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DIVIDEND ANNOUNCEMENT'S BEHAVIORAL EFFECT ON STOCK MARKET OF INDIAN ENERGY SECTOR

Ritika Chittora*
Durga Singh**
Dr. Shurveer S. Bhanawat ***

Abstract

In Modern times, stock markets are considered to be an important part of financial markets. Stock Market has been vital and one of the most vibrant components of the financial market in India. The stock market of the country reflects the internal health and stability of an economy that could be measured through the performance of its indices. For the smooth functioning of the stock market and analyzing its movement, it is important to determine the Behavioral biases affecting financial markets. In reference to check the behavioral biases impact on the financial market, this Paper examines the effect of dividend Announcement on the stock market of the Indian energy sector. The dividend announcement impacts on the market price of the shares; the market will react positively if the dividend is up to the expectation level of the equity investors. At the same time, if the dividend announcement is not the expectation level of the shareholders, the market reaction will in a bear trend for that particular scrip. Dividend announcements are one of the most important events and the studies on stock market reaction. For conducting this study, all listed companies in the Energy sector under Nifty 50 has been used as a sample. The secondary data has been using for analysis the dividend announcement impact on the market price of a share in the Indian energy sector on pre and post period basis. The result of the study shows that dividend announcement affects the market price of a share in the Indian energy sector.

Keywords: *Dividend Announcement, Behavioral Biases, Energy Sector.*

Introduction

To earn in the stock market, knowledge related to it is very important. Performance of stock market is reflected by a number of Behavioral factors related to the country's economy, industrial positions, companies' performance and factors related globe. If an investor wants smart movement in the stock market he is required to understand the effect of major behavioral biases in the stock market. Before understanding the effect of major factors it is important to aware of these major factors. In this paper, an attempt is on the stock market reaction to dividend announcements in India in the light of various previous studies conducted in various developed countries of the world such as the USA, the UK, Australia, etc.

* Research Scholar (ICSSR, Doctoral Fellow).

** Research Scholar, Accountancy and Business Statistics Department, Mohanlal Sukhadia University, Udaipur, Rajasthan, India.

*** Professor, Accountancy and Business Statistics Department, Mohanlal Sukhadia University, Udaipur, Rajasthan, India

Review of Literature

Mehndiratta & Gupta(2010) analyzed to contribute positively to the understanding of the behavior of Indian share prices in relation to the dividend announcements. Dividend announcements usually are considered as the positive signal to the shareholders and its positive impact on the share prices is also expected. A standard event study methodology was adopted in this paper to examine the price reactions of 15 listed companies surrounding sixty days of the announcement dates.

Mohamad Jais (2009) investigated the effect of dividend Announcements on stock market reaction in Kuala Lumpur Stock Exchange. They concluded dividend increase announcements were greeted positively by investors, while there were some evidences suggested investors react negatively prior to dividend decrease announcements.

McCluskey et al. (2006) investigated the manner in which the Irish stock market responded to company announcements about dividend payments. In particular, the paper examined whether the predictions of the 'signalling' hypothesis hold or if more recent findings (which suggest that there is little value-relevant information contained in dividend changes) better characterize the Irish market. Data were obtained for a sample of 50 companies whose shares were traded on the Dublin Stock Exchange from 1987 to 2001. Abnormal returns were then calculated for the whole sample and for various dividend–earnings change combinations. The results suggest that dividend announcements are important for Irish investors, but earnings signals appear to have a stronger impact on equity values.

Docking and Koch (2005) suggested that stock market reaction to dividend announcement is sensitive to the direction or volatility of the stock market. Agency theory provides an alternative explanation of the market reaction to dividend announcements.

Travlos et al (2001) examined the stock market reaction to announcements of cash dividend increases and bonus issues (stock dividends) in the emerging stock market of Cyprus. Both events elicit significantly positive abnormal returns, in line with evidence from developed stock markets. This study contends that special characteristics of the Cyprus stock market delimit applicability of most traditional explanations for cash and stock dividends in favor of an information-signaling explanation. The empirical results are generally inconsistent with these contentions.

Fukuda (2000) studied the stock markets react positively to dividend increase and dividend initiation announcements. However, the magnitude of the reaction was smaller than the studied of the developed market and the post operating performance of the firms contradicted the predictions of the theory.

Lonie et al.(1996) investigated the stock market response to interactive dividend announcements by a sample of 620 UK companies over the period January to June 1991 and examined the possibility that the response to a dividend announcement may be influenced by whether the dividend is being increased, decreased or left unchanged.

Healy and Palepu (1988) find similar evidence on the firms that initiate and omit their dividend. The magnitude of negative stock market reaction is more severe on dividend omission firms.

Asquith and Mullins (1986) investigated the first dividend announcement in the corporate history or dividend initiation after the 10-year interval and find that the stock market reacts stronger to this type of extreme dividend announcements.

Aharony and Swary (1980) find that the market still reacts positively to the announcements even after controlling the contemporaneous earnings announcements.

Objectives

To analyze the impact of dividend announcement information on the market price of the share in Indian stock market.

Hypothesis

To analyze the impact of dividend announcement information on the market price of share following hypothesis has prepared:

H_{01}: There is no significant difference between pre and post average share market price of Indian Energy Sector. Here it is assumed that due to declaration of dividend share price is not fluctuating.

Sample Design

Nifty 50 Index has been selected for the present study because NIFTY 50 is the flagship index on the National Stock Exchange of India Ltd. (NSE). The Index tracks the behavior of a portfolio of blue-chip companies, the largest and most liquid Indian securities. It includes 50 of the approximately 1600 companies listed on the NSE, captures approximately 65% of its float-adjusted market capitalization and is a true reflection of the Indian stock market. In order to determine the sample size for the present research work, the Market price share (MPS) of 50 companies of Nifty 50 has been examined. After analyzing the size of 50 companies, in terms of float-adjusted market capitalization is represented by percentage weight**. It is found that different sectors shows their percentage i.e financial services (36.45%), Energy (15.87%), IT (15.05%), Consumer goods (10.60%), automobile (7.51%), metals (4.51%), construction(3.60%), Pharma (3.05%), Cement and cement product (1.92%), Telecom (1.54%), services (0.90%), media and entertainment (0.56%) and fertilizers and pesticides(0.56%) etc.** Highest percentage represented by the financial services sector (36.45%) but in the present study the Energy sector has chosen which has represented the second highest(15.87%). The reason behind the choice of the energy sector is that the researcher wants to analyze only manufacturing company's dividend decision. Energy sector represents 8 companies i.e. Reliance Industries Ltd.(RIL), National Thermal Power Corporation Ltd (NTPCL), Oil and Natural Gas Corporation Ltd.(ONGCL), Power Grid Corporation of India Ltd.(PGCIL), Indian Oil Corporation Ltd.(IOCL), Bharat Petroleum Corporation Ltd.(BPCL), Gas Authority of India Ltd.(GAIL), Hindustan Petroleum Corporation Ltd.(HPCL).

Period of Study

The study based on only secondary data which has been collected from the website of NSE India. (www.niftyindices.com).The data was collected from the period of 1 April 2017 to 30 September 2018 (18 months). For this study, data has been collected of the average market price of a share of pre and post dividend announcement dates.

Statistical Analysis

In order to check the significant impact of Dividend Announcement on the average market price of shares applied statistical techniques i.e. Averages and t paired test.

Analysis and Discussion

In order to examine the impact of dividend announcement on market price share of listed sample companies of the energy sector, pre and post period of 10 days from the date of dividend announcement has been considered and respective average market price has been calculated. Since the date of declaration of dividend is different in different sample companies, hence individual companies' data have been analyzed separately. In order to identify whether such impact is significant or not, t paired test has been administered.

Table 1: 10 Days Average of Market Price of Share Pre and Post Period of Dividend Announcement

S. No.	Name of Company	Date of Dividend announcement	Average market price of share Before announcement of dividend	Average market price of share after announcement of dividend	P value (t paired test)	Action on H_0
1.	**Reliance Industries Ltd.(RIL)**	25-04-2017	**1384.688**	**1369.903**	0.269982577	Accepted
		27-04-2018	**946.694**	**972.324**	0.000108714	Rejected
2.	**National Thermal power corporation limited(NTPCL)**	01.06.2017	**157.993**	**159.386**	0.061266	Accepted
		19.01.2018	**174.576**	**170.494**	6.17E-05	Rejected
		25.05.2018	**167.846**	**164.234**	1.03E-05	Rejected
3.	**Oil and Natural Gas Corporation Ltd.(ONGCL)**	01-06-2017	**177.067**	**170.976**	6.47561E-06	Rejected
		18-10-2017	**170.981**	**181.703**	0.002859969	Rejected
		19-02-2018	**188.862**	**188.201**	0.447126769	Accepted
		30-05-2018	**180.084**	**172.832**	0.025862943	Rejected
4.	**Power Grid Corporation of India Ltd.(PGCIL)**	31-05-2017	**204.221**	**206.781**	0.07541286	Accepted
		23-01-2018	**197.216**	**194.498**	0.000193958	Rejected
		29-05-2018	**212.554**	**201.432**	8.95804E-06	Rejected
5.	**Indian Oil Corporation Ltd.(IOCL)**	26-05-2017	**436.871**	**421.7**	0.00071704	Rejected
		30-01-2018	**387.203**	**398.872**	0.106477829	Accepted
		22-05-2018	**166.32**	**167.843**	0.543115931	Accepted
6.	**Bharat Petroleum Corporation Ltd.(BPCL)**	30-05-2017	**718.248**	**720.306**	0.817663547	Accepted
		09-02-2018	**481.166**	**452.017**	0.000116823	Rejected
		29-05-2018	**389.16**	**408.885**	0.003417157	Rejected
7.	**Gas Authority of India Ltd.(GAIL)**	23-05-2017	**408.793**	**401.914**	0.090123476	Accepted
		05-01-2018	**502.359**	**488.05**	0.000595694	Rejected
		24-05-2018	**333.457**	**336.559**	0.447691466	Accepted
8.	**Hindustan Petroleum Corporation Ltd.(HPCL)**	30-05-2017	**525.93**	**543.318**	0.018645283	Rejected
		09-02-2018	**388.268**	**385.913**	0.475154177	Accepted
		22-05-2018	**313.506**	**304.472**	0.002651269	Rejected

Source: www.niftyindices.com and own calculation through MS-Excel-2007

The above table No.1 showing 8 companies average market prices for different dividend announcement dates on pre and post basis. After intensive observation of this table, it is found that the highest average market price reported by Reliance industries. The major reason behind for it is reliance industries limited has represented the higher percentage (58.63%) in Energy sector Nifty 50 index. Now individually sample units have been analyzed in the following sections.

Reliance Industries Ltd. (RIL)

On analyzing dividend announcement impact on market price share of RIL Company, it is found that on 25 April 2017 the Null Hypothesis (H_0) is accepted while on 27 April 2018 the H_0 is rejected. Although slightly average market price share of RIL Company is decreased after the dividend declaration on 25 April 2017 yet the difference is not significant as it is evident by $H_{0.}$ It means there is no impact of dividend declaration on average market price share of RIL Company and interesting fact is found on 27 April 2018 after the announcement of dividend declaration average market price share is significantly increased and the H_0 is rejected. It means there is a positive impact of dividend announcement on average market price share of RIL Company. The visible difference exists on the average market price of share before and after the announcement of dividend declaration, which is due to any major reasons but not due to sampling fluctuation. So, the RIL Company may be suggested either to avoid a declaration of a dividend or it has to identify the reasons why share is decreased even though dividend declaration. It means either shareholder, market players are not influenced by dividend declaration or other significant factor influencing the average market price of a share, now it is a matter of research to identify such reason.

National Thermal Power Corporation Limited (NTPCL)

On analyzing dividend declaration impact on share price of NTPCL Company, it is found that on 1 June 2017 the Null Hypothesis (H_0) is accepted while on 19 January 2018 and 25 May 2018 the H_0 are rejected. Although slightly average market price share of NTPCL Company is increased after the announcement of dividend on 1 June 2017 yet the difference is not significant as it is evident by H_0. It means there is no impact of dividend declaration on average market price share of NTPCL Company and interesting fact is found on 19 January 2018 and 25 May 2018 after the declaration of dividend average market price share are significantly decreased and the H_0 is also rejected. It means there is a negative impact of dividend declaration on average market price share of NTPCL Company. The visible difference exists on the average market price of share before and after the announcement of dividend, which is due to any major reasons but not due to sampling fluctuation. Dividend declaration is also major event prices are decrease rather than increase.

So, the NTPCL Company may be suggested either to avoid a declaration of a dividend or it has to identify the reasons why share is decreased even though the dividend is declared. It means either shareholder/market players are not influenced by dividend declaration or other significant factors are influencing the average market price of a share, now it is a matter of research to identify such reasons.

Oil and Natural Gas Corporation Ltd. (ONGCL)

On analyzing dividend announcement impact on market price share of ONGCL Company, it is found that on 19 February 2018 the Null Hypothesis (H_0) is accepted while on 1 June 2017, 18 October 2017 and 30 May 2018 the H_0 are rejected. Although slightly average market price share of ONGCL Company is decreased after the dividend declaration on 19 February 2018 yet the difference is not significant as it is evident by H_0. It means there is no impact of dividend declaration on average market price share ONGCL of Company and interesting fact is found on 1 June 2017 and 30 May 2018 after the announcement of dividend declaration average market price share are significantly decreased and the H_0 are rejected. It means there is a negative impact of dividend declaration on average market price share of ONGCL Company and another fact is found on 18 October 2017 after the announcement of dividend declaration average market price share are significantly increased and the H_0 is rejected. It means there is a positive impact of dividend announcement on average market price share of ONGCL. The visible difference exists on the average market price of share before and after the announcement of dividend declaration, which is due to any major reasons but not due to sampling fluctuation. So, the ONGCL Company may be suggested either to avoid a declaration of a dividend or it has to identify the reasons why share is decreased even though dividend declaration. It means either shareholder, market players are not influenced by dividend declaration or other significant factor influencing the average market price of a share, now it is a matter of research to identify such reason.

Power Grid Corporation of India Ltd. (PGCIL)

On analyzing dividend declaration impact on market price share of PGCIL Company, it is found that on 31 May 2017 Null Hypothesis (H_0) is accepted while on 23 January 2018 and 29 May 2018 the H_0 are rejected. Although the slightly average market price share of PGCIL

Company is increased after the dividend declaration on 31 May 2017 yet the difference is not significant as it is evident by H_0. It means there is no impact of dividend declaration on average market price share of PGCIL Company and interesting fact is found on 23 January 2018 and 29 May 2018 after the announcement of dividend declaration average market price share are significantly decreased and the H_0 are rejected. It means there is a negative impact of dividend declaration on average market price share of PGCIL Company. The visible difference exists on the average market price of share before and after the dividend declaration, which is due to any major reasons but not due to sampling fluctuation. So, the PGCIL Company may be suggested either to avoid a declaration of a dividend or it has to identify the reasons why share is decreased even though dividend declaration. It means either shareholder, market players are not influenced by dividend declaration or other significant factor influencing the average market price of a share, now it is a matter of research to identify such reason.

Indian Oil Corporation Ltd. (IOCL)

On analyzing dividend announcement impact on market price share of IOCL Company, it is found that on 30 January 2018 and 22 May 2018 both Null Hypothesis (H_0) are accepted while on 26 May 2017 the H_0 is rejected. Although slightly average market price share of IOCL Company is increased after the announcement of dividend on 30 January 2018 and 22 May 2018 yet the difference is not significant as it is evident by H_0. It means there is no impact of dividend declaration on average market price share IOCL of Company and interesting fact is found on 26 May 2017 after the announcement of dividend average market price share is significantly decreased and the H_0 is rejected. It means there is a negative impact of dividend declaration announcement on average market price share of IOC Company. The visible difference exists on the average market price of share before and after the announcement of dividend, which is due to any major reasons but not due to sampling fluctuation. So, the IOC Company may be suggested either to avoid a declaration of a dividend or it has to identify the reasons why share is decreased even though dividend declaration. It means either shareholder, market players are not influenced by dividend declaration or other significant factor influencing the average market price of a share, now it is a matter of research to identify such reason.

Bharat Petroleum Corporation Ltd. (BPCL)

On analyzing dividend declaration announcement impact on market price share of BPCL Company, it is found that on 30 May 2017 Null Hypothesis (H_0) is accepted while on 9 February 2018 and 29 May 2018 the H_0 are rejected. Although the slightly average market price share of BPCL Company is increased after the announcement of dividend declaration on 30 May 2017 yet the difference is not significant as it is evident by H_0. It means there is no impact of dividend declaration on average market price share of BPCL Company and interesting fact is found on 9 February 2018 after the announcement of dividend average market price share is significantly decreased and the H_0 is rejected. It means there is a negative impact of dividend announcement on average market price share of BPCL Company and another fact is found on 29 May 2018 after the dividend declaration average market price share is significantly increased and the H_0 is rejected. It means there is a positive impact of dividend announcement on average market price share of BPCL Company. The visible difference exists on the average market price of share before and after the announcement of a dividend, which is due to any major reasons but not due to sampling fluctuation. So, the BPCL Company may be suggested either to avoid a declaration of a dividend or it has to identify the reasons why share is decreased even though dividend declaration. It means either shareholder, market players are not influenced by dividend declaration or other significant factor influencing the average market price of a share, now it is a matter of research to identify such reason.

Gas Authority of India Ltd. (GAIL)

On analyzing dividend declaration impact on market price share of GAIL company, it is found that on 23 May 2017 and 24 May 2018 the Null Hypothesis (H_0) are accepted while on 5 January 2018 the H_0 is rejected. Although slightly average market price share of GAIL Company is decreased after the announcement of dividend declaration on 23 May 2017 and on 24 May 2018 average market price share of GAIL Company is increased yet the difference is not significant as it is evident by H_0. It means there is no impact of dividend declaration announcement on average market price share of GAIL Company and interesting fact is found on 5 January 2018 after the announcement of dividend declaration average market price share is significantly decreased and the H_0 is rejected. It means there is a negative impact of dividend declaration announcement on average market price share of GAIL Company. The visible difference exists on the average market price of share before and after the announcement of dividend declaration, which is due to any major reasons but not due to sampling fluctuation. So, the GAIL Company may be suggested either to avoid a declaration of a dividend or it has to identify the reasons why share is decreased even though dividend declaration. It means either shareholder, market players are not influenced by dividend declaration or other significant factor influencing the average market price of a share, now it is a matter of research to identify such reason.

Hindustan Petroleum Corporation Ltd. (HPCL)

On analyzing dividend declaration announcement impact on market price share of HPCL Company, it is found that on 9 February 2018 the Null Hypothesis (H_0) is accepted while on 30 May 2017 and 22 May 2018 the H_0 are rejected. Although slightly average market price share of HPCL Company is decreased after the announcement of dividend declaration on 9 February 2018 yet the difference is not significant as it is evident by H_0. It means there is no impact of dividend declaration announcement on average market price share of HPCL Company and interesting fact is found on 30 May 2017 after the announcement of dividend declaration average market price share is significantly increased and the H_0 is rejected. It means there is a positive impact of dividend declaration on average market price share of HPCL Company and also found on 22 May 2018 after the announcement of dividend average market price share is significantly decreased and the H_0 is rejected. It means there is a negative impact of dividend declaration on market price share of HPCL Company. The visible difference exists on the average market price of share before and after the dividend declaration, which is due to any major reasons but not due to sampling fluctuation. So, the HPCL Company may be suggested either to avoid a declaration of a dividend or it has to identify the reasons why share is decreased even though dividend declaration. It means either shareholder, market players are not influenced by dividend declaration or other significant factor influencing the average market price of a share, now it is a matter of research to identify such reason.

Overall Analysis of Energy Sector

In order to examine the impact of dividend announcement on market price share of all listed sample companies of the energy sector, pre and post on May(2017), January (2018), May (2018) month's dividend announcement has been considered and the respective average market price of all companies has been calculated. In order to identify whether such impact is significant or not, t paired test has been administered.

Table 2: Average market price of share and Summary of results of t test and action on Null Hypothesis of overall Energy sector listed in Nifty 50 index

Months of Dividend Announcement	Average market price of Pre period of dividend announcement	Average market price of Post period of dividend announcement	P value	Action H_0
May,2017	501.72	499.28	0.3473	Accepted
January,2018	406.05	405.48	0.7754	Accepted
May,2018	339.79	342.99	0.0250	Rejected

Source: own calculation through MS-Excel-2007

The above table No.2 consisting overall Energy sector listed in the Nifty 50 index average market prices for different dividend announcement months on pre and post period. After intensive observation of this table, It is found that On May 2017 and January 2018 Null Hypothesis (H_0) is accepted, Although slightly average market price share of overall Energy sector is decreased after the announcement of dividend declaration on May 2017 and January 2018 yet difference is not significant as it is evident by H_0. It means there is no impact of dividend declaration announcement on average market price share of the overall Energy sector. On May 2018 after the announcement of dividend the average market price share are significantly increased and the H_0 is rejected. It means there is a positive impact of dividend declaration announcement on average market price share of the overall energy sector.

Concluding Remark

Through the Nifty 50 Stock Exchange, Indices was collected of those companies which belong to the Energy sector. The total of 8 companies selected for the study which are as follows Reliance Industries Ltd., National Thermal Power Corporation Limited, Oil and Natural Gas Corporation Ltd., Power Grid Corporation of India Ltd., Indian Oil Corporation Ltd., Bharat Petroleum Corporation Ltd., GAIL (India) Ltd., Hindustan Petroleum Corporation Ltd. Total 24 times are declared dividend during the period of 18 months i.e. from 1 April 2017 to 30 September 2018 by all 8 energy sector companies. Dividend consists of both final and interim dividend. On all 24 times, average Market value of shares has been found of before and after 10 days of dividend declared. After the collection of Data, a Comparative study has been done on both dataset of Pre and Post period after analyzing and Test of significance is concluded that 14 times H_0 rejected which consist 60% and 10 times H_0 accepted which consist 40%.

Finally, results concluded that there is a significant difference between the average market price of shares before and after the announcement of a dividend. Because 14 times H_0 are rejected which consist 60%. There is a no significant difference between the average market price of shares before and after the announcement of the dividend because 10 times H_0 accepted which consist 40%.

References

~ Aharony, J. and I. Swary. 1980. Quarterly dividend and earnings announcements and stockholders returns: an empirical analysis. Journal of Finance 35(1): 1–12.

~ Asquith, P. and D.W. Mullins. 1986. Signaling with dividends, stock repurchases and equity issues. Financial Management 15(3): 27–44.

~ Docking, D.S. and P.D. Koch. 2005. Sensitivity of investor reaction to market direction and volatility: Dividend change announcements. Journal of Financial Research 28(1): 21–40.

~ Fukuda, A. 2000. Dividend changes and earnings performance in Japan. Pacific-Basin Finance Journal 8: 53–66.

~ Healy, P. and K. Palepu. 1988. Earnings information conveyed by dividend initiations and omissions. Journal of Financial Economics 21(2): 149–175.

~ Jais Mohamad, Abdul Karim, Bakri , Funaoka, Kenta and Abidin , Azlan Zainol.2009. Dividend Announcements and Stock Market Reaction. Munich Personal RePEc Archive 19779(12).

~ Lonie, A. A., G. Abeyratna, D. M. Power and C. D. Sinclair. 1996. The stock market reaction to dividend announcements: A UK study of complex market signals. Journal of Economic Studies 23(1): 32–52.

~ McCluskey, T., B. M. Burton, D. M. Power and C. D. Sinclair. 2006. Evidence on the Irish stock markets reaction to dividend announcements. Applied Financial Economics 16(8): 617–628.

~ Neetu Mehndiratta & Shuchi Gupta. 2010. Impact of dividend announcement on stock prices. International Journal of Information Technology and Knowledge Management 2 (2):405-410.

~ Travlos, N., L. Trigeorgis and N.Vafeas. 2001. Shareholder wealth effects of dividend policy changes in an emerging stock market: The case of Cyprus. Multinational Finance Journal 5(2): 87–112.

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