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Stock Market Reaction to Dividend Announcements from a Special Institutional Environment of Vietnamese Stock Market

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Abstract

Vietnamese stock market is an interesting laboratory to examine the reaction of stock price to dividend announcements due to its taxation regulations. The study employs traditional event study methodology to investigate the impact of dividend announcements on stock prices in a special institutional environment of Vietnamese stock market. The research sample includes 979 dividend announcements made by 233 companies listed on HOSE from 2008 to 2014. Although there is no preferential tax treatment of dividends to capitals gains in Vietnamese stock market, this study finds that dividend announcements lead to positive effects on stock prices and trading volume in the stock market. Although dividend announcements in three clusters including dividend increases, dividend decreases and no change have positive impacts on stock prices, the cluster of increases has the largest effect. Moreover, examining the abnormal return behavior, we also find evidence of insider trading before the announcement day.

Keywords: stock price, dividend announcement, Vietnamese stock market

1. Introduction

Miller and Modigliani (1961) initially study the relationship between dividend payment and market value of stocks with the dividend irrelevance theory. They argue that in a perfect environment, all investors have similar information on a firm's future investments, profits and market value; therefore, its stock price is hypothesized to be irrelevant to its dividend announcements. However, there are several studies finding that dividend announcements convey specific information to outside investors in different stock markets including the U.S. (Aharony & Swary, 1980; Charest, 1978), Oman (Al-Yahyaee, Pham, & Walter, 2011), Greece (Dasilas & Leventis, 2011). Based on the argument of asymmetric information between insiders and outsiders, these studies explain the significant impact of dividend announcements on stock price with the dividend-signaling hypothesis in various institutional environments.

Studying the institutional environment of Vietnamese stock market, we find that Vietnamese stock market is an interesting laboratory to examine the reaction of stock prices to dividend announcements due to its taxation. While the extant literature shows that dividend announcements convey information because of the higher tax rates on dividends relative to capital gains, there is no favorable tax treatment of capital gains to dividends in Vietnam. Moreover, unlike developed markets, Vietnamese stock market established only 15 years ago experiences low transparency with scarce professional financial analysis and lacks of media making financial information pubic. The low transparency is an opportunity for insider trading which affects the reaction of stock prices to dividend announcements. This study investigates effects of dividend announcements on stock prices with a sample of 979 dividend announcements made by 233 companies listed on Ho Chi Minh City stock exchange from 2008 to 2014

2. Literature Review

The information content of dividends is first developed by Miller and Modigliani (1961). In stock markets, there is asymmetric information between firms' managers and outside investors (Miller & Rock, 1985). Managers have more information about firms' earnings; therefore, the payout of dividend contains information evaluated by outsiders. Signaling hypothesis is one of the latest and faddish explanations of the payout of dividend (Mollah,

2001). Dividend policy is a signal of the firm's forecasted profitability and the firm tends to remain a steady dividend payout. Heinkel (1978) and Bhattacharya (1979) develop an asymmetric information model stating that firm value is a function of cash dividends. Cash dividends imply firms' expected cash flows; hence, firms with higher dividends are considered to have better performance than those with lower ones. As a result, investors use these signals to make their investment decisions and value firms' stocks. According to Bhattacharya (1979) model, signaling costs are a function of the differential tax treatment of dividends to capital gains and the financing costs of raising unexpected funds to execute dividend obligations. Therefore, taxation on dividends and capital gains play an important role in determining the impact of dividend signaling. This model argues that as agents for shareholders, insiders are expected to maximize the after-tax objective function of the shareholders. When tax rates imposed on dividends are higher than those imposed on capital gains, dividends become more informative. John and Williams (1985) develop Bhattacharya's (1979) model and also argue that tax penalty on dividends versus capital gains is the major signaling cost. Therefore, the absence of tax penalty on dividends versus capital gains in Vietnam is a good opportunity to investigate the tax-based signaling model.

Several prior studies examine the stock price reactions to dividend announcements, especially changes in regularly paid dividends. Aharony and Swary (1980); Charest (1978); Lie (2005); Nissim and Ziv (2001) find supporting evidence for dividend signaling hypothesis. Recently, Al-Yahyaee et al. (2011) investigate the information content of cash dividend announcements in Oman stock market in which both dividends and capital gains are exempt from taxes and find that announcements of dividend increases (decreases) are related to increased (decreased) stock prices. However, Benartzi, Michaely, and Thaler (1997) find little empirical support for the information content of dividends.

3. Institutional Environment of Vietnamese Stock Market

According to Vietnam Enterprise Law, firms are allowed to retain 100% earnings or distribute their earnings in forms of cash dividends, stock dividends and share repurchases. In Vietnam, listed firms usually pay dividends two times per year. The first one usually takes place in July or August based on business outcomes for the first half of the financial year. The second time is in March or April the next year. However, there are also firms paying dividend three times or four times per year.

In Vietnam, regulations concerning tax policies on dividends and capital gains for individual investors and institutional investors are incorporated into Personal Income Tax ("PIT") and Corporate Income Tax ("CIT") respectively. Overall, there is no favorable tax treatment of capital gains to dividends in Vietnam from 2008 to 2014 (Table 1). Over the research period, tax policies on dividends and capital gains earned by individuals can be divided into 4 major sub-periods. From January 2008 to December 2009, individual investors' dividends and capital gains are exempt from PIT. Although Law on PIT 2007, which regulates that dividends and capital gains are taxed at the rate of 5% and 20% or 0.1% selling price respectively, comes into forces since January 2009, due to economic hardships and global financial recessions, the State decides to exempt dividends and capital gains from PIT in that year. Then, from January 2010 to July 2011, dividend and capital tax rates stipulated in PIT Law 2007 are officially applied. From August 2011 to December 2012, with the aim of stimulating personal investments in financial markets, the Government offers the favorable tax treatment for individuals in which dividend tax is reduced to zero and tax on capital gains are cut down by half during this period. From the beginning of 2013, the standard tax rates are back on track.

Table 1. Vietnam tax policy on dividends and capital gains from 2008 to 2014

	Jan 2008 - Dec 2009		Jan 2010 - July 2011		Aug 2011 - Dec 2012		Jan 2013 - Dec 2014	
	Dividends	Capital gains	Dividends	Capital gains	Dividends	Capital gains	Dividends	Capital gains
Individual investors	0%	0%	5%	20% or 0.1% selling price	0%	10% or 0.05% selling price	5%	20% or 0.1% selling price
	Jan 2008 - Dec 2008		Jan 2009 - Dec 2013				Jan 2014 - Dec 2014	
	Dividends	Capital gains	Dividends	Capital gains			Dividends	Capital gains
Vietnamese institutional investors	0%	28%	0%	25%			0%	22%
Foreign institutional investors	0%	0.1% selling price	0%	0.1% selling price			0%	0.1% selling price

Source: Law No. 04/2007/QH12, Circular No. 134/2008/TT-BTC, Circular No. 160/2009/TT-BTC, Decree No. 101/2011/NĐ-CP, Circular No. 111/2013/TT-BTC; "Law No. 09/2003/QH11, Circular No. 100/2004/TT-BTC, Law No. 14/2008/QH12, Circular No. 134/2008/TT-BTC, Law No. 32/2013/QH13.

Regarding dividend and capital gain tax treatments for Vietnamese and foreign institutional investors, dividends are exempt from taxes. Capital gains of Vietnam enterprises are treated like other incomes, specifically financial incomes, and thus are taxed with the effective CIT rate. From 2008 to 2014, three CIT rates are applicable. From January to December 2008, CIT rate is 28%, then adjusted to 25% for the period January 2009-December 2013. Since the beginning of 2014, the tax rate is cut down 22%. For foreign institutional investors, the tax rate on capital gains is 0.1% of the selling price when such securities are sold to other parties and this tax rate is constant over the period from 2008 to 2014.

In Vietnamese stock market, insider trading transactions were introduced in the Security law 2006. However, until the Security law 2010 was issued, the sanctions for insider trading were stipulated in the Decree 85/2010/ND-CP with "a fine of between VND 150,000,000 and 200,000,000 shall be imposed on an individual or institution". In addition, according to Vietnam criminal law the maximum sanction for this crime is 7 years in prison. Although, the sanctions for insider trading are less serious than those in developed market, there are only a few of cases detected and fined. Even, individuals and institutions are willing to be fined to conduct insider trading transactions.

4. Methodology

4.1 Research Design

In line with prior studies, we investigate the stock price behavior under the impact of dividend announcements with price ratios, abnormal return behavior and abnormal trading behavior. Abnormal return and abnormal trading behavior is examined with the event study method: (1) The announcement date (day 0) is defined as the very first occasion on which the information about dividend payouts is officially released to the public; (2) The event window is from day -5 to day +5 and (3) The estimation window is from day -125 to day -6.

4.1.1 Price Ratios

This study investigates the impact of dividend announcements on stock prices with two price ratios including raw price ratio and market adjusted price ratio. The raw price ratio (hereinafter "RPR") is calculated with raw closing prices as follows:

$$PRP_i = \frac{P_{i,0} - P_{i,-1}}{P_{i,-1}} \quad (1)$$

Where: $P_{i,0}$ denotes unadjusted closing price of stock i on announcement date (t_0); $P_{i,1}$ is unadjusted closing price of stock i on the previous day (t_{-1}).

The market adjusted price ratio (hereinafter "MAPR") eliminating the impact of market returns on the event day is calculated as follows:

$$MAPR_i = \frac{P_{i,0}/(1 + R_{m,0}) - P_{i,-1}}{P_{i,-1}} \quad (2)$$

Where: $P_{i,0}$, $P_{i,1}$ are the same as in RPR; $R_{m,0}$ is market return on t_0 calculated by VN-INDEX.

If dividend announcements have no impacts on stock prices, the price ratios are equal to zero. The two null hypotheses are developed as follows:

H1a: RPR is equal to 0.

H1b: MAPR is equal to 0.

4.1.2 Abnormal Return Behavior

The abnormal return (hereinafter "AR") is computed as the difference between the actual return and the security's normal return that would be expected in the absence of the event, according to the following equation:

$$AR_{i,t} = R_{i,t} - E(R_{i,t}) \quad (3)$$

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. In this study, both Market model and Mean-adjusted model are used to estimate the expected return.

Market Model is the standard and most widely-used approach to estimate expected stock return for each firm after taking the market return into consideration. A recent study by Cable and Holland (1999) shows that the Market model compares favorably to other models proposed in the literature. In this model, the parameters α and β are estimated by the OLS regression using 120 daily returns data prior to the event window (t_{-125}, t_{-6}):

$$E(R_{i,t}) = \alpha_i + \beta_i \times R_{m,t} + e_{i,t} \quad (4)$$

Where: α_i, β_i are Market Model parameters; $e_{i,t}$ is random error terms for firm i at time t.

Mean-adjusted returns (Brown & Warner, 1980) are calculated by subtracting the average return for stock i during the estimation period from the stock's return during the event periods. This method does not explicitly control for the risk of the stock or the return on the market portfolio during periods. Compared to using the Market model, this approach is at best only slightly simpler, because one rather than two parameters are estimated and no market returns are required. In this model, as an estimator for expected returns, the mean stock returns over the estimation window are employed, specifically:

$$E(R_{i,t}) = \mu_i = \frac{\Sigma_{t=-125}^{-6} R_{i,t}}{120} \quad (5)$$

If dividend announcements have no impacts on stock prices the abnormal returns on the event day on and after the event day are equal to zero. The null hypothesis is as follows:

H2a: AR_0 is equal to 0.

H2b: $AR_{t>0}$ are equal to 0.

4.1.3 Abnormal Trading Volume Behavior

In addition to abnormal stock returns, we examine the behavior of trading volume on and around dividend announcement dates. In this study, the model used to calculate abnormal trading volume (hereinafter "AV") is based on Gurgul, Mestel, and Schleicher (2003), the daily numbers of shares traded are used as a measure for trading volume. Daily abnormal trading volume of firm i is calculated by means of the formula:

$$AV_{i,t} = ln\left(\frac{V_{i,t}}{V_{m,t}}\right) - E\left[ln\left(\frac{V_{i,t}}{V_{m,t}}\right)\right] \quad (6)$$

Where: $V_{i,t}$ is the trading volume of share i on day t; $V_{m,t}$ is the market trading volume on day t; $E\left[\ln\left(\frac{V_{i,t}}{V_{m,t}}\right)\right]$ represents the expectation operator of natural log-transferred volume ratios.

According to Gurgul et al. (2003) Gurgul et al. (2003), as volume data experience much more volatility than stock prices, the use of logarithms moves the distribution of data closer to normality and also stabilized the variance.

With reference to the expected volume-ratio, the Mean-adjusted model is employed. In this model, the mean volume ratio over the estimation window is used as an estimator for expected volume ratio. The mean volume ratio is given by this formula:

$$\mu_i = \frac{1}{120} \times \sum_{t=-125}^{-6} ln\left(\frac{V_{i,t}}{V_{m,t}}\right) \quad (7)$$

Then, average abnormal volume (hereinafter "AAV") is obtained by averaging daily AVs across the whole sample and each of the three clusters:

$$AAV_{p,t} = \frac{\sum_{i=1}^{n} AV_{i,t}}{n} \quad (8)$$

Where: n is the number of sample observations in each scenario.

Both parametric test and non-parametric test, namely Student's t-test and Wilcoxon signed-rank test are employed to test the above research hypotheses.

4.2 Data Selection

Both raw closing prices and adjusted closing prices for firms listed in Ho Chi Minh City stock exchange from 2008 to 2014 are obtained from website cafef.vn. The event day and other announcement days are collected from the website of FTP securities-www.fpts.com.vn. In order to obtain a reliable sample for analysis, a screening process is performed (Table 2). The final sample consists of 979 dividend announcements made by 233 companies over the 7-year period.

Table 2. Data selection process

Steps	Data selection	No. of companies	No. of dividend announcements
0	Original sample (population)	275	1,836
1	Elimination of Finance and Insurance companies	258	1,766
2	Elimination of companies having other corporate announcements within the event window (earnings announcements, stock dividends, stock splits, stock repurchases, etc.)	250	1,183
3	Elimination of observations missing and lacking price data	234	1,001
4	Elimination of dividends falling into the 1-percentile and 100-percentile of RPR	233	979

Table 3 shows the distribution of the final research sample by year and by industry with three groups of dividend announcements including dividend increases, dividend decreases and no change. The year of 2011 witnesses the largest number of dividend announcements, followed by 2012 with 162. There are 386 dividend increases, 327 dividend decreases and 266 announcements of no dividend change.

Table 3. Distribution of the research sample by year

Year	Sample				
	Firms	Total	Increases	Decreases	No change
2008	77	89	44	27	18
2009	87	111	37	46	28
2010	103	139	67	48	24
2011	140	184	77	53	54
2012	129	162	60	51	51
2013	113	146	45	51	50
2014	121	148	56	51	41
Total		979	386	327	266

5. Empirical Results

5.1 Price Ratios

Table 4 illustrates the testing results of RPR and MAPR to investigate the relationship between dividend announcements and the reaction of stock prices. The cross-sectional means of RPR and MAPR are 0.005 and significant at the 1% level with t-test. In addition, the median values of RPR and MAPR are and significantly positive at 1% with sign-ranked test. These results reject the null hypotheses H1a and H1b and imply that the announcements of dividends lead to immediate positive impacts on stock prices. The detailed analysis of stock return implications on dividend announcements is discussed with abnormal return and trading volume behavior.

Table 4. Testing results for price ratios

Ratio	t-test				Signed-rank test		
	Mean	Std.	t	p-value	Median	z	p-value
RPR	0.005	0.027	5.984	0.000	0.000	5.997	0.000
MAPR	0.005	0.024	6.702	0.000	0.004	6.001	0.000

5.2 Abnormal Return Behavior

Table 5 demonstrates abnormal returns on and around dividend announcement days. There is no statistically significant value of abnormal returns in the two windows (-5, -3) and (+3, +5). This implies that the events which are outside the event window fail to affect the abnormal return behavior. In addition, the mean values of ARs are significantly positive from day -2 to day +2 in the Market model. These results are supported by the signed-rank test, in which the daily median ARs are significantly different from 0 on day -2, 0 and +1. These findings are consistent with the testing results conducted with the Mean-adjusted model.

Table 5. Abnormal returns on and around dividend announcement days

Days	Market Model		Mean-Adjusted Model	
	Mean (%)	Median (%)	Mean (%)	Median (%)
-5	0.103	-0.091	0.141	-0.029
	(1.306)	(0.674)	(1.567)	(1.176)
-4	0.142	-0.064	0.148	-0.010
	(1.775)	(0.767)	(1.638)	(1.250)
-3	0.076	0.048	0.059	-0.189
	(0.973)	(0.736)	(0.648)	(0.549)
-2	0.337***	0.189***	0.344***	0.098***
	(4.010)	(3.400)	(3.729)	(3.435)
-1	0.223***	0.026	0.173	0.043
	(2.805)	(1.634)	(1.928)	(1.583)
0	0.497***	0.368***	0.506***	0.302***
	(6.349)	(5.698)	(5.700)	(5.631)
+1	0.666***	0.510***	0.698***	0.439***
	(8.114)	-7.53	(7.650)	(7.450)
+2	0.206**	-0.015	0.210**	0.010**
	(2.578)	(1.672)	(2.324)	(2.043)
+3	0.054	0.000	-0.004	-0.108
	(0.6968)	(0.056)	(-0.043)	(-0.712)
+4	0.055	-0.002	0.040	-0.011
	(0.6959)	(0.533)	(0.433)	(0.468)
+5	0.158**	-0.017	0.137	0.047
	(1.998)	(1.684)	(1.571)	(1.625)

Note. ***: Significant at the 1% level, **: Significant at the 5% level.

Moreover, the mean and median values of CARS of both Market model and Mean-adjusted model are significant at 1% for windows (-2, -1) and (+1, +2); therefore the hypotheses H2a and H2b are rejected. On one hand, these results imply that dividend announcements have positive effects on abnormal returns. On the other hand, they indicate that there can be leakage of information or insider trading which is supported by the low transparency level of the stock market before announcement days.

Table 6 presents abnormal returns on and around dividend announcement days by clusters including dividend increases, dividend decreases and no change. The mean and median values of abnormal returns from day 0 to day +1 in three clusters are significantly positive. This implies that investors in Vietnamese stock market perceive dividends as a good signal to firms' future cash flows. Dividend increases are interpreted as the best signal with the highest abnormal returns. Remarkably, there is strong statistical evidence of insider trading or information leakage prior to the announcement date when the mean and median values of abnormal returns from day -2 to day -1 in the dividend increase group are significantly positive.

Table 6. Abnormal returns on and around dividend announcement days by clusters

Days	Dividend increases		Dividend decreases		No change	
	Mean	Median	Mean	Median	Mean	Median
-5	0.144	0.040	0.150	-0.092	-0.014	-0.182
	(1.108)	(0.790)	(1.075)	(0.618)	(-0.097)	(-0.360)
-4	0.085	-0.113	0.275	0.095	0.061	-0.118
	(0.628)	(-0.066)	(1.931)	(1.419)	(0.466)	(-0.063)
-3	0.033	-0.063	0.157	0.106	0.038	0.214
	(0.246)	(-0.153)	(1.191)	(0.941)	(0.287)	(0.735)
-2	0.645***	0.532***	0.299**	0.176	-0.064	-0.113
	(4.669)	(4.191)	(2.003)	(1.852)	(-0.445)	(-0.714)
-1	0.340**	0.056	-0.027	-0.098	0.361*	0.137
	(2.485)	(1.762)	(-0.200)	(-0.595)	(2.707)	(1.776)
0	0.497***	0.341***	0.522***	0.375***	0.467***	0.375***
	(3.833)	(3.450)	(3.739)	(3.239)	(3.446)	(3.259)

+1	0.901***	0.789***	0.646***	0.483***	0.352**	0.278**
	(6.602)	(6.114)	(4.545)	(4.118)	(2.417)	(2.410)
+2	0.248	0.046	0.155	-0.176	0.207	0.133
	(1.862)	(1.553)	(1.127)	(-0.130)	(1.446)	(1.393)
+3	0.164	0.111	-0.139	-0.235	0.132	0.164
	(1.329)	(0.945)	(-1.035)	(-1.479)	(0.883)	(0.536)
+4	0.138	0.021	-0.118	-0.171	0.147	0.159
	(1.092)	(0.813)	(-0.807)	(-1.026)	(1.066)	(1.356)
+5	0.125	-0.044	0.099	-0.042	0.279	0.159
	(1.013)	(0.701)	0.150	-0.092	(1.832)	(1.729)
(-2, -1)	0.985*	0.606*	0.272	0.057	0.297	0.110
	(4.861)	(3.958)	(1.366)	(0.658)	(1.554)	(1.369)
(+1, +2)	1.149*	0.793*	0.856*	0.403*	0.558*	0.106**
	(5.634)	(5.123)	(3.647)	(3.489)	(2.672)	(1.963)

Note. ***: Significant at the 1% level, **: Significant at the 5% level.

5.3 Abnormal Trading Volume Behavior

The analysis of trading volume patterns around dividend announcements in combination with price effects will give us a better understanding of how investors react to dividend announcements. Table 7 shows abnormal trading volume on and around dividend announcement days. In line with price reactions, the statistically insignificant values of the mean abnormal trading volume from day -5 to day -1 and the median on day -5 imply that the information content of dividends is not affected by other events. Furthermore, both mean and median values of abnormal trading volume from day 0 to day +5 are positive at significant level of 1%. This can be explained that investors perceive the information content of dividends immediately and tend to buy more stocks which pay dividends.

Table 7. Abnormal trading volume on and around dividend announcement days

Days	Mean	Median
-5	-0.078	0.099
	(-0.411)	(1.039)
-4	-0.038	0.119**
	(-1.046)	(2.163)
-3	0.012	0.098**
	(1.239)	(2.403)
-2	0.049	0.115***
	(0.206)	(2.683)
-1	0.099	0.160***
	(1.81)	(3.961)
0	0.251***	0.305***
	(3.715)	(7.050)
+1	0.370***	0.395***
	(6.248)	(9.155)
+2	0.293***	0.321***
	(4.210)	(7.568)
+3	0.222***	0.336***
	(5.206)	(6.751)
+4	0.206***	0.253***
	(4.121)	(5.774)
+5	0.260***	0.321***
	(4.150)	(6.802)

Note. ***: Significant at the 1% level, **: Significant at the 5% level.

Table 8 presents abnormal trading volume on and around dividend announcement days by clusters. In line with

price reactions, there is strong support for the hypothesis that dividend announcements convey information to the market. Abnormal trading volume is significantly different from zero from day 0 to day +5 in three clusters. Investors respond positively to all kind of dividend changes, thus all clusters of dividend announcements trigger trading volume on and after the announcement day.

Table 8. Abnormal trading volume on and around dividend announcement days by clusters

Days	Increase		Decrease		No change	
	Mean	Median	Mean	Median	Mean	Median
-5	-0.035	0.099	-0.077	0.094	-0.142	0.091
	(-0.411)	(0.994)	(-0.889)	(0.477)	(-1.324)	(0.264)
-4	-0.093	0.085	0.059	0.222**	-0.076	0.071
	(-1.046)	(0.542)	(0.652)	(2.332)	(-0.740)	(0.954)
-3	0.101	0.164**	-0.011	0.091	-0.088	0.032
	(1.239)	(2.453)	(-0.126)	(0.845)	(-0.826)	(0.690)
-2	0.016	0.009	0.185**	0.248***	-0.070	0.054
	(0.206)	(0.862)	(2.132)	(3.053)	(-0.699)	(0.676)
-1	0.159	0.236***	0.143	0.229***	-0.045	-0.037
	(1.810)	(3.414)	(1.657)	(2.944)	(-0.438)	(0.205)
0	0.310***	0.339***	0.289*	0.353***	0.121	0.191***
	(3.715)	(4.859)	(3.515)	(4.343)	(1.268)	(2.837)
+1	0.487***	0.519***	0.356***	0.381***	0.216**	0.236***
	(6.248)	(7.166)	(4.250)	(5.081)	(2.161)	(3.266)
+2	0.346***	0.460*	0.305***	0.288***	0.201**	0.267***
	(4.210)	(5.686)	(3.566)	(3.948)	(2.166)	(3.246)
+3	0.406***	0.421***	0.067	0.183**	0.145	0.274***
	(5.206)	(6.861)	(0.729)	(2.119)	(1.426)	(2.517)
+4	0.335***	0.408***	0.193**	0.138***	0.035	0.084
	(4.121)	(5.199)	(2.234)	(3.111)	(0.370)	(1.202)
+5	0.338***	0.341***	0.229**	0.304***	0.186**	0.279***
	(4.150)	(5.063)	(2.525)	(3.686)	(2.066)	(2.837)

6. Conclusions

The study employs traditional event study methodology to investigate the impact of dividend announcements on stock prices in a special institutional environment of Vietnamese stock market. The research sample includes 979 dividend announcements made by 233 companies listed on HOSE from 2008 to 2014. Although there is no preferential tax treatment of dividends to capitals gains in Vietnamese stock market, this study finds that dividend announcements lead to positive effects on stock prices and trading volume in the stock market. Although dividend announcements in three clusters including dividend increases, dividend decreases and no change have positive impacts on stock prices, the cluster of increases has the largest effect. Moreover, examining the abnormal return behavior, we also find evidence of insider trading before the announcement day.

References

Aharony, J., & Swary, I. (1980). Quarterly Dividend and Earnings Announcements and Stockholders' Returns: An Empirical Analysis. *The Journal of Finance, 35*(1), 1-12. http://dx.doi.org/10.1111/j.1540-6261.1980.tb03466.x

Al-Yahyaee, K. H., Pham, T. M., & Walter, T. S. (2011). The information content of cash dividend announcements in a unique environment. *Journal of Banking & Finance, 35*(3), 606-612. http://dx.doi.org/10.1016/j.jbankfin.2010.03.004

Benartzi, S., Michaely, R., & Thaler, R. (1997). Do Changes in Dividends Signal the Future or the Past? *Journal of Finance, 52*(3), 1007-1034. http://dx.doi.org/10.1111/j.1540-6261.1997.tb02723.x

Bhattacharya, S. (1979). Imperfect information, dividend policy, and "the bird in the hand" fallacy. *Bell Journal of Economics, 10*(1), 259-270. http://dx.doi.org/10.2307/3003330

Brown, S. J., & Warner, J. B. (1980). Measuring security price performance. *Journal of Financial Economics,*

8(3), 205-258. http://dx.doi.org/10.1016/0304-405X(80)90002-1

Charest, G. (1978). Dividend information, stock returns and market efficiency-II. *Journal of Financial Economics, 6*(2-3), 297-330. http://dx.doi.org/10.1016/0304-405X(78)90033-8

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. http://dx.doi.org/10.1016/j.iref.2010.06.003

Gurgul, H., Mestel, R., & Schleicher, C. (2003). Stock market reactions to dividend announcements: Empirical evidence from the Austrian stock market. *Financial Markets and Portfolio Management, 17*(3), 332-350. http://dx.doi.org/10.1007/s11408-003-0304-1

Heinkel, R. (1978). *Dividend policy as a signal of firm value in Essays on financial markets with imperfect information.* (Ph.D), University of California, Berkeley.

John, K., & Williams, J. (1985). Dividends, Dilution, and Taxes: A Signalling Equilibrium. *Journal of Finance, 40*(4), 1053-1070. http://dx.doi.org/10.1111/j.1540-6261.1985.tb02363.x

Lie, E. (2005). Operating performance following dividend decreases and omissions. *Journal of Corporate Finance, 12*(1), 27-53. http://dx.doi.org/10.1016/j.jcorpfin.2004.04.004

Miller, M. H., & Modigliani, F. (1961). Dividend Policy, Growth, and the Valuation of Shares. In H. R. Vane, & C. Mulhearn (Eds.), *Harry M. Markowitz, Merton H. Miller, William F. Sharpe, Robert C. Merton and Myrin S. Scholes* (pp. 113-135). Elgar Reference Collection. Pioneering Papers of the Nobel Memorial Laureates in Economics, vol. 2. Cheltenham, U.K. and Northampton, Mass.: Elgar.

Miller, M. H., & Rock, K. (1985). Dividend Policy under Asymmetric Information. *Journal of Finance, 40*(4), 1031-1051. http://dx.doi.org/10.1111/j.1540-6261.1985.tb02362.x

Mollah, A. S. (2001). *Dividend policy and behaviour, and security price reaction to the announcement of dividends in an emergency market: A study of companies listed on the Dhaka stock exchange* (Ph D. Thesis). University of Leeds (Business School), Leeds. Retrieved from http://etheses.whiterose.ac.uk/700/

Nissim, D., & Ziv, A. (2001). Dividend Changes and Future Profitability. *Journal of Finance, 56*(6), 2111-2133. http://dx.doi.org/10.1111/0022-1082.00400