

# Dividend announcements effects on stock market returns: a comparative study between conventional and Shari'ah compliant stocks on Bursa Malaysia

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## Keywords

Conventional Stocks, Shari'ah Compliant Stocks. Unexpected Changes in Dividend Announcements, Cumulative Abnormal Returns.

## Abstract

Numerous studies have been conducted in Islamic compliant securities, and yet the debate surrounding whether these securities have a significant influence on the stock market rages on. This paper therefore examines the effects of changes in dividend announcements in respect to the conventional and Shari'ah compliant stocks on Malaysian stock market returns. In addition, the investigation will be conducted based on five different economic conditions namely for the: (1) overall period (1990-2010); (2) before the Asian financial crisis (1990-1996); (3) during the Asian financial crisis (1997-1998); (4) after the Asian financial crisis (1999-2007); and (5) during the global financial crisis (2008-2010). Our findings reveal that the changes in dividend announcements of Shari'ah compliant stocks had a significant effect on the Malaysian stock market returns compared to the conventional stocks for every economic condition, except for the period during the global financial crisis. The findings indicate that the Malaysian investors are more sensitive with changes in dividends of Shari'ah compliant stocks rather than the conventional stocks.

## 1. Introduction

There are abundance studies when it comes to examine the effects of dividend change announcements on stock returns in developed and emerging markets and yet no consensus is achieved due to the inconsistent nature of the findings. The insignificant findings in emerging markets can be found in the studies of Abdullah, et al. (2004), Nobanee, et al. (2009), and Ali and Chowdhury (2010). According to Abdullah, et al. (2004), increasing dividend and decreasing dividend announcements causing variations in cumulative abnormal returns (CAR), and none of the determinant variables of dividend increasing and dividend decreasing have significant effect on the CAR, using cross-sectional regression. Similar results are obtained when using stepwise regression except for BUMIPUTRA ownerships in a company, and pre-announcement CAR with significant effect on CAR for decreasing dividend announcements. Their results constitute no support on the dividend signalling, free cash flow and agency costs hypotheses. Unlike Abdullah, et al. (2004), Nobanee, et al. (2009) includes dividend no change, and no dividend no change samples in their study. They find MAR negatively correlated with dividend increases, dividend decreases, dividend no change, and no dividend no change, individually on the event date. Their results are similar using 3-day CAR. Ali and Chowdhury (2010) using sample data of a financial industry in Bangladesh for 9 months. They find stock prices increased by 1.84% in the seven 7-day price adjustment period after the dividend announcement date rather than 7.09% for the latter 7-day before the record date when investors wishing to gain dividend benefits. The results indicate that dividend announcements have no significant influence on stock prices. According to them, the role of speculators consist of insiders, brokers and exchange employees for short-term gains causing the dividend information to be ineffective. Among studies in developed countries that do not support the signalling theory include Amihud and Li (2005) and Grullon et al. (2002). Amihud and Li (2005) find that there is a significant decline over the years in the (absolute) stock price reactions to dividend change announcements that support their proposition that the information content of dividend announcements declines over

time. The effect of RMy (average monthly market return (value weighted) in year y) for dividend increases is negative and significant. They conclude that the increased stockholding by institutional investors, who are more informed than retail investors have reduced the dividend announcement effects on stock prices. Unlike other studies, Grullon et al. (2002) investigate the subsequent changes in the cash flows of the firms after announcing dividends to confirm the dividend signalling theory. They document the profitability represent by ROA decrease of 0.53% during the 3 years after the increase in dividends. Similarly, ROA increase by 0.44% a year in the 3 years after a decrease in dividends.

In contrast to the above findings, Mohamed, et al. (2006), and Bhana (1998) support the dividend signalling theory in emerging markets. Mohamed, et al. (2006) find the relationship between SUDC and CAR is significantly positively correlated in long event and short event windows. Their findings suggest that an increase (decrease) in dividend will increase (decrease) the stock prices. Weak support on the dividend clientele hypothesis because of dividend yields is significant only in short event window and partial support on free cash flow hypothesis for using Tobin Q (Dummy) as a proxy for firm growth. Different with Mohamed, et al. (2006), Bhana (1998) examines the effects of special dividend announcement to excess returns on the Johannesburg Stock Exchange. He finds companies with infrequent declaration (5 or fewer) of special dividends conveys more information with announcement period excess return of 1.81% that is significantly higher than the 1.29% earned by companies that appear on a more regular basis (6 or more declarations of special dividend). The results support the signalling effects but the extent of the signalling effects is determined by market anticipation. The subsequent findings are based on the developed markets and they support the signalling theory. Borde, et al. (1999) examines the effects of dividend increases to stock prices on hospitality industry on New York Stock Exchange (NYSE) from 1979 to 1994 for 15 years. According to them, dividend increases have significant positive relationship with AR and CAR. Similarly, Zhong (1999) emphasises mainly on a particular industry. He documents dividend increases have significant positive effect on the 2-day CAR on insurance industry. Capstaff, et al, (2004) report mixed results except for dividend increases with support on signalling theory. They conclude that the significant negative results on dividend decreases might be contributed by smaller magnitude of 19 observations only from 1993-1998. Sponholtz (2005) reports dividend surprise and CAR are significantly positive. The regression results between CAR with respective current earnings and expected earnings surprises, suggest that the information content of the surprise in management forecast of next year's earnings is much larger than that of the surprise component of current earnings. Ryan and Lee (2000) examine the signalling effects using dividend initiations and omissions on the CAR respectively. Their results suggest that dividend initiations (dividend omissions) will increase (decrease) the CAR. Their findings are consistent with that of Chemmanur, et al. (2010), who found that U.S. stocks prices react more positively for the dividend initiations and more negatively for the dividend omissions compared to Hong Kong. Different from other studies, Banker, et al. (1993) wanted to test the signalling effect using stock dividend announcements. They found that the 7-day CAR is significantly positive with stock dividend announcements with good history (if cash dividends are maintained or increased prior to stock dividend announcement) and statistically insignificant with negative relationship with the stock dividend with bad history (if cash dividend are decreased prior to stock dividend announcement).

Recently, numerous studies had been conducted on the Shari'ah compliant securities and yet the argument on whether the securities have significant influence on the stock market returns still remains unsolved. Shafi, R. M. (2011), investigates the effects of addition and deletion announcements of Shari'ah compliant securities from the Syariah Advisory Council (SAC) list on the MCARs (Mean Cumulative Abnormal Returns). The scholar found that there is no significant effect of the addition and deletion of the securities on the MCARs, in the pre and post events. In opposition, Jr., C. M., & Muhammad, J. (2010) states that the inclusion and exclusion exercise of

Shari'ah compliant stocks from the KLSE Shari'ah Index (SI) should have affected the stock prices and trading volume. This is due to 80 percent of the stocks listed on Bursa Malaysia are Shari'ah compliant securities. Moreover, investment decision by fund managers of Shari'ah based unit trust funds and Muslim investors are induced if only the stocks are included in the SI. Sadeghi, M. (2008) constitutes support on the justification as he found that the introduction of the Shari'ah-compliant index (SI) has significant positive effect on both the MCARs and liquidity of Bursa Malaysia over the long period. The scholar claims that the significant negative abnormal returns in the pre and post events over short period is attributed by the sale of shares by certain investors who concern with the introduction of SI. Due to the inconsistent findings on the Shari'ah compliant stocks, this paper therefore attempts to provide empirical evidence on the effects of unexpected dividend changes (UDC) in respect to Shari'ah and conventional stocks on the cumulative abnormal returns (CAR). In addition, the investigation will be conducted according to Malaysian economic conditions namely before the Asian financial crisis (1990-1996), during the Asian financial crisis (1997-1998), after the Asian financial crisis (1999-2007) and during the financial global crisis (2008-2010).

## 2. Model

The empirical model consists of the predictor variable is unexpected dividend changes (UDC) that have subgroups of dividend increases (DI), dividend decreases (DD), and dividend no-change (DNC) groups. The use of UDC is based on Sponholtz (2005). The scholar examines the effects of dividend surprises (similar to UDC comprises of DI, DD and DNC samples) on 2-day CAR on Copenhagen Stock Exchange, Denmark. The dividend changes are classified as DI if the amount of the dividend has increased for more than 10% from the previous year. The same concept also applies to DD if the amount of dividend has decreased of more than 10% from previous year. If the amount of announced dividend is similar or between +10% to -10% from the previous year, the dividend is classified as DNC. The changes in dividends are computed by the model below as used by Nur Adiana et al. (2004), Norhayati et al. (2006) and Karim (2010). Let  $D_{it}$  = expected dividend per share of firm  $i$  at time  $t$ , and let  $D_{it-1}$  = actual dividend per share of firm  $i$  at time  $t$ .

$$\Delta Div_{it} = \frac{D_{it} - D_{it-1}}{D_{it-1}} \quad \dots \dots \dots (1)$$

The response variable is the cumulative abnormal returns (CAR). The abnormal return (AR) is the difference between actual return of firm  $i$  at time  $t$  and expected return generated by a risk-adjusted market model. This study used Market model of the Sharpe-Lintner Capital Asset Pricing Model (Sharpe, 1964; Lintner, 1965) to calculate the abnormal return based on Mohamed, et al. (2006) and Abdullah, et al. (2004). Let  $R_{it}$  = actual returns of firm  $i$  at time period  $t$ , let  $\hat{\alpha}_i, \hat{\beta}_i$  = the parameters of market model, and let  $R_{mt}$  = return on Bursa Malaysia KLCI at period  $t$ .

$$AR_{it} = R_{it} - [\hat{\alpha}_i + \hat{\beta}_i R_{mt}] \quad \dots \dots \dots (2)$$

To overcome the thin trading bias in Bursa Malaysia, the Dimson-Fowler-Rorke model is applied based on Mohamed, et al. (2006), Lonie and Abeyratna (1996), Gunasekarage and Power (2006) and Bujang and Nassir (2007). According to Dimson (1979) the estimation of unbiased  $\beta_{t, dim}$  for security  $i$  on  $t$  time is as follows:

$$R_{it} = \alpha + \beta_{-2} R_{m, t-2} + \beta_{-1} R_{m, t-1} + \beta_t R_{m, t} + \beta_{+1} R_{m, t+1} + \beta_{+2} R_{m, t+2} \quad \dots \dots (3)$$

However, Fowler and Rorke (1983) as outlined by Imbarine (2005) recommended that the beta coefficients should be weighted by serial correlation in the market return in order to yield a consistent and unbiased beta coefficient. This study used two-lead and two-lag market returns as stated in equation 4. This is based on Ariff et, al (1998) as cited in Mohamed (2005), which specifying that the utilization of two leads and two lags of market returns in the market model, appears to lead to both stable and unbiased beta estimation in the Malaysian capital market. The market model is stated as follows;

$$R_{mt} = \rho_0 + \rho_1 R_{m, t-1} + \rho_{-2} R_{m, t-2} + U_t \quad \dots \dots \dots (4)$$

The weight (W) for correcting the beta coefficients is:

$$W1 = (1 + 2 \rho1 + \rho2) / (1 + 2 \rho1 + 2 \rho2) \dots\dots\dots (5)$$

$$W2 = (1 + \rho1 + \rho2) / (1 + 2 \rho1 + 2 \rho2) \dots\dots\dots (6)$$

Based on Dimson (1979) and Fowler and Rorke (1983) model, the adjusted beta,  $\beta_{i,0}$  for stock i on day 0 is as follows:

$$\beta_{i,0} = W_2(\beta_{i,-2}) + W_1(\beta_{i,-1}) + \beta_{i,0} + W_1(\beta_{i,+1}) + W_2(\beta_{i,+2}) \dots\dots\dots (7)$$

The adjusted beta,  $\beta_{i,0}$  is then, substitute to equation (2). The alpha ( $\alpha$ ) is measured based on daily returns derived from the market returns regression. Once the parameters of market model,  $\alpha_i, \beta_i$  are measured, the abnormal return is calculated based on the equation (2).

The event period for this study is from the announcement date to two days after the announcement date (0 to +2 days) for short event windows based on Mohamed, et al. (2006). This is because the scholars found that dividend changes and cumulative abnormal returns are statistically significant for short event period for 0 to +2 days. The abnormal returns are aggregated over event windows to derive the cumulative abnormal returns. The cumulative abnormal return is computed as follows:

$$CAR_i(t_1 t_2) = \sum_{t_1}^{t_2} AR_{it} \dots\dots\dots (8)$$

Based on panel data approach on cumulative abnormal return, the empirical model used is as follows:

$$\text{Log } CAR_{it} = \alpha + b_1 \text{UDC}_{it} + e_{it} \dots\dots\dots (9)$$

Let  $\text{Log } CAR_{it}$  = log cumulative abnormal returns of firm i at time t, let  $\text{UDC}_{it}$  = unexpected dividend changes of firm i at time t, let  $e_{it}$  = disturbance term assumed to be normally distributed, let t = time, and let i = firm.

### 3. Data and Methodology

**Table 1:** No. of Observations of Unexpected Dividend Changes Comprise of Dividend Increases, Decreases and No-Change Announcements in Respect to Shari’ah Compliant and Conventional Stocks Based on Economic Condition

Economic Condition	N	Unexpected Dividend Changes (UDC)		Dividend Increases (DI)		Dividend Decreases (DD)		Dividend No-Change (DNC)	
		Shari’ah Stocks	Conventional Stocks	Shari’ah Stocks	Conventional Stocks	Shari’ah Stocks	Conventional Stocks	Shari’ah Stocks	Conventional Stocks
		Overall Period (1990-2010)	861	525	336	156	109	103	72
Before Asian Financial Crisis (1990-1996)	287	175	112	49	44	26	19	100	49
During Asian Financial Crisis (1997-1998)	82	50	32	8	7	12	13	30	12
After Asian									

Financial Crisis (1999-2007)	369	225	144	73	45	47	27	105	72
During Global Financial Crisis (2008-2010)	123	75	48	25	13	19	13	31	22

Table 1 shows the number of observations of unexpected dividend changes (UDC) with subgroups of dividend increase (DI), dividend decrease (DD) and dividend no-change (DNC) according to Malaysian economic conditions. The sample size is limited to only 41 listed companies as they had consistently announced cash dividends from the year 1990 to 2010 over the 21-years. The reason is to apply panel data analysis and to identify the type of economic condition that can stimulate investors' reactions to changes in dividend announcements in respect to Shari'ah compliant stocks and conventional stocks.

**Table 2:** Summary of Hypotheses Testing Between Cumulative Abnormal returns (LnCAR) and Unexpected Dividend Changes (UDC) in Respect to Shari'ah and Conventional Stocks Based on Economic Conditions

Overall Period (1990-2010)	Before Asian Financial Crisis (1990-1996)	During Asian Financial Crisis (1997-1998)	After Asian Financial Crisis (1999-2007)	During Global Financial Crisis (2008-2010)	Type of Stocks
H1	H2	H3	H4	H5	<i>Shari'ah compliant Stocks</i>
H6	H7	H8	H9	H10	<i>Conventional Stocks</i>

Notes: H1 = Hypothesis 1, H2 = Hypothesis 2, H3 = Hypothesis 3, H4 = Hypothesis 4, H5 = Hypothesis 5, H6 = Hypothesis 6, H7 = Hypothesis 7, H8 = Hypothesis 8, H9 = Hypothesis 9, and H10 = Hypothesis 10

As shown in Table 2, this study produces ten (10) hypotheses testing. The first five (5) hypotheses are to examine the relationship between the unexpected changes in dividend of the Shari'ah compliant stocks and the cumulative abnormal returns in every economic condition. The remaining hypotheses have the same objectives but the explanatory variable is the unexpected changes in dividend of the conventional stocks.

#### 4. Analysis of Findings

The panel unit root used is: (1) Levin, Lin and Chu (LLC) test; and (2) Im, Pesaran and Shin (IPS) test. These tests have the same null hypothesis that all panels contain unit roots and are not stationary and the alternative hypothesis contains otherwise. The cumulative abnormal returns (CAR) had been transformed into natural logarithms (LnCAR) due to the CAR being found to have skewed distribution. The results of panel unit root tests can be seen in Table 3. The adjusted t-statistic of LnCAR and UDC in respect to Shari'ah compliant and conventional stocks are significant at the 10% and 1% level, indicating that the panels used are stationary for the overall period (1990-2010), before the Asian financial crisis (1990-1997) and after the Asian financial crisis (1999-2007). However, these tests cannot be performed in the period during the Asian financial crisis (1997-1998) and during the global financial crisis (2008-2010) due to data being insufficient.

**Table 3:** Results of Panel Unit Root Tests on Cumulative Abnormal Returns (LnCAR) and Unexpected Dividend Changes (UDC) in Respect to Shari'ah Compliant and Conventional Stocks.

Economic Condition	LnCAR		UDC	
	Shari'ah Stocks	Conventional Stocks	Shari'ah Stocks	Conventional Stocks
<b>Overall Period</b> (1990-2010)				
<b>LLC</b>	-2.4246	-5.2859	-17.2569	-14.1468
p-value	(0.0077)***	(0.0001)***	(0.0001)***	(0.0001)***
<b>IPS</b>	-1.4327	-4.0285	-17.2787	-12.6708
p-value	(0.0760)*	(0.0001)***	(0.0001)***	(0.0001)***
<b>Before Asian Financial Crisis</b> (1990-1996)				
<b>LLC</b>	-8.1426	-5.1079	-11.6279	-15.1562
p-value	(0.0001)***	(0.0001)***	(0.0001)***	(0.0001)***
<b>IPS</b>	-1.1131	0.2732	-7.1487	-6.0873
p-value	(0.1328)	(0.6077)	(0.0001)***	(0.0001)***
<b>During Asian Financial Crisis</b> (1997-1998)				
<b>LLC</b>	N/A	N/A	N/A	N/A
p-value				
<b>IPS</b>	N/A	N/A	N/A	N/A
p-value				
<b>After Asian Financial Crisis</b> (1999-2007)				
<b>LLC</b>	-0.9842	-2.20E+02	-7.7972	-11.3749
p-value	(0.1625)	(0.0001)***	(0.0001)***	(0.0001)***
<b>IPS</b>	1.4289	-61.6047	-5.6856	-6.9089
p-value	(0.9235)	(0.0001)***	(0.0001)***	(0.0001)***
<b>During Global Financial Crisis</b> (2008-2010)				
<b>LLC</b>	N/A	N/A	N/A	N/A
p-value				
<b>IPS</b>	N/A	N/A	N/A	N/A
p-value				

Notes: Figures in the parentheses are the p-values. \* denotes significance at the 10% level, \*\* denotes significance at the 5% level and \*\*\* denotes significance at the 1% level.  
N/A denotes the variable is not included in model tested.

**Table 4:** Results of Regression Analysis Between Unexpected Changes in Dividend (UDC) of Shari'ah Compliant Stocks and Cumulative Abnormal Returns (LnCAR).

Dependent Variable: LnCAR

Statistic	Overall Period	Before Asian Financial Crisis	During Asian Financial Crisis	After Asian Financial Crisis	During Global Financial Crisis
<b>Breusch Pagan LM Test</b>	1741.97 (0.0001)***	195.24 (0.0001)***	6.49 (0.0108)***	576.36 (0.0001)***	61.56 (0.0001)***
<b>Hausman Specification Test</b>	3.29 (0.0696)	N/A	0.07 (0.7842)	0.001 (0.9752)	0.81 (0.3678)
<b>UDC</b>					
$\beta$	0.2098631		0.8466595	0.2639258	0.042743
Z-stat	4.63		2.65	5.41	0.97
p-value	(0.0001)***		(0.008)***	(0.0001)***	(0.331)
<b>Constant</b>					
$\beta$	1.84691		1.860719	1.786287	2.309797
Z-stat	14.41		13.09	11.93	14.06
p-value	(0.0001)***		(0.0001)***	(0.0001)***	(0.0001)***
<b>UDC</b>					
$\beta$		0.2573481			
t-stat		2.6			
p-value		(0.010)**			
<b>Constant</b>					
$\beta$		1.717073			
t-stat		29.03			
p-value		(0.0001)***			
R-Squared		0.026			

Notes: Figures in the parentheses are the p-values. \* denotes significance at the 10% level, \*\* denotes significance at the 5% level and \*\*\* denotes significance at the 1% level.

**Table 5:** Results of Regression Analysis Between Unexpected Changes in Dividend (UDC) of Conventional Stocks and Cumulative Abnormal Returns (LnCAR).

Dependent Variable: LnCAR

Statistic	Overall Period	Before Asian Financial Crisis	During Asian Financial Crisis	After Asian Financial Crisis	During Global Financial Crisis
<b>Breusch Pagan LM Test</b>	2139.36 (0.0001)***	181.24 (0.0001)***	7.04 (0.0080)***	493.93 (0.0001)***	44.25 (0.0001)***
<b>Hausman Specification Test</b>	0.01 (0.9129)	4.31 (0.0379)	0.44 (0.506)	0.09 (0.7703)	0.03 (0.8593)
<b>UDC</b>					
$\beta$	0.0253434		1.07692	0.0526375	0.028371
Z-stat	0.6		2.65	1.46	0.66
p-value	(0.551)		(0.008)***	(0.144)	(0.508)
<b>Constant</b>					
$\beta$	2.152201		2.291145	2.114437	2.398513
Z-stat	8.73		9.87	7.77	8.75
p-value	(0.0001)***		(0.0001)***	(0.0001)***	(0.0001)***
<b>UDC</b>					
$\beta$		0.122106			
t-stat		0.65			
p-value		(0.527)			
<b>Constant</b>					
$\beta$		2.031517			
t-stat		73.97			
p-value		(0.0001)***			

Notes: Figures in the parentheses are the p-values. \* denotes significance at the 10% level, \*\* denotes significance at the 5% level and \*\*\* denotes significance at the 1% level.

Table 4 illustrates the results of regression analysis between unexpected changes in dividend (UDC) of Shari'ah compliant stocks and log cumulative abnormal returns (LnCAR) using panel data analysis. The UDC comprises of subgroups of dividend increases (DI), dividend decreases (DD) and dividend no-change (DNC) without the restriction of dividend changes of more than 10%. By using UDC, this study is dealing with the balanced panels. The inclusion of DNC in the sample of UDC is due to DNC having dominated the total number of observations of dividend changes for every economic condition. Overall results in Table 4 constitute support that the unexpected increases (decreases) in dividends of Shari'ah compliant stocks lead the stock market returns to increase (decrease). This significant positive relationship also indicates that dividend no-change (DNC) has a positive impact on the market as investors regard DNC as a stable dividend policy. The significant positive results are consistent with Mohamed, et al. (2006), Borde, et al. (1999), Lonie and Abeyratna (1996), Gunasekarage and Power (2006) and Ryan, et al. (2000).

Overall results in Table 5 however show that the relationship between unexpected changes in dividends of conventional stocks and cumulative abnormal returns have a positive relationship but

are insignificant, for every economic condition except for the period during the Asian Financial Crisis. These findings are consistent Abdullah, et al. (2004), Nobanee, et al. (2009), and Karim (2010) who found that dividend changes have insignificant relationship with the stock returns. This study concludes that the changes in dividend announcements of Shari'ah compliant stocks had strong significant effect on the Malaysian stock market returns compare to the conventional stocks for every economic condition, except for the period during the global financial crisis suggesting that other economic factors might cause the dividend signaling effects is ineffective in the stated period. These findings also indicate that the Malaysian investors are more sensitive with changes in dividends of Shari'ah compliant stocks rather than the conventional stocks.

**Table 6:** Results of Hypotheses Testing Between Unexpected Dividend Changes of Shari'ah Compliant Stocks and Cumulative Abnormal Returns (LnCAR).  
Dependent Variable: LnCAR

	<b>Before Asian Financial Crisis (1990-2010)</b>	<b>During Asian Financial Crisis (1997-1998)</b>	<b>After Asian Financial Crisis (1999-2007)</b>	<b>During Global Financial Crisis (2008-2010)</b>
<b>Overall Period</b>				
<b><u>H1:</u></b>	<b><u>H2:</u></b>	<b><u>H3:</u></b>	<b><u>H4:</u></b>	<b><u>H5:</u></b>
Reject $H_0$	Reject $H_0$	Reject $H_0$	Reject $H_0$	Fail to Reject $H_0$

Notes: H1 = Hypothesis 1, H2 = Hypothesis 2, H3 = Hypothesis 2, H4 = Hypothesis 4, and H5 = Hypothesis 5.

The results shown significance at 1% and 5% level.

Table 6 shows the summary results of hypotheses testing between unexpected changes in dividend of Shari'ah compliant stocks and cumulative abnormal returns. The null hypothesis ( $H_0$ ) of hypothesis 1, 2, 3 and 4 except 5 are rejected indicate that there is a significant positive relationship between unexpected changes in dividend of Shari'ah compliant stocks and cumulative abnormal returns in the stated periods.

**Table 7:** Results of Hypotheses Testing Between Unexpected Dividend Changes of Conventional Stocks and Cumulative Abnormal Returns (LnCAR). Dependent Variable: LnCAR

	<b>Before Asian Financial Crisis (1990-2010)</b>	<b>During Asian Financial Crisis (1997-1998)</b>	<b>After Asian Financial Crisis (1999-2007)</b>	<b>During Global Financial Crisis (2008-2010)</b>
<b>Overall Period</b>				
<b><u>H6:</u></b>	<b><u>H7:</u></b>	<b><u>H8:</u></b>	<b><u>H9:</u></b>	<b><u>H10:</u></b>
Rejected $H_1$	Rejected $H_1$	Rejected $H_0$	Rejected $H_1$	Rejected $H_1$

Notes: H6 = Hypothesis 6, H7 = Hypothesis 7, H8 = Hypothesis 8,

H9 = Hypothesis 9, and H10 = Hypothesis 10.

The results shown significance at 1% level.

Table 7 however shows opposite findings between the unexpected changes in dividend of conventional stocks and cumulative abnormal returns. The rejection of alternate hypothesis ( $H_1$ ) in hypothesis 6, 7, 9 and 10 except 8, indicate that the given dependent variable have insignificant relationship towards the independent variable in the stated periods.

## 5. Conclusion

This study concludes that the changes in dividend announcements of Shari'ah compliant stocks had strong significant effect on the Malaysian stock market returns compare to the conventional stocks for every economic condition, except for the period during the global financial crisis suggesting that other economic factors might cause the dividend signalling effects is ineffective in the stated period. These findings indicate that the Malaysian investors are more sensitive with changes in dividends of Shari'ah compliant stocks rather than the conventional stocks. This is consistent with findings of Jr., C. M., & Muhammad, J. (2010) and Sadeghi, M. (2008) who claim that the Shari'ah compliant stocks and Shari'ah-compliant index (SI) have significant positive effect on the stock returns and trading volume on Bursa Malaysia.

## 6. Research Limitations and Recommendations

This section is designated for limitations of this study. Firstly, the sample size of this study is relatively small with 25 companies from the Shari'ah approved counters and 16 companies from the conventional counters. This is due to the fact that the sample must comply with the following criteria: (a) the company must be available from the year 1990 to 2010 for the 21-year period; (b) companies must have consistently announced cash dividends from the year 1990 to 2010 for the 21-year period; (c) the dividend announcements must be on a cash basis; and (d) there are no corporate events such as the announcement of stock splits, stock dividends and bonus issues, and mergers and acquisitions surrounding the dividend announcement dates that could have an influence on stock price movements. Secondly, some tests could not be performed under certain economic conditions due to the small size of the sample. For example, panel unit root and diagnostic tests were unable to be performed in the period during the Asian financial crisis and during the global financial crisis due to insufficient data. Finally, the event (period) of interest of this study is only from the announcement date to two days after the announcement date (0 to +2 days), based on the study of Mohamed, et al. (2006) for short event windows. This study did not investigate the long event window due to confounding events such as stock dividends, stock splits and bonus issues were found on the outside of short event windows. If the long event window is to be included, this study must eliminate some of the samples. The exclusion of the long event window causing pre event and post event returns is not included in this study. It is recommended that further research should be undertaken in the following areas. The sample size should be expanded. This can be done if the focus is given to listed companies that have announced stock dividends rather than cash dividends. Next, the investigation on the pre-event and post-event announcement returns should be included for the upcoming studies.

## 7. References

- Abdullah, N. A., Abdul Rashid, R., & Ibrahim, Y. (2004). Information Content of Dividend Changes in an Emerging Market. *International Journal of Banking and Finance*, 2(1), 1-18.
- Ali, M. B., & Chowdhury, T. A. (2010). Effect of Dividend on Stock Price in Emerging Stock Market: A study on the Listed Private Commercial Banks in DSE. *International Journal of Economics and Finance*, 2(4), 52-64.
- Amihud, Y., & Li, K. (2005). The Declining Information Content of Dividend Announcements and the Effects of Institutional Holdings. *Journal of Financial and Quantitative Analysis*, 1-42.
- Banker, R. D., Das, S., & Datar, S. M. (1993). Complementary of Prior Accounting Information: The Case of Stock Dividend Announcements. *The Accounting Review*, 68, 28-47.

- Bhana, N. (1998). The Share Price Reaction on the Johannesburg Stock Exchange for Special (Extra) Dividend Announcements. *Investment Analysts Journal*, 47, 5-15.
- Borde, S. F., Byrd, A. K., & Atkinson, S. M. (1999). Stock Price Reaction to Dividend increases in the Hotel and Restaurant Sector. *Journal of Hospitality and Tourism Research*, 40-52.
- Bujang, I. (2005). The Relevance of Gordon's Model and Earnings Multiplier Approaches in Emerging Stock Market: Test with Appropriate Refinements. *Unpublished Master Thesis*.
- Bujang, I., & Md Nassir, A. (2007). The Relevance of Gordon's Model and Earnings Multiplier Approaches in Emerging Stock Market: Test with Appropriate Refinements. *International Research Journal of Finance and Economics*, 140-152.
- Capstaff, J., Klaeboe, A., & Marshall, A. P. (2004). Share Price Reactions to Dividend Announcements: Empirical Evidence on the Signalling Model from the Oslo Stock Exchange. *Multinational Finance Journal*, 8(1 & 2), 115-139.
- Chemmanur, T. J., Jie, H., Gang, H., & Liu, H. (2010). Is Dividend Smoothing Universal? New Insights from a Comparative Study of Dividend Policies in Hong Kong and U.S. *Journal of Corporate Finance*, 16, 413-430.
- Grullon, G., Michaely, R., & Swaminathan, B. (2002). Are Dividend Changes a Sign of Firm Maturity? *Journal of Business*, 75(3), 387-424.
- Gunasekarage, A., & Power, D. M. (2006). Anomalous Evidence in Dividend Announcement Effect. *Journal of Managerial Finance*, 32(3), 209-226.
- Jr., C. M., & Muhammad, J. (2010). The Theoretical Impact of The Listing Of Syariah-Approved Stocks On Stock Price And Trading Volume. *International Business & Economics Research Journal*, Volume 9, (Number 3), 11-20.
- Karim, M. (2010). Announcement Effects of Dividend on Stock Price of Enlisted Companies in Developed Countries: A Comparative Study Between London Stock Exchange and New York Stock Exchange. Retrieved from: <http://dx.doi.org/10.2139/ssrn.1624363>.
- Lonie, A. A., Abeyratna, G., Power, D. M., & Sinclair, C. D. (1996). The Stock Market Reaction to Dividend Announcements. A UK Study of Complex Market Signals. *Journal of Economic Studies*, 23(1), 32-52.
- Mohamed, N. (2005). Information Signaling and Dividend Policies in Malaysia. *Unpublished PHD Thesis*, Universiti Putra Malaysia.
- Mohamed, N., Abdul Hamid, M. A., Md Nassir, A., & Mohamed, S. (2006). Information Content of Dividend Changes: Cash Flow Signaling, Dividend Clientele and Free Cash Flow Hypothesis. *Malaysian Accounting Review*, 5(1), 65-84.
- Nobanee, H., Haddad, A. E., Alshattarat, W. K., & Alshattarat, H. K. (2009). An Analysis of the Informational Content of Dividend Change Payments at Amman Stock Exchange. *Journal of Middle Eastern Finance and Economics*, 5, 76-91.
- Ryan, P. A., Besley, S., & Hei, W. L. (2000). An Empirical Analysis of Reactions to Dividend Policy Changes for NASDAQ Firms. *Journal of Financial and Strategic Decision*, 13(1).
- Sadeghi, M. (2008). Financial Performance of Shariah-Compliant Investment: Evidence from Malaysian Stock Market. *International Research Journal of Finance and Economics*(Issue 20), 15-26.
- Shafi, R. M. (2011). Sensitivity on Stock Returns and Volatility: The Case of Shari'ah Compliant Securities in Bursa Malaysia. *Academic Journal UiTM Johor*, 10, 105-117.
- Sponholtz, C. (2005). Separating the Stock Market Reactions to Simultaneous Dividend and Earnings Announcements. *Working Paper Series No. 212*, 1-25.
- Zhong, M. A. (1999). Dividend Signalling by Insurance Companies and Price Regulation: A Reexamination. *Journal of Insurance Issues*, 22(2), 164-176.