@yahoo.co.in

### **Abstract:**

*Many participants in the stock market attempted to gain profits from studying share price movements. As a result, the stock market attracts many researchers and scholars who have shown interest in it. Hence, there have been numerous studies in this field of research. One specific kind of research which has been in the spotlight for many years is the abnormal returns around specific event dates. This study focuses on the impact of special dividend announcements on stock prices in the Indian Stock market. An event study-based methodology has been employed to investigate the price fluctuations around the announcement dates of 21 identified special dividend announcements. The market model has been used in this study.*

**Keywords:** Market model; Special dividends; announcements; Abnormal returns; Event-study; Stock market; Price movements. Signalling theory.

### **Introduction**

Dividends are distributions of a company's earnings paid to its shareholders. Dividend payout is a part of the company's overall strategy and results from the firm's financial performance. When companies declare dividends, they essentially say they believe in their strength and future growth enough to share some of that strength with investors, who help fund that.

A dividend announcement by a company, typically the board of directors of a public company, signals to outside observers that the company feels its prospects are good enough to warrant paying out some of its profits to investors. It is not just the cash dividend per share but also the dividend increase or decrease that impacts stock prices. The market likes companies with stable dividends, as they indicate that management thinks it can consistently earn more money than it can reinvest in the business.

According to earlier studies, the news of dividend increases causes stock prices to rise, whereas the announcement of dividend payout reductions causes prices to fall. However, much research contends that a company's dividend announcement will not result in abnormal returns. Therefore, whether a company's payouts increase shareholder value is still a concern.

The rationale behind choosing special dividends is that they are non-periodic and not anticipated by the market. Therefore, special dividends have a surprise element in them. This surprise element makes the study about special dividends more significant. This study examines how stock prices respond when special dividends are announced.

### **Review of Literature:**

Dividends can be classified into three categories. They are final dividends, interim dividends, and special dividends. A final dividend is the one that a company's board of directors announces after its annual financial reports. The payment of earnings to shareholders before the conclusion of the fiscal year is known as an interim dividend. The board of directors tends to be restrictive in finalizing the quantity of any interim dividends declared because the total quantity of money accessible for distribution to shareholders is uncertain until the final results are available for the whole year. As a result, the final dividend is typically higher than any interim dividends that may have been issued during the fiscal year. A one-time transfer of firm assets, often in the form of cash, to shareholders is known as a special dividend.

In an ideal scenario (free of restrictions and taxes), paying dividends has no impact on the share price (Porterfield, 1959). However, in practice, changing the dividend policy would frequently be accompanied by changes in the market value of the stocks. According to Gordon (1959) and Walter (1956), the present value of all future dividends will affect the stock's current price. According to Ross (1977), who developed the dividend signaling hypothesis, companies that considerably raise their dividend payments see a substantial rise in their share values. In contrast, those that drastically decrease or miss dividend payments see a corresponding decline in share prices. Ogden (1995) found a significant positive association between disbursing out dividends and stock price.

Contrarily, many studies have found a negative association between dividend announcements and the stock's market value (Loughlin, 1983). For example, according to Sealy (1987), the market receives little to no information from dividend announcements made on the Johannesburg Stock Exchange, raising doubts about the significance of signaling in the dividend phenomenon. Additionally, Uddin and Chowdhury (2005) investigated dividend announcements for the Stock Exchange of Dhaka. They discovered that there were no statistically significant abnormal returns and that the payout had no impact on stock prices.

Nevertheless, subsequent research on this subject still needs to be revised. For example, Chatterjee and Dutta (2017) likewise discovered that the declaration of cash dividends yielded no abnormal returns. Legenzova (2017) also discovered that the NASDAQ OMX Baltic market disbursed dividends between 2010 and 2005 did not exhibit any substantial abnormal returns. Studies that back the signaling idea, however, also exist. Frensidy et al. (2016) found supporting evidence for the signaling hypothesis from the Indonesian stock market.

Even though theoretically good literature on the effects of dividends already exists, why companies continue to provide dividends remains a mystery. Further research is required to shed light on this question. Therefore, this study investigates the announcement of special dividends on companies from the National stock exchange for 2015-2018.

### **Objective:**

The objective of this research is to study the announcement effect of dividends on the stock price.

**Hypotheses:** The following are the hypotheses to be tested to examine the effect of dividend announcements on the stock price.

H01: The shareholders cannot earn abnormal returns post-dividend announcements.

H02: The cumulative abnormal returns are close to zero

**Sample:**

Nifty 100 companies that announced special dividends from 2015 to 2018 have been selected. Based on the conditions mentioned, special dividend announcements have been identified for our study.

**Data:**

In this study, there are three kinds of data sets. The first data set was information about the special dividend announcements. This data contains the dates on which the Board of Directors convenes, authorizes, and declares the Company's Dividend. The second data set includes the adjusted closing prices of the selected equities within the time frame of this study. The study uses daily-adjusted closing prices since it is believed that they accurately reflect the opinion of the market on the price of the stock at the close of trade. The third data set has the prices of the Nifty 100 Index from the NSE. All the data has been collected from CMIE ProwessIQ.

Sample Companies with Dividend Announcement Dates are as follows.

S.no	Company Name	Date of Announcement
1	Sanofi India Ltd.	20-02-2015
2	Hindustan Zinc Ltd.	19-10-2015
3	Siemens Ltd.	27-11-2015
4	Havells India Ltd.	03-02-2016
5	Sanofi India Ltd.	04-02-2016
6	Hindustan Zinc Ltd.	30-03-2016
7	I T C Ltd.	20-05-2016
8	Tech Mahindra Ltd.	24-05-2016
9	Siemens Ltd.	05-08-2016
10	Shree Cement Ltd.	30-01-2017
11	Bharat Petroleum Corpn. Ltd.	10-02-2017
12	Hindustan Zinc Ltd.	22-03-2017
13	Bharat Petroleum Corpn. Ltd.	23-03-2017
14	I C I C I Prudential Life Insurance Co. Ltd.	25-04-2017
15	Tata Communications Ltd.	04-05-2017
16	Procter & Gamble Hygiene & Health Care Ltd.	05-05-2017

17	Pfizer Ltd.	06-05-2017
18	Asian Paints Ltd.	11-05-2017
19	Infosys Ltd.	13-04-2018
20	I C I C I Prudential Life Insurance Co. Ltd.	24-04-2018
21	Dabur India Ltd.	01-05-2018

**Research Methodology:**

This study tests the stock price responses to dividend announcements using a two-stage methodology. The estimate of a parameter, such as beta, is done in the first step using the ex-post returns on stocks and the market index and the predicted returns on each stock using the market model. Then, these estimated parameters are utilized to compute abnormal returns around the event day in the second stage. The dividend announcement date is referred to in this research as day 0 or the event day. The trading day that immediately follows the event day is regarded as an event day if the event day is non-trading. The 20 trading days leading up to the dividend announcement date, or days -20 to -1, are the pre-announcement period. The post-announcement period, or days +1 to +20, consists of the first 20 trading days following the dividend announcement. Therefore, we have chosen a timeframe of 41 trading days for the event (including day 0 as the event day). The expected abnormal returns (AARs) are averaged across stocks to determine average abnormal returns. Average abnormal returns are then accumulated over time to determine cumulative average abnormal returns (CAARs). The market model is employed in this study to calculate the returns on stocks affected by market movement. Sharpe created and proposed the market model.

The market model has been extensively used in earlier research to calculate the estimated return on a particular asset given the return on the market and the two market model parameters (alpha and beta of the security). The market model is founded on the idea that the primary factor influencing stock returns is the market component, which is reflected in the market model as a parameter.

The expected or normal return of a given security is given by the market model. The regression equation is given by

$$E(R_{it}) = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \text{ for } i=1,2,\dots N$$

Where,

$E(R_{it})$  = Expected return on security ‘i’ during the period ‘t’

$\alpha_i$  = Intercept of a straight-line or alpha coefficient of  $i^{th}$  security

$\beta_i$  = Slope of a straight-line or beta coefficient of  $i^{th}$  security

$R_{mt}$  = Expected return on the index

$\varepsilon_{it}$  = Error term with a mean zero and a standard deviation which is a constant during period 't.'

The expected return is calculated using the following:

$$\text{Expected return} = E(R_{it}) = \alpha_i + \beta_i R_{mt}$$

The abnormal returns are calculated using the following equation:

$$AR_{it} = e_{it} = R_{it} - E(R_{it})$$

Where,

$R_{it}$  = Actual returns

Daily returns/actual returns are determined as below

$$R_{jt} = \ln (P_{jt} / P_{jt-1})$$

where,

$R_{jt}$  is the daily return on security 'j' on day 't.'

$P_{jt}$  is the daily adjusted price of the security 'j' at the end of period 't.'

$P_{jt-1}$  is the daily adjusted price of the security 'j' at the end of period 't-1'.

$$R_{mt} = \ln (I_t / I_{t-1})$$

where,

$R_{mt}$  is the daily return on the market index on day 't'.  $I_t$  and  $I_{t-1}$  is the closing index value on day 't' and 't-1', respectively.

Abnormal returns indicate the portion of the return that is not expected and, as a result, estimate the change in the firm's share price on that day due to the special dividend announcement.

Abnormal returns are averaged across firms to produce  $AAR_t$  for day 't' using the following formula,

$$AAR_{jt} = \sum_{j=1}^N AR_{jt} / N$$

where, N is the number of events in the sample.

The cumulative average abnormal return denotes the average total effect of the event in the event window. CAAR is given by,

$$CAAR_{jt} = \sum_{t=-20}^{t=20} AAR_{jt}$$

The cumulative average abnormal return sheds light on the typical price movement of assets during the event window. The AARs and CAARs should be close to zero if markets are efficient. AAR significance is evaluated using a parametric t-test. The null hypothesis that there were no significant abnormal returns following the event day was tested using the 5% significance level with the appropriate degree of freedom. Inferences are drawn based on the outcomes of t values on AARs for the event window.

The statistic is given by

$$t = AAR_t / \sigma_{AAR_t} \text{ (Standard error of AAR)}$$

where

AAR = average abnormal return,

$\sigma_{AAR_t}$  = standard error of average abnormal return.

The standard error is calculated by using the following formula.

$$SE = \sigma / \sqrt{n}$$

Where, S.E = standard error

$\sigma$  = standard deviation

n = number of observations

The statistical significance of cumulative average abnormal returns (CAARs) in various event periods are assessed by using the following model:

$$t = CAAR_{jt} / \text{Standard Error}$$

where, Standard Error = Standard Deviation/Sq Rt (Count of events)

$$\text{Therefore, } t = CAAR_{jt} / (\sigma_{AAR_{jt}}) / \text{Sq Rt (T)}$$

$$\text{Or } t = CAAR_{jt} / (\sigma_{AAR_{jt}}) * T^{1/2}$$

Analysis and Interpretation:

Results from the event research method, which computes each company's abnormal return using the Sharpe Model to analyze informational efficiency, are provided in this article. Abnormal Return (AAR) and Cumulative Average Abnormal Returns (CAAR) centric to the dividend announcement date were derived for a portfolio of sample stocks during the research period to examine the prevalence of market efficiency. The same was condensed for

a 41-day event window that included 20 days before and after the announcement of the special dividend, respectively.

Day	AAR	Day	AAR	Day	AAR	Day	AAR
-20	-0.00017	-10	-0.00025	1	0.005065	11	-0.00373
-19	-0.00302	-9	-0.00146	2	0.002273	12	0.000639
-18	0.000292	-8	0.000216	3	-0.00363	13	-0.00481
-17	-0.00213	-7	-0.00261	4	0.001586	14	-0.00012
-16	0.051631	-6	0.001781	5	-0.0072	15	-0.00546
-15	0.000698	-5	-0.0167	6	-0.00087	16	-0.00245
-14	0	-4	0.003301	7	-0.00416	17	0.003502
-13	0.000752	-3	0.001111	8	-0.0004	18	-0.00033
-12	-0.00559	-2	-0.00064	9	-0.0071	19	0.00161
-11	0.001848	-1	0.003699	10	0.005042	20	-0.00514
		<b>0</b>	<b>-0.00612</b>				

**Table: Average Abnormal returns for each day in the event window.**

We can observe from the above table that the abnormal return on event day was significantly less.

<u>CAR Pre and Post Event</u>			
		t-statistic	Significance
CAR 2 days Pre-event	0.0031	1.077626	No
CAR 2 days post-event	0.0073	2.587881	Yes
CAR 5-day Pre-event	-0.009	-1.30207	No
CAR 5-day post-event	-0.002	-0.26805	No
CAR Pre-event in Event Window (20 Days)	0.0327	1.1535	No
CAR Post-event in Event Window (20 Days)	-0.026	-0.90555	No
<u>Window CAR</u>			
2 days [-2, 2]	0.0043	0.602356	No
5 days [-5, 5]	-0.017	-1.10635	No
Event Window [-20, 20]	0.0009	0.015603	No

**Table: t-statistics of various periods.**

**Findings:**

The table above shows the t-statistic of various periods. The table above shows the t-statistics of various periods. The various periods which have been considered are a two-day period of pre- and post-announcement dates, a five-day period of pre and post-announcement dates, pre

and post-announcement dates in the event window, two day window period which includes the event day, two days pre and posts the announcement date, similarly 5-day window announcements and complete Event window period.

From the table, we can infer that only the two days post period has a significant abnormal return while all other periods have no significant abnormal return. The hypothesis "shareholders cannot earn abnormal returns post-dividend announcements" is rejected for a 2-day period. For all other periods, this hypothesis failed to be rejected hence shareholders cannot earn abnormal returns post-dividend announcements. The second hypothesis failed to be rejected, and hence cumulative abnormal returns are close to zero.

### **Conclusion:**

According to the findings, an investor can earn abnormal return post two days' special dividend announcement only. There is no sign of abnormal returns in any other periods considered. A special dividend is a one-time event, so investors do not take that as a positive signal from managers about the company's performance. Therefore, this study is not in accordance with the signaling theory.

### **References:**

1. Porterfield, J. T. (1959). *Dividends, dilution, and delusion*. *Harvard Business Review*, 37(6), 56-61.
2. Miller, M. H., & Modigliani, F. (1961). *Dividend policy, growth, and the valuation of shares*. *the Journal of Business*, 34(4), 411-433.
3. Gordon, M. J. (1959). *Dividends, earnings, and stock prices*. *The review of economics and statistics*, 99-105.
4. Walter, J. E. (1956). *Dividend policies and common stock prices*. *the Journal of Finance*, 11(1), 29-41.
5. Brennan, M. J. (1970). *Taxes, market valuation and corporate financial policy*. *National tax journal*, 23(4), 417-427.
6. Litzenberger, R. H., & Ramaswamy, K. (1979). *The effect of personal taxes and dividends on capital asset prices: Theory and empirical evidence*. *Journal of financial economics*, 7(2), 163-195.
7. Ross, S. A. (1977). *The determination of financial structure: the incentive-signalling approach*. *The bell journal of economics*, 23-40.
8. Ogden, J. P. (1994). *A dividend payment effect in stock returns*. *Financial Review*, 29(3), 345-369.
9. Stevens, J. L., & Jose, M. L. (1992). *The effects of dividend payout, stability, and smoothing on firm value*. *Journal of Accounting, Auditing & Finance*, 7(2), 195-212.
10. Kato, K., & Loewenstein, U. (1995). *The ex-dividend-day behavior of stock prices: The case of Japan*. *The Review of Financial Studies*, 8(3), 817-847.
11. Sealy, N. R., & Knight, R. F. (1987). *Dividend policy, share price and return: A study on the Johannesburg Stock Exchange*. *Investment Analysts Journal*, 16(29), 33-47.
12. Uddin, M. H., & Chowdhury, G. M. (2005). *Effect of dividend announcement on shareholders' value: Evidence from Dhaka Stock Exchange*. *Journal of business research*, 7(1), 61-72.
13. Chatterjee, C., & Dutta, P. (2017). *Price behaviour around dividend announcements in the Indian equity market in the existence of corporate dividend tax*. *Global Business Review*, 18(2), 402-415.
14. Legenzova, R., Jurakovaitė, O., & Galinskaitė, A. (2017). *The Analysis Of Dividend Announcement Impact On Stock Prices Of Baltic Companies*. *Central European Business Review*, 6(1).
15. Chaabouni, I. (2017). *Impact of dividend announcement on stock return: A study on listed companies in the Saudi Arabia financial markets*. *Business and management*, 9(1), 1-13.





16. *Frensidy, B., & Setyawan, I. R. (2016). Price Formation Around Cum Date Dividend Announcement: Empirical Evidence in Indonesian Stock Exchange. Ignatius Roni, Price Formation Around Cum Date Dividend Announcement: Empirical Evidence in Indonesian Stock Exchange (January 6, 2016).*
17. *Brown, S. J., & Warner, J. B. (1985). Using daily stock returns: The case of event studies. Journal of financial economics, 14(1), 3-31.*