

Dividend Announcement and its Impact on Stock Prices of Indian Automobile Companies

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ABSTRACT

The academic fraternity differs in its view as to whether corporate announcements such as Dividend, Bonus Declaration, and Stock Split etc. have an impact on the value of a company. The current study was undertaken with the purpose of understanding one such corporate announcement viz. Stock Dividend declaration and its impact on the stock prices of 16 auto companies constituting S&P BSE Auto Index. BSE listed Auto companies having announced dividends over the period April 2012 through October 2016 were selected as sample data. The impact of Dividend announcement effect on stock prices was gauged by examining the daily returns of these stocks using paired sample t-test. The results of paired t-test show that there are significant differences in average number of transactions before and after announcement during the period 2012 to 2016 for the companies like Bharat Forge, Bosch, MRF, Maruti Suzuki, Motherson Sumi, TVS Motor and Tata Motors DVR.

1. Introduction

Dividend policies are the regulations and guidelines that a company develops and implements as the means of arranging and making dividend payments to the shareholders. It determines the proportions of the profit that are to be distributed among the shareholders as dividend and the portions that are to be retained for future applications (investments) in the business operations. Establishing a specific dividend policy is to the advantage of both the company and the shareholders. In order to make sure that the policy is workable, a company should develop a viable policy and then run this policy through a number of test scenarios in order to determine what impact the dividend policy would have on the operations and the share prices of the company.

When the shareholders wealth is maximised the value of the firm gets maximised. For long, the corporate dividend policy has been debated in the academic arena in terms of its role in firm's value creation. Various analytical frameworks and intensive theoretical models have tried to explain corporate dividend behaviour on the following issues:

1. Does dividend policy really matter to a firm?
2. Does dividend policy have any effect on the market price of the equity stock or market capitalization rate, of the firm?
3. Do shareholders have a preference for current versus future income?

According to one school of thought, corporate dividend payments create a positive influence on share prices and hence, the value of the firm paying dividends will be more than the firms not paying any dividends, thus impacting the value of the firm. The other school of thought believes that corporate dividend policy bears absolutely no impact on either firm's value or its stock prices. Many growth firms such as IT stocks do not

pay dividends or pay very low dividends. Companies like Microsoft and Satyam that did not pay dividends for years but reinvested the same in the business enjoyed a good share value in the market. Thus companies should invest their funds in projects with prospects of positive NPV. On the other hand, according to the other school of thought, dividend decision materially affects the shareholders wealth and also the value of the firm. Investors consider dividends as signals to understand the future prospects of a company. Hence increase in dividends is taken positively and decrease in dividend is negatively perceived by investors. The former approach is known as **the irrelevance concept of dividend** or the theory of irrelevance and the later is known as **the relevance concept of dividend** or the theory of relevance.

Over the last several years many researchers have undertaken studies to empirically analyse the impact of dividend payments on stock market returns. They have presented contradictory views as to the effect of dividend declaration on shareholders return. Most of the researchers considered the entire market index for some relevant period to understand the impact of dividend on stock return. In this paper our focus is to understand the impact of dividend declaration on a specific sector i.e Indian Automobile Industry.

The Indian Auto Industry contributes 7.1 per cent of the country's Gross Domestic Product (GDP) and also is one of the largest in the world. The two wheelers segment with 81 per cent market share is the leader of the Indian Automobile market owing to a growing middle class and a young population. Thrust and interest of companies in exploring the rural markets supplemented help for the growth of the sector. The overall Passenger Vehicle (PV) segment has 13 per cent market share. India is also a prominent auto exporter and has strong export growth expectations for the near future (Source: drop.ndtv.com)

The S&P BSE Auto Index constitutes total 16 companies-

- Amara Raja Batteries Ltd.
- Apollo Tyres Ltd.
- Ashok Leyland Ltd.
- Bajaj Auto Ltd.
- Bharat Forge Ltd.
- Bosch Ltd.
- Eicher Motors Ltd.
- Exide Industries Ltd.
- Hero MotoCorp Ltd.
- MRF Ltd.
- Mahindra & Mahindra Ltd.
- Maruti Suzuki India Ltd.
- Motherson Sumi Systems Ltd.
- TVS Motor Company Ltd.
- Tata Motors Ltd DVR
- Tata Motors Ltd.

The present paper is organised as follows. Section 2 presents a review of literature. Section 3 states the objective of the study. Section 4 discusses the methodology. The empirical findings are analysed and presented in Section 5. Section 6 concludes the paper.

2. Literature Review

Miller & Modigliani (1961) study was the most vital literature in the corporate finance world, because Miller & Modigliani documented that dividend pay-out does not add any value to the firm, this phenomena was called 'Dividend Irrelevance Theory'. It has to be noted that the influential paper of Miller & Modigliani (1961) the Dividend Irrelevance Theory exists in a market which is perfect, having rational investors, no brokerage fee, tax free world, no transaction cost. But we live in a bona fide world, where postulation made by Miller & Modigliani are now on reverse, namely there are different types of taxes, market is not perfect, etc.

At the same time, many researchers were of contrary view that dividend announcement does add value to the firm. Pioneer amongst them being Graham & Dodd (1951), Walter (1956) and Gordon (1959 and 1962).

Based on literature, there is no consensus evidence on the effect of dividend announcement on the stock prices in the world, but it can be observed that there are mixed empirical evidences on the dividend effect.

Gordon (1959), Ball & Brown (1968), Ariff & Finn (1986), Stevens & Jose (1992), Ogden (1994), Kato & Loewenstein, (1995), Lee (1995), Koerniadi & Tourani-Rad (2011) found significant positive effect on the dividend announcement. On the contrary, Loughlin (1982) and Easton & Sinclair (1989) found negative effect on the dividend announcement.

Kang & Diltz (2000) examined the stock returns of 21 shares between 1990 and 1994 and found abnormal positive returns on and after the dividend announcement date, that indicated, information flow have already entered in the market.

A study of 137 listed companies paying dividend on the Dhaka Stock Exchange by Md. Hamid Uddin (2003), using

event study, found that 30 days prior the dividend announcement, shareholders lost about 20 per cent.

Kadioglu (2008) studied the effect of dividend announcement in Istanbul Stock Exchange. He calculated abnormal returns using market adjusted model with t-5 and t+15 methodologies. He considered 330 events in 88 companies from the year 2003 to 2007. He found that there were significant negative abnormal returns after the announcement and also found higher cash dividend lead to significant negative abnormal returns and lower cash dividend lead to significant lower negative abnormal return.

Jais et al (2009), studied dividend announcements and stock market reaction of Kuala Lumpur Stock Exchange using event study approach. They have considered all the companies who have announced increase or decrease in dividend between the period 2001 to 2005. There were 853 and 376 increase and decrease dividend announcements respectively. The estimation period was taken from day -140 to day -21 prior to the announcement date. Their study revealed that dividend increase announcements were greeted positively by shareholders whereas investors reacted negatively prior to dividend decrease announcement.

In the Indian context, Sultan Singh & Kumari Sapna (2011) examined the stock return behaviour around dividend announcements during the period 2006-07 to 2009-10. Dividend announcements made by BSE A-Group listed companies have been taken for the study for calculating the abnormal returns and two methods i.e. percentile method and the paired t-test for means has been used to see the impact of announcement on liquidity. The results of paired t-test for means have shown that there are significant differences in average number of transactions before and after announcement from 2006-07 to 2009-10. On the other hand, the results of the paired t-test for means have shown mixed results for turnover and average traded quantity during the period under study.

3. Objectives of the study

To examine the effect of dividend announcements by 16 selected companies of BSE on the stock price.

To analyse whether the stock price moved significantly in post dividend announcement period.

4. Methodology & Data description

Scope of the Study:

The study covers five financial years ranging from 2011-12 to 2015-16. The study is restricted to dividend announcement made by 16 selected companies from S&P BSE Auto Index. One major source of information is corporate event announcement. Corporate event announcement information is of greater interest to the investors, fund managers, policy makers, market regulators, researchers, the government, and the public in general. The present study is an attempt to check the effect of dividend announcement in Indian Stock Market.

Sample and Sampling Size:

Sample is drawn from 16 auto companies listed on the Bombay Stock Exchange that have announced dividend over the period April 2012 through October 2016.

Stock price data were collected for 16 auto companies for 21 days prior to dividend announcement and 21 days post-announcement period starting from the day of announcement.

Table 1: Dividend Declaration Date of 16 Auto Companies listed on BSE from 2011-12 to 2015-16.

	Dividend Declaration Date				
	2011-12	2012-13	2013-14	2014-15	2015-16
Amara Raja Batteries Ltd	28-05-2012	14-05-2013	28-05-2014	29-05-2015	10-03-2016
Apollo Tyres Ltd.	10-05-2012	10-05-2013	15-05-2014	12-05-2015	01-08-2016
Ashok Leyland Ltd.	14-05-2012	10-05-2013	-	12-05-2015	25-05-2016
Bajaj Auto Ltd.	17-05-2012	16-05-2013	15-05-2014	21-05-2015	25-05-2016
Bharat Forge Ltd.	28-05-2012	27-05-2013	27-05-2014	20-05-2015	17-05-2016
Bosch Ltd.	28-02-2012	27-02-2013	28-02-2014	29-05-2015	25-05-2016
Eicher Motors Ltd.	11-02-2012	12-02-2013	12-02-2014	16-02-2015	14-03-2016
Exide Industries Ltd.	30-04-2012	29-04-2013	25-04-2014	30-04-2015	27-04-2016
Hero MotoCorp Ltd.	02-05-2012	26-04-2013	28-05-2014	07-05-2015	05-05-2016
MRF Ltd.	29-11-2012	28-11-2013	26-11-2014	27-07-2015	03-05-2016
Mahindra & Mahindra L	30-05-2012	30-05-2013	29-05-2014	29-05-2015	30-05-2016
Maruti Suzuki India Ltd.	28-04-2012	26-04-2013	25-04-2014	27-04-2015	26-04-2016
Motherson Sumi Systems	28-05-2012	17-05-2013	22-05-2014	12-05-2015	11-03-2016
TVS Motor Company Ltd.	24-05-2012	08-10-2013	16-04-2014	17-05-2015	03-03-2016
Tata Motors Ltd DVR	29-05-2012	29-05-2013	29-05-2014	29-05-2015	30-05-2016
Tata Motors Ltd.	13-06-2012	29-05-2013	29-05-2014	29-05-2015	30-05-2016

Methodology / Statistical Tools:

To examine the effect of dividend announcement Paired Sample T-test was used to compare the means of return of stock of two sets of data (i.e. pre-dividend and post-dividend). This analysis tool helps to understand the significant mean differences before and after the announcement of dividends.

Following formula was used to calculate t-values:

$$t = \frac{\sum d}{\sqrt{\frac{n(\sum d^2) - (\sum d)^2}{n-1}}}$$

SPSS Statistical Software was used for study analysis.

5. Hypothesis Testing and Empirical results

H₀: There is no significant difference in stock returns between pre dividend and post dividend period.

H₁: There is significant difference in stock returns between pre dividend and post dividend period

Table 2: P value (Sig.) of paired sample returns of stock between pre announcements (-21 days) and post announcement period (+20 days)

	P Value (Sig.)				
	2011-12	2012-13	2013-14	2014-15	2015-16
Amara Raja Batteries Ltd.	0.000	0.126	0.000	0.000	0.000
Apollo Tyres Ltd.	0.000	0.704	0.000	0.271	0.000
Ashok Leyland Ltd.	0.000	0.000	0.000	0.093	0.818
Bajaj Auto Ltd.	0.000	0.090	0.159	0.000	0.000
Bharat Forge Ltd.	0.000	0.011	0.000	0.022	0.000
Bosch Ltd.	0.000	0.000	0.000	0.002	0.000
Eicher Motors Ltd.	0.009	0.683	0.008	0.128	0.667
Exide Industries Ltd.	0.000	0.000	0.373	0.000	0.000
Hero MotoCorp Ltd.	0.000	0.000	0.000	0.036	0.677
MRF Ltd.	0.000	0.000	0.000	0.000	0.000
Mahindra & Mahindra Ltd.	0.076	0.331	0.000	0.001	0.000
Maruti Suzuki India Ltd.	0.001	0.000	0.001	0.004	0.000
Motherson Sumi Systems Ltd.	0.000	0.000	0.000	0.001	0.000
TVS Motor Company Ltd.	0.000	0.000	0.017	0.000	0.000
Tata Motors Ltd DVR	0.000	0.000	0.000	0.000	0.000
Tata Motors Ltd.	0.007	0.724	0.019	0.000	0.000

Above table reflects P Value (2 tailed Significance) of Paired Sample T-test. For hypothesis testing, significance values were tested at 95% confidence level. All the listed companies in Indian Auto Industry show a p value of less than 0.005 in most of the years, 65 of 80 cases thus validating the hypothesis that dividend declaration has a significant impact on companies' stock prices.

The results of paired t-test show that there are significant differences in average return of stock prices before and after announcement during the period 2012 to 2016 for the companies like Bharat Forge, Bosch, MRF, Maruti Suzuki, Motherson Sumi, TVS Motor and Tata Motors DVR, Whereas companies like Amara Raja Batteries Ltd., Exide Industries Ltd., Hero MotoCorp Ltd., Tata Motors Ltd., too have shown significant impact of dividend declaration on stock price returns in four out of five years period considered under the study. Rest

of the companies' portray mixed results of impact in some years and no impact in other years during and after dividend announcement.

During FY 2012-13, many companies failed to capture investors' attention by dividend announcement, i.e., Minimum share price influence in 2012-13.

6. Conclusion

To sum up, there is high occurrence of significant change in stock prices during or after dividend announcement under study for the companies in Indian Auto industry. Stock returns were found 65 times significant on event period whereas 15 times

constant or near to zero volatility found. Thus we conclude in our study that Indian Auto Industry shows impact of Dividend Policy in their share prices. Thus companies in auto industry need to make appropriate planning of Dividend policy. Investors perceive dividends as signals to understand the financial prospects of the company.

Future Scope:

Further to examine the impact Mean cumulative abnormal returns model and multiple regression models may be used to measure the statistical significance of the abnormal returns

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