Stock Market Reaction to Dividend Announcement: An Empirical Study on Reliance Industries Limited

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Abstract

Stock markets are more sensitive to market information whether it is positive or negative it will significantly impact on stock price. The aim of this paper is to analyze stock price on corporate action that is particularly dividend announcement that effect on stock price. Thus, this study attempts to analyse impact on dividend announcement on stock price of Reliance Industries Limited (RIL). For the purpose of study secondary data was collected from Bombay Stock Exchange (BSE). Data are collected for 30 prior to dividend announcement and 30 days after dividend announcement and shorter window of 5 days are also analyzed. The study employs various tools such as Event study Methodology, Market Model and t test. This research paper concludes that the stock market reacts to dividend announcement in the post announcement period.

Index Term - Dividend, Event Study, Market Model, Abnormal Return

I. Introduction

The stock market is a marketplace where companies' shares are bought and sold. The stock market usually fluctuates for various reasons; one such reason is corporate action. It is an activity or event that significantly influences the company's stakeholders such as shareholders and bondholders. These actions include the following dividend announcement, Bonus share, Stock splits etc,. Dividend is income of the shareholders' investment. It is usually distributed to the shareholders from the profit of the concern. Companies which pay consistent dividend will maintain a good image and trust among the public as it indicates success of the concern. Reliance Industries Limited (RIL) is an Indian multinational company and one of the largest private sector companies in India, which announces dividend to its shareholders on 25th April 2025. This study attempted to analyse whether dividend announcement has any impact on stock price on both pre and post announcement date.

II. Statement of Problem

In business, every corporate action influences the market value of share, Dividend is one such action which conveys information about a company's future financial outlook to investors thereby influencing the market by shifting its market price. Dividend are regular payments made by the company to its shareholders. Dividend serves as an announcement of success of the concern. As per signaling theory announcement of dividend influences the market value of share. Therefore, the study is undertaken to study whether the announcement of dividend has any impact on stock price.

III. Review of Literature

Karthik Bhimavarapu (2022) conducted research on "Empirical Evidence on the Effect of Dividend Announcement on Stock Return". This research paper analyzed 55 Indian listed companies for the period of 20 days event window. Event study methodology has been used. From the finding of the study author concludes that the market reacts to the announcement of dividend.

Lakshmi Rawat , Mary Jessica Velugu (2016) analyzed paper on "Effect of Ex Dividend Date on Stock Returns of Nifty Stocks in India". In this study they used event study methodology to analyse daily abnormal return for various event windows such as 61 days, 31 days and 11 days. The sample of 50 Nifty companies selected for the period 2011-2015. t-test and wilcoxon signed rank test are employed to test the significance of Average Abnormal Return. Finally they conclude that there are very high actual returns during the pre-announcement period.

Thanwarat Suwanna (2012) conducted a study on" Impact of Dividend Announcement on Stock Return "In this study the author selected 60 Thai Companies listed in Stock Exchange of Thailand during the period 2005-2010. Tools used in the study are Event study methodology. The author concludes that Abnormal return and Cumulative return are statistically significant impact on share price.

IV. Objectives of the study

1. To investigate stock price of RIL company on its pre announcement of dividend.
2. To examine stock price of RIL company on its post announcement of dividend.

V. Hypotheses

H0: There is no abnormal return on the pre and post announcement date of dividend.
H1: There is an abnormal return on the pre and post announcement date of dividend.

VI. Methodology

This research is based on secondary data. The data for this study is collected from the website of Bombay Stock Exchange. The various tools and techniques used in the study are Event study, Market Model, t-test.

6.1 Event study Methodology

Event study methodology is a tool to analyse the market reaction of company share on a particular event or activity of the firm. The activity includes dividend announcement, Bonus share, Stock splits etc., In this study event study methodology used to analyse stock price performance. In this study, the period of 60 days has been taken, that is 30 days of pre announcement period and 30 days of post announcement period. Day zero was taken as the event date that is the announcement of the dividend. Share Trading days prior to the dividend announcement were numbered as -1, -2 and so on. The event days after dividend announcement were numbered as +1, +2 and so on. The time window chosen in this study was -30 to +30 and other shorter windows - 5 to +5 are also analyzed.

6.2 Market Model

Market Model is used in event studies to calculate expected return and finally abnormal return in the event window. The formula to calculate expected return is

$$Rit = ai + bi (Rmt) + eit \qquad (1)$$

Where Rit = return on security i in period t, ai = intercept (called alpha), bi = beta for security i, Rmt = return on the market in period t, eit = error term on security i in period t,

The excess return or Abnormal return is calculated using, Abnormal return= Actual stock return-Expected stock Return. i.e. XRt= Rt-E(Rt).

The cumulative Abnormal Return (CAR) of dividend announcement in a 30 day (-30, +30) window was estimated by summation of the abnormal return in the window. t-test of 5% level of significance is used to test hypotheses.

VII. Result and Discussion

The table 1 shows the result of stock return for -5 to + 5 event window, it reveals that the market reacts to dividend announcement in the post announcement period (1, 2,...5 days) that is stock return has increased from -0. 122920908 (event day) 0 to 5.265182108 (event 1st day). The cumulative return also increased from 2.898316716 to 14.66927992.

The table 2 shows the result of abnormal return and t statistics for event period of -30 to +30, it reveals that abnormal return around the dividend announcement has showed positive result around 2 days of post announcement. The t test on Abnormal return and cumulative return also raised in the post announcement period. Hence null hypothesis is rejected alternative hypothesis is accepted there is significant abnormal return during post announcement period around 2 days as it clearly reveals that market has reacted to dividend announcement, after announcement of dividend in shorter event days.

Table 1: Stock Return and Cumulative return of 5 days window

Day	Date	Stock return	Cumulative return
-5	17-04-2025	2.898316716	2.898316716
-4	21-04-2025	1.671178063	4.569494783
-3	22-04-2025	-0.378130185	4.191364598
-2	23-04-2025	0.693287889	4.884652487
-1	24-04-2025	0.13462574	5.019278227
0	25-04-2025	-0.122920908	4.896357319
1	28-04-2025	5.265182108	10.16153943
2	29-04-2025	2.323712094	12.48525152
3	30-04-2025	0.574876812	13.06012833
4	02-05-2025	0.965669045	14.02579738
5	05-05-2025	0.643482542	14.66927992

Source: Calculated

Table 2: Abnormal return and t statistics for 30 days Pre and Post Dividend Announcement

Day	Date	Abnormal Return	Cumulative return	t statistics	Hypothesis significant/ insignificant level
-30	07-03-2025	3.09596102	3.09596102	3.210846722	Significant
-29	10-03-2025	-0.628829102	2.467131919	-0.652163851	Insignificant
-28	11-03-2025	0.662987999	3.130119918	0.687590325	Insignificant
-27	12-03-2025	0.752345649	3.882465567	0.780263881	Insignificant
-26	13-03-2025	-0.513254172	3.369211395	-0.532300137	Insignificant
-25	17-03-2025	-1.205259576	2.163951818	-1.249984652	Insignificant
-24	18-03-2025	-2.024580887	0.139370931	-2.099709544	Insignificant
-23	19-03-2025	0.387016346	0.526387278	0.401377846	Insignificant
-22	20-03-2025	0.168281837	0.694669115	0.174526482	Insignificant

-21	21-0-2025	-0.336997588	0.357671526	-0.34950298	Insignificant
-20	24-03-2025	0.19923873	0.556910256	0.206632131	Insignificant
-19	25-03-2025	-1.375598006	-0.81868775	-1.426644043	Insignificant
-18	26-03-2025	-0.000856962	-0.819544711	-0.000888762	Insignificant
-17	27-03-2025	-0.124858879	-0.944403591	-0.129492174	Insignificant
-16	28-03-2025	-0.075957902	-1.020361493	-0.078776567	Insignificant
-15	01-04-2025	0.244758355	-0.775603138	0.25384091	Insignificant
-14	02-04-2025	-1.126127915	-1.901731052	-1.167916553	Insignificant
-13	03-04-2025	0.194493868	-1.707237185	0.201711195	Insignificant
-12	04-04-2025	-2.180725126	-3.887962311	-2.261648023	Insignificant
-11	07-04-2025	0.181199581	-3.70676273	0.18792358	Insignificant
-10	08-04-2025	-0.463999589	-4.170762319	-0.481217802	Insignificant
-9	09-04-2025	0.772612131	-3.398150188	0.801282416	Insignificant
-8	11-04-2025	0.654046014	-2.744104175	0.678316518	Insignificant
-7	15-04-2025	-0.88142945	-3.625533624	-0.914137756	Insignificant
-6	16-04-2025	-0.675790233	-4.301323858	-0.700867628	Insignificant
-5	17-04-2025	0.492879008	-3.80844485	0.511168886	Insignificant
-4	21-04-2025	0.289290251	-3.519154599	0.300025306	Insignificant
-3	22-04-2025	-0.755850753	-4.275005352	-0.783899053	Insignificant
-2	23-04-2025	-0.177363194	-4.452368546	-0.183944832	Insignificant
-1	24-04-2025	0.4970233	-3.955345246	0.515466966	Insignificant
0	25-04-2025	0.645168201	-3.310177045	0.669109265	Insignificant
1	28-04-2025	3.670290819	0.360113774	3.806488895***	**Significant**
2	29-04-2025	2.120565255	2.480679029	2.199255725***	**Significant**
3	30-04-2025	0.542080762	3.022759791	0.562196431	Insignificant
4	02-05-2025	0.484257969	3.50701776	0.502227936	Insignificant
5	05-05-2025	0.111985107	3.619002867	0.116140679	Insignificant
6	06-05-2025	-0.610724444	3.008278424	-0.63338736	Insignificant
7	07-05-2025	-1.278962412	1.729316011	-1.326422472	Insignificant
8	08-05-2025	0.418243859	2.14755987	0.433764157	Insignificant
9	09-05-2025	-0.73974167	1.4078182	-0.76719219	Insignificant
10	12-05-2025	-0.239984834	1.167833366	-0.248890252	Insignificant

11	13-05-2025	0.312950574	1.480783939	0.324563623	Insignificant
12	14-05-2025	0.203535837	1.684319776	0.211088696	Insignificant
13	15-05-2025	0.237576571	1.921896347	0.246392622	Insignificant
14	16-05-2025	0.377590324	2.299486671	0.391602041	Insignificant
15	19-05-2025	-0.73915328	1.560333391	-0.766581966	Insignificant
16	20-05-2025	0.017511203	1.577844594	0.018161013	Insignificant
17	21-05-2025	-0.442488507	1.135356087	-0.458908482	Insignificant
18	22-05-2025	-0.53530749	0.600048596	-0.555171816	Insignificant
19	23-05-2025	-0.008843718	0.591204879	-0.009171893	Insignificant
20	26-05-2025	-0.216442138	0.374762741	-0.224473927	Insignificant
21	27-05-2025	-0.070191646	0.304571095	-0.072796336	Insignificant
22	28-05-2025	-0.50062722	-0.196056125	-0.519204621	Insignificant
23	29-05-2025	-0.121716063	-0.317772188	-0.126232733	Insignificant
24	30-05-2025	0.401853301	0.084081113	0.416765375	Insignificant
25	02-06-2025	-0.435725946	-0.351644833	-0.451894975	Insignificant
26	03-06-2025	0.218835954	-0.13280888	0.226956573	Insignificant
27	04-06-2025	0.746411245	0.613602365	0.774109261	Insignificant
28	05-06-2025	0.621368387	1.234970752	0.644426281	Insignificant
29	06-06-2025	-1.11747038	0.117500372	-1.158937752	Insignificant
30	09-06-2025	-0.117500209	0.0000001626	-0.121860436	Insignificant

Source: Calculated

VIII. Conclusion

The result obtained from the study reveals that stock return and abnormal return have an upward trend in the post announcement period. Hence the study concludes that the market reacts to dividend announcement.

References

1.Suwanna, Thanwarat " Impacts of Dividend Announcement on Stock Return", Procedia - Social and Behavioral Science, Volume 40, 2012, PP 721-725, ISSN 1877-0428, https://doi.org/10.1016/j.sbspro.2012.03.255.

2.Bhimavarapu, Karthik, Empirical Evidence on the Effect of Dividend Announcement on Stock Return (October 9, 2022).

3.Rawat, Lakshmi & Velugu, Mary (2016) " Effect of Ex Dividend Date on Stock Returns of Nifty Stocks in India, PEOPLE: International Journal of Social Science, Vol-2, Issue 1, pp. 236-248, ISSN 2454-5899, DOI- http://dx.doi.org/10.20319/ pijss. 2016.s21.236248.

4.Adhikari, K. P. (2024). Market Reaction to Dividend Announcement: Evidence from Nepalese Stock Market. Journal of Emerging Management Studies, 1(2), 210–228. https://doi.org/10.3126/jems.v1i2.71532