

## DIVIDEND ANNOUNCEMENTS AND THE ABNORMAL STOCK RETURNS FOR THE EVENT FIRM AND ITS RIVALS

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### ABSTRACT

*Impact of dividend announcement on stock prices is pronounced in various studies conducted by various researchers. Event study has been conducted in this paper on 26 announcements and the firms were belonging to cement and oil and gas sector of Pakistan. In this study data span of 2004-2008 has been covered. Impact of dividend announcement on stock prices of event and rival firms has been analysed and it has been found that dividend announcement depicts positive impact on share prices of the companies at the time of announcement as well as immediately after such announcements. Performance of event firms has been evaluated in comparison with its rival firms in this study in order to give better understanding of dividend announcement effect on the financial health of the companies. Overall, our results robust the findings of earlier research and as per theoretical background of the study. Our conclusion explains the significance of t-statistics values during this study.*

### INTRODUCTION

Efficient Market Hypothesis (EMH) claims that investors can not get abnormal returns from the market if publicly available information is used. It has been tested severally through gauging the impact of some events on stock price of the companies. Semi strong form of market efficiency has been tested through various studies in which impact of disclosure of information relating to dividend announcement, earning announcement, announcement of stock repurchase and merger/ acquisition has been extensively investigated, but investigation of impact of such information on stock prices remained an issue of key importance in different time periods. This matter has been examined in various research studies which revealed that market efficiency depends upon timely and freely availability of information.

Even though, there is rich theoretical and empirical research on the relevance of and relationship between stock prices and dividends, it is questionable. Graham and Dodd (1951) point toward the relevance of and hence investors' preference for dividends. According to Modigliani and Miller (1961), in a world of no taxes and transaction costs, dividends are irrelevant to investors. However, empirical research has revealed findings that support the relevance of the dividends proposition. Cash dividend payment is considered as a reward to the shareholders out of something they already own in the company, so this reward may be offset through fall of share price (Porterfield 1959 & 1965). Later on, this idea of relevance of dividend was advanced by Walter (1956) & Gordon (1962) and it has now been formalized into a theory of dividend relevance. It postulates that current stock price would reflect the present value of all expected dividend payments in the future.

The ultimate objective of corporate managers is to increase the shareholders value. In this perspective, they make various types of investment and financing decisions. In the process of making investment decisions, they have to find the investment projects having positive net present value, while in the process of making financing decisions, they have to decide about the mix of firms capital structure which will minimize the overall cost of firms capital. Apart from making these decisions, managers have to decide whether they should distribute the earnings to the shareholders in the form of dividend or not because such distribution will result in increasing the cash flow of the stockholders but simultaneously, it will limitize the financial resources of the firm.

The objective of this study is to evaluate whether the announcement of dividend has any impact on the share price of the companies announcing the dividend and its rival firms in the industry. Yu & Leistikow (2011) define rival firms are those firms which are rival of event firms. A dividend payment provides cash flow to the shareholders but reduces firm's recourses for investment; this dilemma is a myth in the finance literature.

Academic literature suggests that in the absence of taxes and market imperfections, dividend payments should have no impact on shareholders' value. So, instead of paying excess funds to the shareholders, the companies should invest them in the positive net present value projects. Literature also suggests that market valuation of stocks depends on the expected future dividends. If company pays out all of the earnings, funds for future investment will decrease and dividend may not increase in the future. Moreover, when dividend is taxable, paying out more cash would increase the shareholders tax liability. Despite these theoretical arguments for not paying dividends, companies often pay cash dividends to their shareholders possibly to signal information about the future earnings prospects.

### **LITERATURE REVIEW**

Many studies have been conducted in the literature which is of great help to understand the impact of dividend announcement on stock returns of companies. These studies show mixed pattern of results. Positive impact of dividend payment announcement on abnormal returns of stocks has been observed by Lea (1995), Foster & Vicky (1978), Gordon (1962). Lonie, et al. (1996) found the sensitivity of investors to the increase or decrease of dividend and revealed that on the average, abnormal returns of companies even one day before the announcement of dividend were significantly different from zero even for those companies in which there was no change in dividend. Semi strong form market efficiency has also been investigated by Adelegan (2003) in Nigerian market through the application of event study. He examined the reaction of stock market to dividend announcement and concluded that Nigerian stock market was not found to be efficient one with respect to semi strong form. Uddin & Chaudhary (2005) in their study regarding investigation of dividend announcement impact on stock price of Dhaka market found that there was no information content in the dividend for Dhakan market stock prices and returns. No significantly abnormal returns in that stock market were found in response to dividend announcement. Although, short term impact of dividend announcement news may exist at the time of announcement but its long term influence on the stock returns may be absent (Gunasekarage & Power, 2006). Rejection of semi strong form of efficient market was also confirmed by Kong & Taghavi (2006) in their study of Chinese stock market. Not only stock return, but increase in stock return volatility around the announcement of final dividend has also been found to be existing by Acker (1999) in his study. It has also been suggested that dividend payment to the shareholders is an important source of conflict resolution between shareholders and firm managers. In other words, it can be helpful in reducing the agency problems. When , management of firm pays dividend after investing in all those projects contributing positive net present value to the company, it pays excess cash to them. Therefore, dividend payment contributes positively towards the share price of the firm ( Black,1976 & Easterbrook,1984 ).

Weak form of market efficiency has also been examined in Pakistani sample of stock market firms by various studies conduct by Ali & Akbar (2009), Chakraborty (2006) and Husain (1999). In a study conducted by Ali & Mustafa (2001), they found that public information plays no significant role in determination of stock return rather sensitivity of stock returns to private information is found to be existing significantly. It is evident that above literature on impact of dividend announcement on stock return exhibits mixed pattern of results about semi strong form of market efficiency.

### **DATA AND METHODOLOGY**

The main objective of this study is to investigate the impact of dividend announcements on stock market returns with the help of event study round the dividend announcement date. These announcements relate to announcement of cash dividend. Therefore, reaction of dividend will be checked on stock returns in this study.

For this study, data of two industrial sectors known as Cement & Oil and Gas sectors has been collected from the Karachi Stock Exchange and Business Recorder. Data spans from 2004 -2008. A total of 26 dividend announcements during this time period were taken and their effect was investigated on event firms and its rivals. Impact of dividend announcements on stock prices of 21 days before this announcement and 21 days after this announcement has been checked in this study.

We calculated actual returns for event firms and weighted returns of rivals portfolios during the same time period. Then average market returns with respect to each specific announcement were calculated in order to calculate the abnormal returns of event firms and rivals portfolios. Standard deviations of all these event firms and rival portfolios were calculated along with calculation of CAAR and values of t statistics were calculated later on by dividing CAARS by standard deviations.

**Table 1 (Event Firm)**

Day	AAR	SD	CAARS	T VALUE	Day	AAR	SD	CAARS	T VALUE
-21	-0.002	0.025928	-0.04521	-1.74372	1	0.009199	0.03	0.174476	5.815861
-20	-0.01285	0.023361	-0.13338	-5.70943	2	0.00138	0.033092	0.06589	1.991129
-19	0.005826	0.022192	0.051864	2.337075	3	-0.00095	0.046978	-0.00991	-0.21085
-18	0.00071	0.022874	-0.00539	-0.23565	4	-0.00332	0.056786	-0.0839	-1.4775
-17	-6.1E-05	0.026474	-0.01817	-0.68623	5	0.005147	0.027226	0.075798	2.784015
-16	8.26E-05	0.020339	-0.0327	-1.60771	6	0.004339	0.028122	0.028503	1.01355
-15	-0.00207	0.038997	-0.0424	-1.08721	7	0.000334	0.021525	0.023743	1.103041
-14	0.002553	0.026296	0.019002	0.722617	8	0.002591	0.02079	0.017134	0.824148
-13	0.005974	0.029882	0.090583	3.031355	9	-0.00035	0.058953	0.063274	1.073297
-12	0.000804	0.034267	-0.00858	-0.25046	10	0.010103	0.022608	0.131669	5.824012
-11	0.001688	0.026624	0.015136	0.568504	11	0.004089	0.01928	0.029855	1.548532
-10	0.001147	0.021382	0.003795	0.177508	12	-0.00479	0.025024	-0.10514	-4.20149
-9	-0.00159	0.022625	-0.0666	-2.94378	13	0.004946	0.03242	0.112109	3.458007
-8	0.008797	0.02883	0.031877	1.105683	14	0.005674	0.029304	0.106254	3.625879
-7	-0.00091	0.033078	0.0403	1.218312	15	0.007486	0.021925	0.076245	3.477454
-6	-0.00328	0.02302	-0.09416	-4.09028	16	0.006468	0.023518	0.116298	4.945036
-5	0.005554	0.019564	0.091309	4.66715	17	-0.0052	0.058326	0.097809	1.676937
-4	0.001801	0.021993	-0.04394	-1.99816	18	0.001654	0.024345	0.028769	1.181712
-3	-0.00203	0.028129	-0.07376	-2.62227	19	0.006861	0.018643	0.066379	3.560601
-2	-0.00151	0.015569	-0.03722	-2.39058	20	-0.00713	0.030085	-0.18386	-6.11124
-1	0.008453	0.023303	0.104035	4.464518	21	0.004248	0.031088	0.075547	2.430088
0	0.016174	0.040242	0.258849	6.432319					

Table 1 depicts average abnormal returns of event firms around 21 days i.e., -21 and +21 days. It shows that the value of average abnormal return was negative during nine days before announcement date and it was negative for six days after dividend announcement date. But near about same pattern was followed in the cumulative average abnormal return of event firm. Moreover, average abnormal returns on announcement date and two days after announcement is also positive which depicts the positive reaction of investors to this dividend announcement.

In table 1, analysis of data relating to event firms have been analysed. The table explains abnormal returns, standard deviations, cumulative abnormal returns, and cumulative average abnormal returns of 26 event firms. It is evident from data that value of t statistics on dividend announcement date is significant with figure of 6.432. It has also been found that out of 21 days before dividend announcement, t values are significant about nine days with insignificant value of -1.74 on 21<sup>st</sup> day. Out of 21 days, t statistics value is insignificant for 13 days. So far as the t-statistics values after dividend announcements are concerned, these are again 2 or more about nine days and it is less than 2 about 12 days.

**Table 2 (Rival Firms)**

Day	AAR	SD	CAARS	T Value	Day	AAR	SD	CAARS	T Value
-21	-0.00302	0.01623	-0.04703	-2.89784	1	0.006141	0.01518	0.081933	5.397487
-20	-0.00657	0.018488	-0.07298	-3.9475	2	0.003984	0.025948	0.102946	3.967358
-19	0.003632	0.026158	0.004092	0.156422	3	0.001782	0.016659	-0.01365	-0.81919
-18	0.002687	0.022953	0.060751	2.646757	4	0.002352	0.01835	0.008708	0.474538
-17	-0.00185	0.023861	-0.04283	-1.79508	5	-0.00361	0.027339	-0.04678	-1.71117
-16	-0.00029	0.019394	-0.00941	-0.48533	6	-0.00145	0.026686	0.04618	1.730463

-15	0.003946	0.015297	0.019515	1.275798	7	-0.00056	0.01661	0.004792	0.288467
-14	-5.3E-06	0.02405	-0.09597	-3.99029	8	-0.00093	0.012308	-0.0307	-2.49432
-13	0.001347	0.027879	0.085735	3.075216	9	0.005606	0.01783	0.105727	5.929633
-12	-0.00729	0.023634	-0.14399	-6.09247	10	0.006692	0.011485	0.103648	9.024845
-11	0.000299	0.018709	-0.04633	-2.47616	11	0.002549	0.01724	-0.00876	-0.50811
-10	-0.00887	0.01521	-0.16003	-10.521	12	0.002411	0.018451	0.026148	1.417141
-9	-0.0048	0.024343	-0.0354	-1.45435	13	0.007701	0.01491	0.113244	7.595026
-8	-0.00132	0.018811	-0.09673	-5.14203	14	0.003038	0.01765	0.102291	5.795626
-7	-0.00115	0.018508	-0.01402	-0.7573	15	0.002244	0.018476	0.025572	1.384084
-6	0.005496	0.016753	0.032695	1.951604	16	0.00373	0.020891	0.131747	6.306362
-5	0.003299	0.014772	0.034237	2.317773	17	0.005003	0.013543	0.093312	6.890224
-4	-0.00146	0.013423	-0.06587	-4.90705	18	0.003613	0.02085	0.020608	0.988377
-3	6.93E-05	0.017325	-0.05819	-3.35845	19	0.004903	0.019577	0.022866	1.168025
-2	0.003097	0.01991	0.030799	1.546887	20	0.002584	0.038583	0.071245	1.84652
-1	-0.00361	0.025968	-0.07607	-2.92956	21	-0.01264	0.017426	-0.23781	-13.6465
0	0.009005	0.016948	0.120464	7.107952					

Table 2 presents the average abnormal returns, standard deviations and t statistics values of rival firms. It can be examined that average abnormal return were negative about 12 days out of 21 days before the dividend announcement while it was negative for about 5 days out of 21 days after announcement of dividend date by the rival firms. It was positive on dividend announcement date while it also remained positive for four days after announcement of this dividend. It depicts positive impact of dividend on stock prices of rival firms.

T statistic value on dividend announcement date was 7.10795 showing the significance level of returns of the announcement date. Out of 21 days before dividend announcement, t-values were about 2 or more for eight days and were less than 2 for about 13 days. Whereas these values were negative for only 5 days after dividend announcement date. These values were significant immediately before and after the announcement date which shows the positive impact of dividend on stock prices.

## CONCLUSION

It has been found that there are some firms whose abnormal return were negative on the dividend announcement date but became positive immediately after the dividend announcement date. There are some other companies, whose abnormal returns were positive on the dividend announcement date and some days before and after the announcement date. There are instances where dividend announcement day return was negative but it was positive before and after the dividend announcement date. Overall results indicate that impact of dividend on dividend announcement date and few days after were positive. These results confirm the theoretical background regarding the impact of dividend on the stock prices. It shows that dividend distribution is relevant for future price determination. Same pattern of findings also exists for rival firms.

## FUTURE IMPLICATIONS

As this study provides a detailed analysis of dividend announcement impact on stock prices, it can be helpful for investors and investment managers in understanding the behavior of market with regard to dividend announcement. This study can be further expanded in future in other areas like impact of merger/acquisitions, stock splits, stock repurchase and their impact on stock prices.

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