EFFECTS OF DIVIDEND ANNOUNCEMENT ON THE REACTION OF STOCK MARKET: EVIDENCES FROM VIETNAMESE STOCK MARKET

Shu-Hui Su, Hsiu-Ling Lee, Jung-Ju Chou* and Nguyen Huu Pho
Department of Accounting, I-Shou University, Taiwan
*corresponding author: Jung-Ju Chou

ABSTRACT

With taxation regulations, the Vietnamese stock market is an interesting case to examine the responses of stock market to dividend announcements through stock price. This study examines the reaction of stock market to the dividend announcement and analyzes the impact of firm characteristic factors on the cumulative average abnormal return. The research sample includes dividend announcements made by 358 companies listed on Ho Chi Minh Stock Exchange (HOSE) from 2016 to 2018, which is the most stable period of dividends payments and the development of the Vietnamese stock market. The research method is carried out with two combined parts: traditional event study methodology and regression analysis of firm characteristic factors affecting the cumulative abnormal returns. This study finds the relationship between dividend announcements and the reaction of the stock market by examining stock price and shows the level of influence on the Vietnamese stock market according to the increase dividend announcements, neutral dividend announcements, and decrease dividend announcements. The results of the firm characteristics panel regressions indicate that the cumulative abnormal return has a relationship with the dividend yield and the systemic risk.

KEYWORDS: Stock Market Reaction, Dividend Announcement, Vietnamese Stock Market
JEL Classification codes: G12, G14, G35

1. INTRODUCTION

The stock market, with its continuous development, is an effective channel to raise capital for businesses and an investment method favored by many investors because of its convenience, profitability, and liquidity. Along with raising capital, businesses must also ensure the rights of their shareholders through the annual dividend distribution. Not only is the decision to allocate returns to shareholders, but it is also a basis for changes in investor behavior as well as a channel for transmitting information from corporate governance to the market. Therefore, in the stock market, the period of announcing the annual dividend payment is always the time that investors are interested in and the fluctuation of stock prices during this period is also relatively large. The topic of dividends has always been an urgent issue that is still in its infancy and always a great question for researchers. To find out the relationship between the fluctuation of stock prices and the dividend announcements, researchers employed an event analysis model to analyze the reaction of the stock market to activities such as dividend notifications, stock splits, and corporate rights issues (Dasilas & Leventis, 2011; Kumar 2017).

The reaction of the stock market before dividend notice has received much attention from investors. Due to the information asymmetry between investors, an outside investor will have less information than insiders. The prospects and growth of the business is expressed by the managers through the signals coming from the notice of dividend increase. Therefore, the increase dividend announcement will transfer positive information to the market. To investigate the market's reaction to news announcements, the majority of studies have been done in the US while studies in developing countries are still in need. Tran and Mai (2015) conducted a study by examining 233 listed firms on Ho Chi Minh Stock Exchange (HOSE) from 2008 to 2014. The research results showed a significant positive effect of dividend notification on changes in stock prices and trading volumes and also there is significant insider trading before the official dividend announcement date.

To further analyze the reaction of the stock market to the announcement of corporate dividends as well as the effect of the firm characteristics on the market's response to dividend announcements, this study was conducted with more updated data such as dividend announcements made by 358 companies listed on Ho Chi Minh Stock Exchange (HOSE) from 2016 to 2018, which is the most stable period of dividends payments and the development of the Vietnamese stock market. This study enriches the academic treasure with new empirical evidence from Vietnam, an emerging economy. The findings of this research provide practical implications for investors and regulatory agencies in the market and also for market managers in formulating management policies that contribute to improving the explicitness of the stock market.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Signaling theory is one of the most important theories used to explain the reaction of the market to the announcement of corporate dividends and suggests that an increases dividends announcement will bring clear signals transmitted by managers about the bright prospects of future businesses to investors in the market. Mrzygłód and Nowak (2017) found that for each increase (decrease) of dividends, there is an increase (decrease) in response to stock price, which is consistent with the sign of the dividend change and showed that the Polish stock market reaction to dividend announcements is positive and immediate. To understand the relationship between the abnormal yield of a stock and the dividend announcement, customer effect theory is used to explain the impact of a firm's dividend rate on the response intensity of the market. Masum (2014) indicated that dividend policy has significant positive effect on stock prices, which mean when the enterprise pays more dividend, the market will react in the same direction to it. Dasilas and Leventis (2011) conducted event studies combining regression research for companies listed on Amman Stock Exchange (ASE) and the results showed that the market has significant responses to the company's dividend announcement, which supporting that there exists information inside the announcement of increase (decrease) of dividends that have effect on increase (decrease) of stock prices.

Tsai and Wu (2015) examined the data provided by Center for Research in Security Prices (CRSP) with cash dividend notices of companies from January 2005 to December 2012 and data about bond transactions from Trade Reporting and Compliance Engine (TRACE) to compare the response of the corporate bond market and the stock market's reaction to the company's dividend notice. The results showed that the relationship between the change of dividends and future returns is relatively weak. However, the reaction of the stock and bond markets on the day of information disclosure seems to provide information about the company's profit of the following year. Kumar (2017) revealed that the announcement of an increase in dividends will cause the stock price to go up while the stock price will decrease accordingly when the announced dividend is reduced. In the case of constant dividends, the results showed that there is a slight but negligible stock price decrease. However, the study of Kadioglu (2008) on the Turkish market showed that the market only responded positively to the announcement of dividend reduction. Do and Hieu (2018) revealed that announcements of dividend increase do not significantly cause reactions of Vietnamese stock market.

Studies in developed stock markets like the UK and US showed that the market reacted clearly on the day of the first official announcement (Sewell, 2012; Khanal & Mishra, 2017; Khokhar & Sarkar, 2019), but other studies in smaller markets did not find similar results. Gupta, Vashisht and Ghai (2012) supported dividend changes do signally change in stock price whereas there is no significant efficient reaction between dividend announcements and Indian stock market. The empirical study of Prabhakaran and Karthika (2018) showed abnormal return and cumulative abnormal return is upward significantly after the divided announcements, which confirming the dividend signaling theory. However, the stock price volatility is not clear in the pre-announcement periods as well as on the date of dividend announcement. The reaction of stock market is significant in the post announcement day especially next trading day of dividend announcement, which is in line with the empirical findings of Suwanna (2012). Additionally, the findings of Hashemijoo, Ardekani and Multimedia (2012) indicated dividend yield and firm size significantly affect share price volatility. Kengatharan and Ford (2021) found that dividend yield, dividend per share and firm size have significant effects on the fluctuation of share price in Sri Lankan, Which is similar to the empirical results of Camilleri, Grima and Grima (2019). The findings of Felimban, Floros and Nguyen (2018) discovered the Gulf Cooperation Council market is inefficient and indicated that there is a significant trading volume reaction in all the three announcements clusters, where dividends increase, decrease, and are constant. The results supported that the dividend change announcements have effects on the reaction of stock market such as change in trading volume.

To investigate whether there is a different market reaction to dividend announcements, this study developed null hypothesis H10: There is no significant relationship between dividend announcements and abnormal returns. To test this hypothesis, this study examines average abnormal returns and

average cumulative abnormal returns with time frames before and after the dividend announcement within [-5, +5] around the official announcement date on three separate patterns: the increase dividend group, the decrease dividend group and the neutral dividend group. The study of Kumar (2017) showed an effect opposite of BETA with a ratio of market reaction to dividend announcement, which meaning a reduction in systemic risk will lead to better prospects for the future of the business and this is reflected by a positive response to the cumulative abnormal returns of the stock around the date of the dividend notice, especially the notice of paying more dividends. With the expectation of the larger group of investors who prefer dividends in the market, which is consistent with customer effect theory (Camilleri, et al., 2019), this study expects that stocks with higher dividend yield will receive stronger reactions from the market compared to stocks with lower dividend yield. The previous studies (Hashemijoo, et al., 2012; Kengatharan & Ford, 2021) also showed that firm size has the opposite impact on the market reaction to dividend notifications. To investigate the influence of firm characteristics (firm size, systematic risk, dividend yield) on the stock price reaction to dividend announcements, this study developed null hypothesis H20: There is no significant relationship between firm characteristics and cumulative abnormal returns.

3. METHODOLOGY

The research questions guiding this study are: (1) How does the market respond to dividend announcements? (2) How do firm characteristics (firm size, systematic risk, dividend yield) influence on the stock price reaction to dividend announcements? To clarify the research questions, the hypotheses will be investigated.

3.1 Research Design

This study used a classic event day research model to test the hypotheses. Based on the research characteristics, the date of the event in the study is the date of the official announcement of dividends of the business. To have the most effective observation time frame, this study uses the official observation time frame of 11 days around the official dividend notification date [- 5; + 5]. To assess the impact of events on stock prices, this study uses the abnormal return. The abnormal return (hereinafter "AR") is calculated as the difference between the actual return and the normal return of stock that would be expected in the absence of the event, following the equation:

$$AR_{i,t} = R_{i,t} - \text{E}\,(R_{i,t}) \qquad (3.1)$$

Where:

$AR_{i,t}$ is the abnormal return of share i on day t and E $(R_{i,t})$ is the expected return of share i on day t.

The return of stock i on day t is computed:

$$R_{i,t} = \frac{\text{Pi,t} - \text{Pi,t}-1}{\text{Pi,t}-1}$$

Where:

$P_{i,0}$ denotes the unadjusted closing price of stock i on announcement date (t0); $P_{i,1}$ is the unadjusted closing price of stock i on the previous day (t-1).

To ensure the accuracy of the research results as well as to provide effective data for regression analysis, this study uses the CAPM model to estimate the expected return for stocks. With the characteristics of changes in stock prices depending heavily on short-term trends in the Vietnam market, this study used Regression with the time frame in 6 months before the date of dividend notice. At that time, this study conducted Ordinary Least Squares (OLS) regression to determine the coefficient α and β are estimated by the OLS regression using 120 daily returns data before the event window [t-125, t-6]:

$E(R_{i,t}) = \alpha_i + \beta_i \times R_{m,t} + e_{i,t}$ (3.2)

Where:

α_i, β_i are Market Model parameters with stock i;

$R_{m,t}$ is the market return on the day calculated through the change of the VN Index;

$e_{i,t}$ is random error terms for firm i at time t.

If dividend announcements does not effect on stock prices the abnormal returns on the event day on and after the event day are equal to zero.

$AR_{i,t} = R_{i,t} - \alpha_i - \beta_i \times R_{m,t}$ (3.3)

The average abnormal return of the t-day dividend group is denoted by AAR, and is determined by the formula:

$AAR_t = \frac{1}{N}\sum_{i=1}^{N} AR_{i,t}$ (3. 4)

Where:

N is the number of dividend notices in the group. Then, this study uses the value of the cumulative abnormal return (CAR) to represent all the abnormal returns that investors receive from stocks at any time in event windows CAR [- 5; + 5], CAR [0; +5]. At that time, the cumulative abnormal profit is determined by the formula:

$CAR_i(t_1; t_2) = \sum_{t_1}^{t_2} AR_{i,t}$ (3. 5)

To select representative values similar to the previous AAR, this study determines the value. The average abnormal return accrues to each time frame so that we can give the most general view of the total abnormal return earned by investors according to each observation time frame.

$CAAR(t_1; t_2) = \sum_{t_1}^{t_2} AAR_t$ (3.6)

To get a better insight as to how firm characteristic variables affect the stock price reaction to dividend announcements, the research conducted cross-sectional regressions. The CARs are regressed for

different event windows CAR[- 5; + 5], CAR[0; +5] on the number of independent variables such as the firm size (SIZE), systematic risk (BETA), firm's dividend yield (DY), which is similar with those of Kadioglu (2008) and Kumar (2017). At that time, the model influencing the firm's firm characteristics on the market reaction to dividend notification is presented in the formula (3.7).

$$CAR_{i,[t1,t2]} = = \mu_0 + \mu_1 SIZE_i + \mu_2 BETA_i + \mu_3\ DY_i + e_i \qquad (3.7)$$

In which:

+ CAR_{it} is an cumulative abnormal profit of stocks with observation frames respectively [- 5 ; + 5], [0; + 5].

+ SIZE is the firm size measured by taking logarithm of the market capitalization.

+ $BETA_i$ is the systematic risk estimated using data in the pre-event (estimation) period.

+ DY_i estimated as the ratio of dividend for the year over the price one day prior to dividend announcement.

3.2 Sample and Data

The sample of this study is companies listed on HOSE from 2016 to 2018, which fitting the following conditions:

(1) Dividends are only paid in cash

(2) Announcements must have data on prices and volume of stocks in the range from [-126; + 5] around the date of dividend payment.

(3) No activities of stock splitting, pooling, dividends by stock, or rights issuance take place within the range of [-126, +5] around the day Dividend payment

(4) Enterprises only pay cash dividends once a year, for those enterprises who pay dividends twice a year, the selected date is the date of the second dividend notice.

This study used secondary data from the Website of FPT Securities Joint Stock Company www.fpts.com. The historical price data was collected from the www.website.cophieu68.vn and corporate financial information will be collected from www.vietstock.vn. Table 1 exhibited the amount of dividend announcement on three separate patterns during the research period.

Table 1. Dividend Announcements from 2016 to 2018

Year	Increase dividend	Neutral dividend	Decrease dividend	Total
2016	35	8	8	51
2017	62	55	43	160
2018	73	61	58	192
Total	170	124	109	403

4. RESULT AND DISCUSSION

T-test testing with a sample average is used to test the null hypothesis whether the average abnormal returns are zero. Specifically, an effect is considered to be clear from the dividend notice if the abnormal returns, the cumulative abnormal returns of observations at the time frame are different from zero with a significance level less than 5%.

4.1 Test for hypothesis 1

Table 2 showed the results of the cumulative average abnormal returns for the dividend announcement for all the stocks. The CAAR for two days event window [0, +1] is 1.38 % (t=8.266), when the event window is widened to include more trading days [-1, +1], [-3, +3] and [-5, +5], the CAARs are positive with 1.12% (t=6.099), 2.2% (t=7.808) and 1.54 % (t=4.585) respectively which is statistically significant at the 5% level. The overall review for 11 days [-5; +5] around the official dividend announcement, the market has shown a positive reaction, increasing the average abnormal return by 1.54% compared to expected return. In particular, both time frames before and after the official dividend announcement received positive responses from the market. Therefore, the hypothesis $H1_0$ was rejected. There is significant relationship between dividend announcements and abnormal returns.

Table 2. Stock market reaction to all dividend announcements

| T | Test Value = 0 | | | | | |
| | t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
					Lower	Upper
-5	0.66	402	0.51	0.0007	-0.0014	0.0028
-4	0.359	402	0.719	0.0004	-0.0018	0.0027
-3	1.445	402	0.149	0.0015	-0.0006	0.0036
-2	1.414	402	0.158	0.0016	-0.0006	0.0039
-1	1.945	402	0.052	0.0022*	0	0.0044
0	4.001	402	0	0.005***	0.0026	0.0075
1	6.619	402	0	0.0077***	0.0054	0.01
2	2.499	402	0.013	0.0029**	0.0006	0.0051
3	0.911	402	0.363	0.001	-0.0012	0.0032
4	0.579	402	0.563	0.0007	-0.0016	0.003
5	-0.559	402	0.576	-0.0007	-0.0031	0.0018

CAAR [-5,+5]	4.585	402	0	0.0154***	0.0088	0.022
CAAR [-5,-1]	3.432	402	0.001	0.0088***	0.0038	0.0138
CAAR [0,+5]	5.802	402	0.0000	0.0166***	0.0110	0.0222
CAAR [-1,+1]	6.099	402	0	0.0112***	0.0076	0.0148
CAAR [-1,0]	5.26	402	0	0.0096***	0.006	0.0132
CAAR [0,+1]	8.266	402	0	0.0181***	0.0138	0.0224
CAAR [-3,3]	7.808	402	0	0.0220***	.01646	.02755

Note: *, ** and *** represent that the coefficients are significant at 10%, 5%, and 1% level respectively.

For further analysis, Table 3 demonstrated the results for the cumulative abnormal returns for dividend announcements for all three dividend announcement groups. There are significant positive CAARs around the increase dividend announcement. The CAAR of increase dividend announcement for two days event window [0, +1] is 1.67% (t=6.571). When the event window is widened to include more trading days [-1, +1], [-3,3], and [-5, +5], the CAARs are positive with 1.87%, 2.6% and 2.84% , which is statistically significant. The results showed that there is significant relationship between increase dividend announcements and abnormal returns. As shown on Table 3, the CAAR of the neutral dividend announcement for three-day event window [0, +1] is 0.7 % (t=2.082) and smaller than the CAAR of increase dividend announcement. When the event window is widened to include more trading days [-1, +1], [-3, +3], and [-5, +5], the CAARs are positive with 0.9 %, 1.75 % and 1.5 % and significant respectively. The results showed that there is significant relationship between neutral dividend announcements and abnormal returns. The CAAR of decrease dividend announcement for a three-day event window [0, +1] is 1.31 % (t=3.887), higher than the CAAR of neutral dividend announcement and smaller than the CAAR of increase dividend announcement. When the event window is widened to include more trading days [-1, +1], [-3,3], and [-5, +5], the CAARs are positive with 1.59 %, 2.09 %, and 2.41 % and significant respectively. The results showed there is significant relationship between dividend announcements and abnormal returns.

Table 3. Cumulative abnormal returns for three separate patterns

Days	Increase dividend	Neutral dividend	Decrease dividend
[-5, +5]	0.0284***	0.015**	0.0241***
	(4.123)	(2.335)	(3.752)
[-5, -1]	0.0072*	0.0073*	0.0045
	(1.673)	(1.81)	(1.162)
[0, +5]	0.021***	0.008	0.020***
	(4.423)	(1.546)	(4.081)
[-3, +3]	0.026***	0.0175***	0.0209***
	(5.292)	(3.591)	(4.767)
[-1, +1]	0.0187***	0.009**	0.0159***
	(5.621)	(2.364)	(4.544)
[-1, 0]	0.0093***	0.0046*	0.0069**
	(3.257)	(1.644)	(2.522)
[0, +1]	0.0167***	0.007**	0.0131***
	(6.571)	(2.082)	(3.887)

Note: *, ** and *** represent that the coefficients are significant at 10%, 5%, and 1% level respectively.

The figure 1 showed the AAR for all the 11 days [−5, +5] for each type of dividend announcement around the announcement date. We observe that for CAARs, there is a peak at the day +1 clearly indicating the abnormal returns on the announcement day. The peak smoothens on both the sides of day +1 as the returns are less compared to the announcement day. And Figure 2 exhibited the CAAR for all the 11 days [−5, +5] for each type of dividend announcement around the announcement date. The figure indicted that both AARs and CAARs are the maximum to increase dividend announcement and the minimum to neutral dividend announcement.
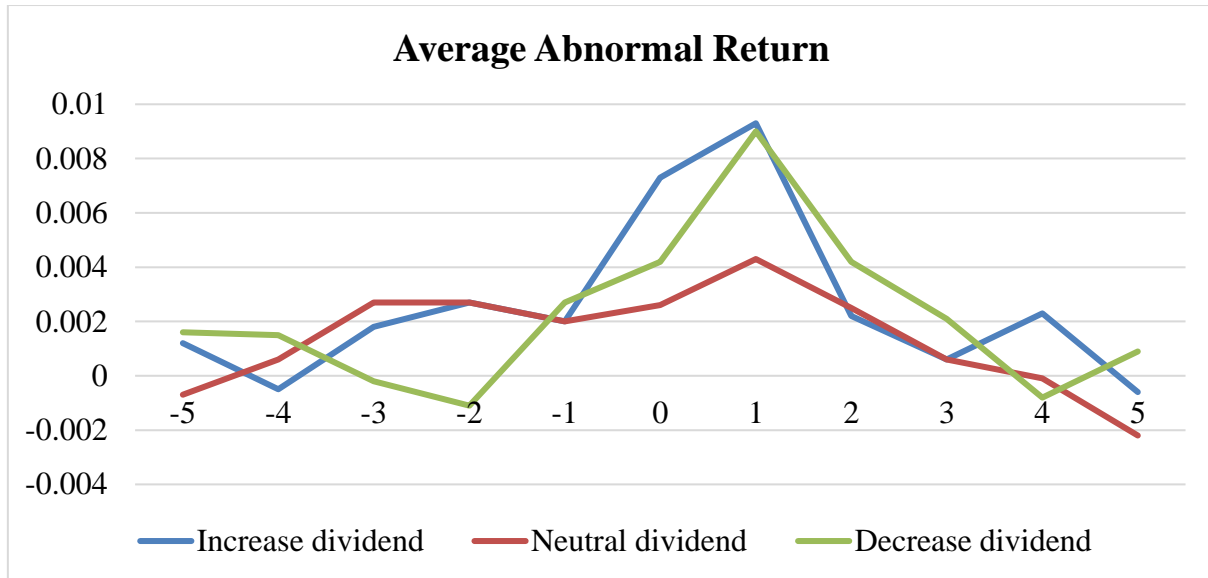
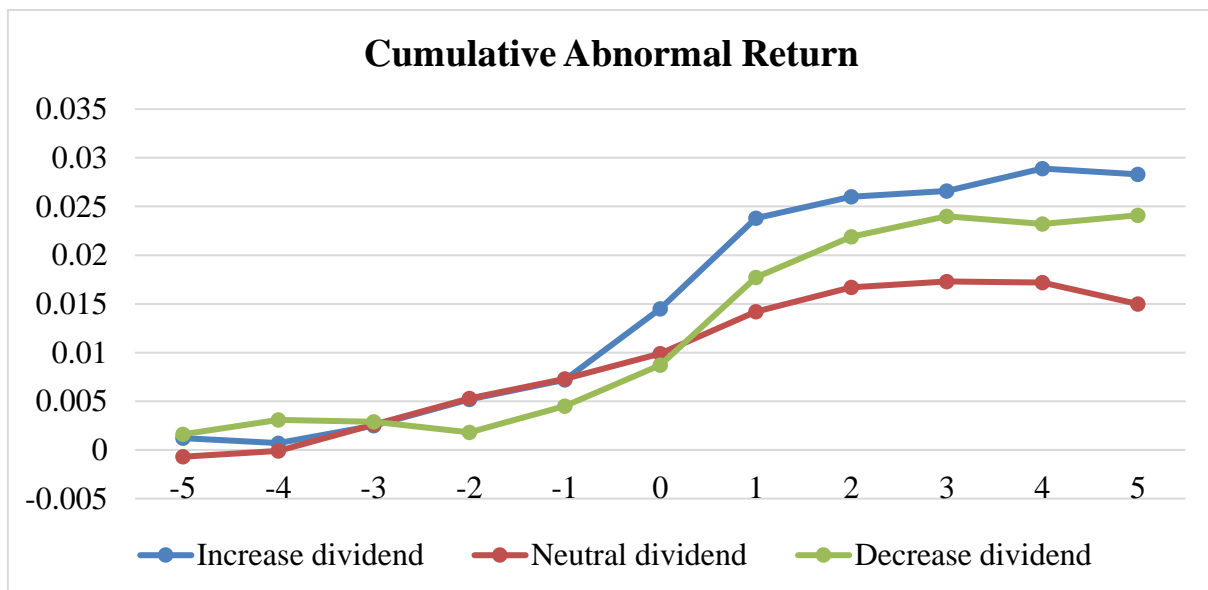**Figure 1. Average Abnormal Return for each type of dividend announcement on and around the event date.**

Figure 2. Cumulative Average Abnormal Return for each type of dividend announcement on and around the event date.

4.2 Test for hypothesis 2

To examine the effects of firm characteristics on the level of market reaction, the study regressed cumulative abnormal returns on the event period with two dependent variables CAR [-5, +5], CAR

[0, +5] and against a number of independent variables such as systematic risk (BETA), firm size (SIZE), firm's yearly dividend yield (DY). Regression results shown on Table 4 revealed that the impact of firm characteristics on cumulative abnormal profits. While both BETA and DY variables show the most effective explanation for market response in the entire observation framework [5; + 5] and [0, +5] with significance respectively 10% and 5% level, the SIZE variable does not significantly show an explanation in any of these three patterns. Therefore, the hypothesis $H2_0$ is rejected. There is a significant relationship between firm characteristics and cumulative abnormal return.

For further analysis, according to the results shown on panel A, only the DY variable is used to explain the effect in the observation framework [-5; + 5], the DY variable shows a significant positive impact on cumulative abnormal returns. The others of independent variables are not meaningful to explain for the reaction of the market in both the observation framework [-5; + 5] and [0, +5]. For panel B, specifically, the BETA variable shows a significant negative effect on cumulative abnormal returns in the timeframe [0; + 5] with a 10% significance level, and the regression coefficient is -0.141. Besides, the DY variable shows a significant positive impact on cumulative abnormal returns to increase dividend announcements in both the observation framework [-5; + 5] and [0, +5] with respectively the regression coefficient 0.132 and 0.181 at 10% and 5% significance level. In contrast to the panel B, the panel C shows that the BETA variable is a significant positive to on cumulative abnormal returns in the timeframe [0; + 5] with the regression coefficient 0.197 (t=2.178) and the DY variable shows a significant negative impact on cumulative abnormal returns to neutral dividend announcements in observation framework [-5; + 5] with the regression coefficient - 0.169 (t = -1.704). Based on the results of panel B, the decrease dividend announcements has no significant effective firm variables to explain for market response in both the observations. Hence, there is no significant relationship between firm characteristic and cumulative abnormal returns related to decrease dividend announcements. However, the study found that the dividend yield and systemic risks play the considerable roles in explaining cumulative abnormal returns on dividend policy (increase or constant), which is similar the findings of Kengatharan and Ford (2021). The finding also showed dividend yield and systemic risks affect the market in different way due to the different kind of dividend announcement.

Table 4. Regression analysis of cumulative abnormal returns on dividend announcement dates.

	BETA	SIZE	DY
Panel A. Full sample of dividend announcements			
CAR [-5, +5]	0.012	0.051	0.095*
t	0.238	0.979	1.786
CAR [0, +5]	0.053	0.03	0.086
t	1.038	0.571	1.607
Panel B. Sample of increase dividend announcements			
CAR [-5, +5]	-0.141*	0.058	0.132*
t	-1.842	0.729	1.653
CAR [0, +5]	-0.097	0.062	0.181**
t	-1.266	0.781	2.277
Panel C. Sample of neutral dividend announcements			
CAR [-5, +5]	0.008	-0.104	-0.169*
t	0.082	-1.048	-1.704
CAR [0, +5]	0.197**	-0.065	-0.097
t	2.178	-0.66	-0.992
Panel D. Sample of decrease dividend announcements			
CAR [-5, +5]	0.044	0.095	-0.003
t	0.447	0.95	-0.035
CAR [0, +5]	0.104	0.027	0.067
t	1.066	0.275	0.678

Note: *, ** and *** represent that the coefficients are significant at 10%, 5%, and 1% level respectively.

CONCLUSION AND SUGGESTIONS

Based on the data collected from selected dividend notices from firms listed on the Ho Chi Minh Stock Exchange (HOSE) for the period 2016-2018, this study has combined the analysis of market reaction around the dividend announcement date and regression analysis to test the impact of firm characteristics on the reaction market in order to give a full overview of the reaction of Vietnam's stock market. The findings of this study will improve investment efficiency as well as recommend for regulatory agencies in building a more effective market. The findings are as followings:

(1) Investors in the market showed a positive response to dividend notices by the abnormal returns, especially the strongest reaction to increase dividend announcements. The positive reactions of the stock market are similar to the empirical results of Prabhakaran and Karthika (2018). The positive

response of the market to the increase dividend announcement can be explained by the signaling theory.

(2) Enterprises with high dividend yield often receive a response with a stronger margin from the market. Stocks with high dividend ratios attract a number of dividend-preferred investors (most of the market), so before the changes in dividends announcements, investors will reflect on the corresponding price. The finding is in line with the studies of Camilleri, et al. (2019) and Kengatharan and Ford (2021).

(3) Dividend notices that are accompanied by the reduction of systemic risk will receive a positive response from investors. When the BETA of businesses decreased compared to last year, it is expected that the firm is becoming less risky. A positive reaction to the stock price will take place in the market around dividend announcement date. The finding is consistent with the empirical results of Kumar (2017).

REFERENCES

Camilleri, S. J., Grima, K., & Grima, S. (2019). The effect of dividend policy on share price volatility: an analysis of Mediterranean banks' stocks. Managerial Finance, 45(2), 348-364. https://doi.org/ 10.1108/MF-11-2017-0451,

Dasilas, A., & Leventis, S. (2011). Stock market reaction to dividend announcements: Evidence from the Greek stock market. International Review of Economics & Finance, 20(2), 302-311.

Do, Q. H., & Hieu, L. V. (2018). Impacts of Dividend Announcement on Stock Price: An Empirical Study of the Vietnam Stock Market. Journal of Business and Management Sciences, 6(2), 59-59. https://doi.org/ 10.12691/jbms-6-2-6.

Felimban, R., Floros, C., Nguyen, A. (2018). The impact of dividend announcements on share price and trading volume: Empirical evidence from the Gulf Cooperation Council (GCC) countries. Journal of Economic Studies, 45(2), 210-230. https://doi.org/10.1108/JES-03-2017-0069,

Gupta, S., Dogra, B., Vashisht, A. K., & Ghai, S. (2012). Stock price reaction to dividend announcements. International Journal of Financial Management, 2(2), 23-31.

Hashemijoo, M., Ardekani, A. M., & Multimedia, M. U. (2012). The Impact of Dividend Policy on Share Price Volatility in The Malaysian Stock Market. Journal of Business Studies Quarterly, 4(1), 111-129.

Kadioglu, E. (2008). The Announcement effect of cash dividend: evidence from Turkish capital market. Leeds University Business School, 87-98.

Kengatharan, L., & Ford, J.S., (2021). Dividend Policy and Share Price Volatility: Evidence from Listed Non-Financial Firms in Sri Lanka. International Journal of Business and Society, 22(1), 227-239. https://doi.org/10.33736/ijbs.3172.2021

Khanal, A.R., Mishra, A.K. (2017) Stock price reactions to stock dividend announcements: A case from a sluggish economic period. The North American Journal of Economics and Finance, 42, 338-345. https://doi.org/10.1016/j.najef.2017.08.002

Khokhar, A. R., Sarkar, S. (2019). Market response to dividend change announcements: unregulated versus regulated US firms. Accounting & Finance, 60 (2), 1759-1799. https://doi.org/10.1111/acfi.12512

Kumar, S. (2017). New evidence on stock market reaction to dividend announcements in India. Research in International Business and Finance, 39, 327- 337

Masum, A. A. (2014). Dividend Policy and Its Impact on Stock Price – A Study on Commercial Banks Listed in Dhaka Stock Exchange. Global Disclosure of Economics and Business, 3(1), 9-17.

Mrzygłód, U., & Nowak, S. (2017). Market reactions to dividends announcements and payouts. Empirical evidence from the Warsaw Stock Exchange. Contemporary Economics, 11(2), 187-204. https://doi.org/ 10.5709/ce.1897-9254.236

Prabhakaran K, Karthika P. (2018). The impact of dividend announcement on stock prices in Muscat securities market, Muscat. Open Access J Sci., 2(6), 409–417. https://doi.org/10.15406/oajs.2018.02.00106

Sewell, M. (2012). The efficient market hypothesis: Empirical evidence. International Journal of Statistics and Probability, 1 (2), 164. http://dx.doi.org/10.5539/ijsp.v1n2p164

Suwanna, T. (2012). Impacts of Dividend Announcement on Stock Return. Procedia - Social and Behavioral Sciences, 40, 721 – 725. https://doi.org/10.1016/j.sbspro.2012.03.255

Tsai, H. J., & Wu, Y. (2015). Bond and stock market response to unexpected dividend changes. Journal of Empirical Finance, 30, 1-15.

Tran, Q. T, & Mai, Y. D. (2015), Stock Market Reaction to Dividend Announcements from a Special Institutional Environment of Vietnamese Stock Market, International Journal of Economics and Finance, 7 (9), 50-58. https://doi.org/10.5539/ijef.v7n9p50