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# Stock Price Reaction to Cash Dividend Announcement: Evidence from Saudi Arabian Stock Exchange 

Ziram Walid ${ }^{\text {1* }}$<br>${ }^{1}$ Faculty of Economics, Commerce and Management Science, University of Setif 1, (Algeria), walidziram@yahoo.fr

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#### Abstract

: The paper is aimed to investigate the cash dividend announcement impact on stock prices of companies listed on the Saudi stock exchange during 2011-2019. The full sample examined is consists of 199 cash dividend announcements from 30 companies. An event study methodology is used to find if the cash dividend events have a significant impact on stock prices, 10 days before and after the announcement dates. The study shows a significant reaction in stock prices around the event date. In particular, cash dividend announcements have a significant positive effect on stock prices one day after the announcement; this is consistent with the information content theory. The presence of earlier and delayed significant abnormal returns indicates that stock prices do not reflect the publicly available information instantly and accurately, therefore the Saudi Stock Exchange is not consistent with the semi-strong form efficiency hypothesis. Keywords: Saudi Stock Exchange; cash dividend announcements; Stock price; event study; information efficiency.


Jel Classification Codes: G12, G14.

[^0]Corresponding author: Ziram Walid

## 1. Introduction

The published information in a capital market is very, important for investors in their decision-makings. Listed companies publish often their significant material information over the capital market in order to make aware the public. When the companies announce this information to the public, it is considered as valuable information for the investors to choose their investment portfolios. The investors' judgment on these information changes the stock prices and as a result, they may react positively or negatively in making trading decisions (Dharmarathne, 2020). Although there are several theoretical and empirical researches in this area, yet it is inconclusive. In addition, it is evident that much of the studies on stock price reaction to publicly available information for testing the efficiency of the stock markets based on developed stock markets and there is a lack of such studies in emerging capital markets. In Saudi Arabia, a small number of attempts have been made to test the relevance of corporate public announcements in assessing stock prices.

The main purpose of this research is to analyse the stock price reaction around cash dividend announcements. To examine the influence of cash dividend announcements on the stock price, the following research question has been formed;

## Is there a reaction of the stock prices to cash dividends around the announcement day?

Consistent with many studies in this domain the following hypothesis are defined:
$\mathrm{H}_{0}$ : there is no reaction of stock the price to the announcement of cash dividends. ( $\mathrm{AAR}=0$ ): the abnormal return identified is not statistically different from zero.
$\mathrm{H}_{1}$ : there is either positive or negative reaction of the stock price to the announcement of cash dividends. (AAR $\neq 0$ ) the abnormal return identified is statistically different from zero.

## 2. Prior Studies

The impact of dividend announcements on stock prices has been broadly documented. Pettit (1972) was the first to empirically study the abnormal returns from dividend announcements. Conducting a study on 625 firms listed on the NYSE in the period January 1964 through June 1968 he discovered a strong positive relationship between dividend changes and stock price changes. In his study, he showed that (positive or negative) changes in dividend lead to (positive or negative) abnormal returns, and that the size of the stock price reaction depended heavily on the size of the dividend change. His study demonstrates that announcements of dividend changes convey considerable information, and Pettit himself concludes, "The result of this investigation clearly supports the proposition that the market makes use of announcements of changes in dividend payments in assessing the value of a security" (Pettit, 1972)

Aharony and Swary (1980) tried to ascertain if quarterly dividend changes provide information beyond that be already provided by quarterly earnings announcements, and found that the market's reaction to a dividend increase is positive, and negative for dividend decrease. (Aharony \& Swary, 1980)

Similar to Aharony and Swary (1980), Asquith and Mullins (1983) also employs a naive dividend-forecasting model when examining the impact of dividend initiations. Asquith and Mullins (1983) investigate the impact of dividends on shareholder wealth by analyzing 168 U.S firms that either pays their first dividend or initiate dividends after a 10 year interruption. According to their findings, dividend initiation has a significant positive impact on the firm's stock
prices, and contributes to significant abnormal returns. Their evidence is consistent with the signaling hypothesis. (Asquith \& Mullins, 1983)

Woolridge (1983) studies the impact of both increase and decrease in a dividend change announcement on stock prices. He observed that the announcement pertaining to increasing the dividend yielded positive returns and information pertaining to decrease in dividend resulted in decrease in stock prices. The author thus, attributed the movement of stock prices to dividend signalling theory and wealth transfer hypothesis. (Woolridge, 1982)

Grinblatt et al. (1984) examined the announcement period effect of stock dividends and splits of more than 10 per cent at the New York Stock Exchange (NYSE) and AMEX-listed securities between 1967 and 1976. They concluded that stock dividends and splits convey information about future cash flows even in the absence of cash dividends. (Mark Grinblatt \& Titman, 1984)

Merton and Rock (1985) concluded that the earnings surprise and the net dividend surprise can convey the same information and that an unexpected increase in dividends will increase the value of the enterprise (Miller \& Rock, 1985)

McNichols and Dravid (1990) provided evidence to support the signalling hypothesis. They reported positively significant abnormal returns on the day of stock dividend announcement (McNichols \& Dravid, 1990)

Lonie et al. (1996) found that investors respond to the increase or decrease in dividends. However, their findings also revealed that, even for companies with no change in dividends, the average abnormal returns one day prior to the announcements were significantly different from zero as indicated by the t -statistic. (Lonie, Abeyratna, Power, \& Sinclair, 1996)

Anderson et al. (2001) reported that there is significant abnormal return around announcement period. Their sample of noncontaminated announcements show significant two-day returns. However, this is not significantly different when compared with the remaining contaminated announcements. (Anderson, Cahan, \& Rose, 2001)

Chern et al. (2008) study the information content of stock splits and find that prices of optional stocks embody more information, diminishing the information content of stock split announcements. (Chern, Tandon, Yu, \& Webb, 2008)

Akbar and Baig (2010) suggested negligible abnormal returns for cash dividend announcements. However, the average abnormal and cumulative average abnormal returns for stocks and simultaneous cash and stock dividend announcements are mostly positive and statistically significant. (Akbar \& Baig, 2010)

Pradhan (2014) investigates the effect of the dividend announcement on share price during 2009 to 2011. The results show that there is an increase in the stock price after the announcement, but that the rise in stock price is mainly due to market conditions rather than dividend. The increase or decrease in share price is not reflecting the amount of dividend. The CAR is positive in the long-run after dividend announcement. (Pradhan, 2014)

Joshi and Mayur (2017) study the share price movements of top 20 PSU during the year 2013-2016. The study showed that the announcement of dividends induces an increase in the wealth of the shareholders in Indian context. They suggest that investors should follow dividend decisions in order to make wiser profits and wiser investment decisions. Further, the study concludes that the investors perceive the announcement of stock dividends to be beneficial for them and believe that stock dividends provide a positive signal about

## 3. Literature Review

### 3.1 The Efficient Market Hypothesis (EMH)

One of the major themes in finance literature is the concept of stock market efficiency and how different information is reflected in stock prices. The Efficient market hypothesis (EMH) suggests that competition between the investor's abnormal profits derive when prices higher than their "fair values." This means that prices should consider market information. The capacity of the market is calculated when information is incorporated into price determination. Fama (1970) declared that these are enough but not the compulsory surroundings for efficiency are; there are no transaction costs in securities trading, all information is available to market participant has zero cost, fixed investment policy and market participants agree on the meaning of current information and the current price and future price of each security distribution.

Fama (1970) classified the information items into three levels depending on how quickly the information is reflected in the price; (1) Weak-form EMH (2) Semi-strong form EMH (3) Strong-form EMH. (Fama, Efficient Capital Market: A Review Of Theory And Empirical Work, 1970)

The Weak form efficiency is, the less accurate form of efficiency, there is one possibility of adjustment of historical prices is a subset of publicly announced information. It pursues if there is any alteration in share prices it cannot be predicted from previous public information or from historical data, we cannot predict future prices of the stocks. (Bodie, Kane, \& Marcus, 2014) It is generally assumed that news arises randomly and share prices should also be moved in random form. It states that: In an investment plan, on the basis of fundamental analysis no access returns can be earned.

The second major argument is that from technical analysis access return cannot be earned. To analyze it, in time series data of stock prices it is enough to apply statistical techniques.

The Semi strong form efficiency is defined as prices respond to all public information and on the basis of this information no abnormal return can be obtained. Tests of semi-strong form efficiency suggests that investors cannot get a higher return on this information which is publicly available, such as the annual financial reports of commercial units, earnings announcements, stock split announcements, dividend announcements and repurchase of stock announcement . (Fama, Fisher, Jensen, \& Roll, 1969)

The Semi strong form EMH explains if the information comes in the market, the prices change immediately in a fair pattern and on the basis of this information an investor cannot get a surplus return. It also states that on the basis of fundamental analysis no one can achieve access return. If we want to check the efficiency of the market, then there should instantaneous adjustment in size of previous prices. If these prices follow the pattern in this adjustment, this reflects that investor had understood this information in a subjective and inefficient way. (Hasnain, 2015)

### 3.2 The Information Content of Dividends

The main purpose of the dividend is to increase the shareholder wealth. It may be dividend or capital gain. For investment decision, dividend policy is an important factor. There are a number of factors, which affect the dividend policy decisions of a firm such as investor preference, earnings and investment opportunities, flotation costs, signaling, stability and Government policies. It is also important for lenders, manager and other stakeholders. There are different types of dividend policy and selection of most suitable dividend policy is important for companies because on the basis of these information's investors invest in the stocks. For the companies it is important

Dividend plays a vital role in minimizing or maximizing the conflicts between shareholders and management. When a company pays dividends to its shareholders, it gives them surplus money and the remaining portion of cash spends into those projects, which have a positive NPV (Black, 1976). (Black \& Scholes, 1974)

When companies change the policies of dividend and are unexpected for shareholders and other stakeholders, it creates a signal into the public, which may affect the market value of the company. Therefore, managers stay away from changing the dividend policies because they knew about its effect on stock prices, which actually change the value of the company (Lintner, 1956). Michaely et al. (1995) explain that in the USA the companies don't announce a dividend, decrease value by $7 \%$ and those companies which announce dividend their value appreciated by $3 \%$ on event day.

### 3.2.1 Dividend and Signaling Theory

One of the most prominent theories attempting to explain the effects of a firm's dividend policy is the dividend-signaling hypothesis. Lintner (1956) who surveyed managers from 28 US companies regarding dividends and dividend policy initially proposed this theory. Lintner (1956) examined a period of seven years from 1947 to 1953, and based on the findings of his study, several facts about dividend policy were established. First, according to Lintner (1956), managers are reluctant either to cut or to raise existing dividends. Managers only reduce dividends when they have no choice, and raise dividends only when they are certain that the new dividend level can be sustained in the future. Second, the dividend level is tied
to substantial long-term earnings; at least dividend payments are smoothed over time in order to move towards a long-term target dividend payout ratio. (Lintner, 1956)

The dividend signaling theory classic models were further developed by Bhattacharya (1979), John and Williams (1985), and Miller and Rock (1985). According to the dividend-signaling hypothesis, dividend announcements contain information about the management's assessment of the firm's future prospects. Bhattacharya states "Cash dividends function as a signal of expected cash flows on firms in an imperfect-information setting". (Bhattacharya, 1979).He argued that in an imperfect-information setting where cash dividends are taxed; the size of the announced dividend would depend on how good the news is.

Under the dividend signaling models of Bhattacharya (1979), John and Williams (1985) and Miller and Rock (1985) it is argued that in a world of asymmetric information, insiders have a better knowledge of the firm's true worth than its shareholders. The insiders use dividends as a costly signal to convey information about a firm's real value and its economic prospects to the market. According to this theory, dividend increases signal an improvement in the firm's future situation, which should be reflected by an increase in stock prices. While dividend decreases signal deterioration of the firm's future situation and thus should be reflected by a decrease in stock prices. (Vieira \& Raposo, 2007)

### 3.3 Event study

The event study is an important research tool in economics and finance. The aim of event Study analysis is to determine whether there is any relationship between the event and the fluctuation of stock price by monitoring the changing of stock price and the occurrence of abnormal returns.

Event study methods exploit the fact that, given rationality in
the marketplace, the effects of an event will be reflected immediately in security prices and the impact can be measured by examining security prices surrounding the event. The roots of event study go back to Dolly (1939), who was the first to introduce an event study analysis to the public. He examined the effects of stock splits to stock prices, but this theory has been significantly developed since the 1960s.

The path-breaking event study conducted by fame, Fisher, Jensen, and Roll (1969) created the methodology used in event studies since then. Even the most cursory perusal of event studies carried out over the past four decades reveals a striking fact: the basic statistical format of event studies has not changed over time. It is still based on the table layout in the classic stock split event study of Fama et al. (1969).The key focus is still on measuring the sample securities' mean and cumulative mean abnormal return around the time of an event. Since the 1980s, the performance of the event study methodology has been the subject of a number of studies. (Fama, Fisher, Jensen, \& Roll, 1969)

Since the 1980s, the performance of event study methodology has been the subject of a number of studies. The main concern of this research is to analyse the power and the degree of specification of test statistics used in short-run and long-run event studies. Brown and Warner (1985), Dyckman, Philbrick, and Stephan (1984), Campbell and Wasley (1993) and Cowan and Sergeant (1996) analyse how the particular properties of daily stock returns affect the performance of several test statistics used in short-run event studies. On the other hand, Barber and Lyon (1997), Kothari and Warner (1997), Brav (2000) and Jegadeesh and Karceski (2004) examine the performance of alternative test statistics used in long-run event studies. (Julijana, 2017)

## 4-Sample, Data and Methodology

## 4-1The sample design

The sample is drawn from all dividend announcements during the period 2011-2019. The dividend announcement dates of listed companies are collected from the website of The Saudi Stock Exchange (Tadawuld). The company will be selected as eligible for the study only when the following selection criteria are satisfied:

- The Company should be listed in the Saudi Stock Exchange during the sample period mention above.
- The availability of daily closing price data in the following circumstances. Daily closing prices should be available at least 160 days before the event window and 21 days for event window
- There are no other distribution announcements in a onemonth window; otherwise, the confounding effects would contaminate the results.

The final observations consist of 30 firms listed on the Saudi Stock Exchange, and these firms have made 199 cash dividend during the period of 9 February 2011-5 September 2019.

## 4-2 Data collection:

The data, which are required for this study, are as follows.

- the published date of the cash Dividend Announcements of each company
- Closing prices of cash Dividend Announcements of each company.
- All Share Price Indexes (TASI).

Data was collected from the official website: the Saudi Stock Exchange (Tadawaul) www.tadawaul.com, www.investing.com,
annual reports of the companies.

## 4-3 Research Methodology

This study employs the event study methodology to examine the stock market response to dividend announcements.

In an event study, what one wants to measure is how much of the price reaction to news is abnormal return. (Peterson, 1989) In order to isolate the impact of a selected event on stock price it is essential to distinguish between the expected returns and unexpected returns on stocks. Therefore, firstly expected returns will have to be calculated using parameters estimated from the period prior to the event. Then, identify abnormal returns by subtracting expected returns from the actual returns surrounding the announcement of the selected new information regarding an event.

The abnormal return measures the magnitude of price reaction attributable to the informational event. In carrying out this methodology, one has to select first the estimation period and the event window. In this study an estimated period of 160 days, an event window 21 trading days are used. Returns data during the estimation period is used to predict the expected returns during both estimation period and event window. In previous studies, researchers have used several benchmarks to calculate abnormal returns. In this study, the market model is used.

## 4-3-1Calculations of Stock Returns (Rit) and Market Returns (Rmt)

Before using the market model to calculate the actual returns during the both estimation period and event period, time series of daily return for each event under consideration has to be computed since return data on the Malaysia stocks are not readily available. This study calculates daily actual returns for the sample of companies using collected daily closing prices.

4-3-1-1 Stock returns

$$
\begin{equation*}
\mathbf{R i t}=\left[\mathbf{P i}_{\mathbf{t}^{-}} \mathbf{P i}_{(t-1)}\right] / \mathbf{P i}_{(\mathbf{t}-1)} \tag{1}
\end{equation*}
$$

Where, Rit: the Daily Return on stock of firm i on day, Pit: closing stock price of firm i on day t (current date), $\mathbf{P i}(\mathbf{t}-\mathbf{1})$ : closing stock price of firm i on day $\mathrm{t}^{-1}$ (previous trading date).

The market model is used in forecasting market returns; they are calculated using the formula given below.

## 4-3-1-2 Market return

$$
\begin{equation*}
\text { Rmt }=\left[\operatorname{TASI}_{(t)}-\operatorname{TASI}_{(t-1)}\right] / \text { TASI }_{(t-1)} \tag{2}
\end{equation*}
$$

Where, Rmt: Daily Market Index Return, TASI ( $\mathbf{t}$ : TASI ( $\mathbf{t}$ ) for $t^{\text {th }}$ day (current day), TASI ( $\mathrm{t}_{\mathbf{-}}$ ): TASI ( $\mathrm{t}-1$ ) for the day $\mathrm{t}^{\text {th }}$ day (previous day)

## 4-3-2 Bench Mark Model

As mentioned earlier, this study uses the market model to forecast expected returns, which require computing the abnormal returns surrounding the event. Firstly, I use the market model to estimate $\alpha$ and $\beta$ using the data for the estimation period. The market model is estimated through ordinary least squares (OLS) regression. Market returns during the estimation period are considered as independent variable while the dependent variable is the returns of the firm for running the regressions. Regression analysis produces estimates of the regression intercept ( $\alpha$ - Alpha) and regression slope ( $\beta$ - Beta), which will be used in computing expected returns in the next step.The market model is specified as,

$$
\begin{equation*}
\text { Rit }=\boldsymbol{\alpha} \mathbf{i}++\boldsymbol{\beta} \mathbf{i} \mathrm{Rmt}+\varepsilon i t \tag{3}
\end{equation*}
$$

Where, Rit: the Daily Return on stock of firm i on day t, Rmt: (alpha), $\boldsymbol{\beta i}$ : the systematic risk of stock i, (beta) and, $\boldsymbol{\varepsilon i t}$ : the regression error term.

## 4-3-3 Adjustments for Data

It was observed that stocks of selected companies had not been traded on every trading data of the total period of 181 days, even though the Exchange was in operation. Therefore, it is inherent by nature; the trading days of selected companies were less than that of the market. Hence, the market trading days and the corresponding missing prices were replaced with the closing prices of the previous days.

## 4-3-4 Event Date, Event Window and Estimation Window

Before being able to estimate the market model for each security I, we need to identify the event date, and define the event window and the estimation window. The timing sequence of an event study is illustrated as follows:


Source: Compiled By Researcher .

## 4-3-5 Calculation of Abnormal Returns (ARs)

From estimation of the equation 3, the expected returns of the firms are forecasted using the following equation.

$$
\begin{equation*}
E(R i t)=\widehat{\alpha} i+\widehat{\beta} i \operatorname{Rmt} \tag{4}
\end{equation*}
$$

Where,
$\mathrm{E}($ Rit $)=$ expected return on firm i on day t during the event period.
$\widehat{\alpha} \mathrm{i}=$ estimated regression intercept (alpha) of stock i
$\widehat{\beta} i=$ the estimated systematic risk (beta) of stock $i$
Then, the abnormal returns are calculated for the event period using the following formula:
ARit=Rit-E(Rit)

Where, ARit: abnormal return on the stock of the firm i on day $t$ during the event period, Rit: the Daily Return on stock of the firm i on day $t$ during the event period, E (Rit): expected return on the stock of the firm $i$ on day $t$ during the event period.

## 4-3-6 Calculation of Average Abnormal Returns (AARs)

After calculating the ARs for each event, the next step is to calculate the average abnormal returns for the sample of securities under consideration. That means, in a sample there are several events, then, in order to get a representative measure AAR is calculated. The ARs for each day for each event are summed up and averaged to obtain the AAR for each sample as follows; (Brown \& Warner, 1985)

$$
\begin{aligned}
& \text { AARt }=\sum_{\mathrm{I}=1}^{\mathrm{N}} \text { ARti } \\
& \text { Where, AARt = average abnormal return for day } t \text {. } \\
& \mathrm{N} \text { : number of events in the sample. }
\end{aligned}
$$

However, a leakage of information occurs regarding a relevant event to a small group of investors before the official announcement, the stock prices might start to increase before the event date. Then, the abnormal return on the event day will not be a powerful indicator of the total informational impact. Therefore, the better indicator would be

## 4-3-7 Calculation of Cumulative Average Abnormal Returns (CAARs)

Cumulative average abnormal returns are calculated using the following formula and it is used to measure the impact of changes in dividends on share price. ${ }^{2}$

$$
\begin{equation*}
\operatorname{CAAR}_{\mathrm{p}}^{\mathrm{t}}=\sum_{\mathrm{t}=1}^{\mathrm{p}} \mathrm{AAR}^{\mathrm{t}} \tag{7}
\end{equation*}
$$

CAAR $_{p}$ : cumulative average abnormal returns up for day $t$
P: time: number of days over which abnormal returns are cumulated

AARt $=$ average abnormal return on day $t$

## 4-3-8 Significance Testing (Parametric) for: AAR and CAAR

Significance of average abnormal returns (AARs) for the event period will be tested using t -statistic. The t -statistics are calculated as follows;

$$
\begin{equation*}
\mathrm{T}=\mathrm{AARt} / \sigma \mathrm{AAR} . \tag{8}
\end{equation*}
$$

Where,
$\sigma A A R:$ is the standard deviation of portfolio returns during the estimation period.

The Significance of cumulative abnormal returns (CAARs) for the event period is tested using the $t$ - statistics and they are calculated in the following manner;
$\mathrm{T}=\mathrm{CAARt} / \sigma A A R i * \sqrt{ } \mathrm{~N}$

Where,
CAARt: Cumulative average abnormal returns, N : number of days used in calculating CAAR.

## 5- Results and discussion

Results reported in this paper are obtained in terms of the event study methodology wherein the abnormal return of every company is computed thoroughly with a view to study the informational efficiency. The study includes use the Market Model here; return means the excess of security, return over the index return on a particular date.

To test the null hypothesis a two-tailed test at significance level, $1 \%, 5 \%$ and $10 \%$ is used. The test statistic is conducted every day relative to the announcement date for AAR and CAAR for different event windows.

According to Table.1. The results show a positive stock price reaction on the dividend announcement day of 0,0017 . However, the corresponding T -value is 1,2627 and thus; the abnormal returns on the announcement day are statistically insignificant.

There are positive abnormal returns on the day before and on the day after the dividend announcement. Specifically, the abnormal return one day prior to the announcement is positive 0,0003 and of lesser magnitude than the abnormal return on the announcement day. This implies that some few information may have leaked into the stock market prior to the announcement and this is consistent with the information content theory.

In the period preceding and subsequent to the announcement day the abnormal returns are mostly insignificant and appear random. With the exception of the abnormal returns two days prior to the announcement, which is negative and significant. However, this it is most likely caused by the impact of other important information performance of stocks increased after the dividend announcement day. A positive AAR of 0,0036 was recorded on $($ day +1$)$ with a significant reaction by the market This signifies that the market took some time to react and eventually has reacted positively just after the dividend announcement day in most of the cases $(t+1)$. That means the market is not consistent with the semi-strong form efficiency hypothesis.

When it comes to cumulative average abnormal return (CAAR) over different time periods during event window, results reported in table (1) also shows that the cumulative average abnormal returns are significantly different from zero and positive except for days $-20,-19,-$ 18 where the CAARs are negative. Therefore, the returns reveal that the market fails to fully anticipate public information.

Figure (2) shows that the CAAR starts declining steadily from day -9 up to day 0 .This could be explained by the fact that the AAR earned during this period was mostly negative. This trend could be interpreted to indicate that in the days before the dividend announcement date, the public anticipated that the announcement will contain some negative information. This is reflected by the decreasing CAAR on the days preceding the announcement. The cumulative average abnormal returns continue to decrease even after the dividend information becomes public. $\left(\mathrm{CAARt}_{0}\right)=-0,0031$

However, after the announcement, the CAAR starts rising considerably from day +1 up to the last day of the event window except for days $+3,+4,+5$. This may mean that stock price response slowly and partially to the dividend information on the event day, but the significant reaction does not occur, this explanation is related to the 'delayed price reaction' argument highlighted by Ball and Kothari (1991).

Fig.2. AAR (\%) and CAAR (\%) around dividend announcement Days


Source: Compiled by researcher.
Table 1. Average Abnormal Return (AAR) and Cumulative Average Abnormal Return (CAAR) in an event window of 21 days

| EW | AAR | T-value (AAR) | CAAR | T-value (CAAR) |
| :---: | :---: | :---: | :---: | :---: |
| -10 | 0,07\% | 0,7682 | 0,07\% | 0,7682 |
| -9 | -0,19\% | 1,7827* | -0,12\% | 0,8343 |
| -8 | 0,09\% | 0,9327 | -0,03\% | 0,1648 |
| -7 | -0,17\% | 1,7242* | -0,20\% | 0,9603 |
| -6 | -0,19\% | - 2,1144** | -0,39\% | - 1,6926* |
| -5 | -0,09\% | 0,8527 | -0,48\% | 1,8873* |
| -4 | -0,01\% | 0,0762 | -0,48\% | - 1,7252* |
| -3 | -0,16\% | - 1,7740* | -0,64\% | - 2,1340** |
| -2 | 0,14\% | 1,2265 | -0,51\% | 1,6084 |
| -1 | 0,03\% | 0,3002 | -0,48\% | 1,4649 |
| 0 | 0,17\% | 1,2627 | -0,31\% | 0,9032 |
| 1 | 0,36\% | 2,3548** | 0,05\% | 0,1242 |


| 2 | 0,04\% |  | 0,3695 | 0,09\% |  | 0,2153 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | -0,16\% | - | 1,5822 | -0,07\% | - | 0,1713 |
| 4 | -0,03\% | - | 0,3304 | -0,11\% | - | 0,2383 |
| 5 | 0,03\% |  | 0,3198 | -0,08\% | - | 0,1706 |
| 6 | 0,67\% |  | 0,9362 | 0,60\% |  | 0,6927 |
| 7 | 0,34\% |  | 0,6494 | 0,93\% |  | 0,9702 |
| 8 | -0,01\% | - | 0,1161 | 0,92\% |  | 0,9430 |
| 9 | -0,05\% | - | 0,5090 | 0,87\% |  | 0,8838 |
| 10 | -0,06\% | - | 0,6523 | 0,81\% |  | 0,8097 |

Source: Compiled by researcher. $\quad *, * *$, significant at $10 \%, 5 \%$

## 6. Conclusion

The signalling theory is based on asymmetric information between investors and insiders of the firm, where changes in dividend contain useful information to investors. According to this theory, dividend announcements are usually considered as a signal to the investors, about firm's future performance, that reflects in stock price changes.

The present paper analyses the stock price reaction around cash dividend announcements using the Event study methodology. A total of 30 companies listed on Saudi stock exchange have been selected, which, in all, had made 200 cash dividend announcements during the sample period, that is 9 February 2011-5 September 2019.

The purpose of the study is to identify whether there are any significant abnormal returns around the public announcement of dividend. An event study methodology is used for an event window of twenty days surrounding the announcement day. More specifically, it employs the market model in generating abnormal returns surrounding cash dividend announcements.

The results of this research show that stock returns react positively to the cash dividend announcements in the Saudi Stock Exchange and this is consistent with the information content theory. The presence of earlier and delayed significant abnormal returns indicates that stock prices do not reflect the publicly available information instantly and accurately, therefore, the Saudi Stock Exchange is not consistent with the semi-strong form efficiency hypothesis.

The study of the relationship between announcements dividend and share prices of companies is very important as it plays a significant role in the regulation and supervision of the capital market and can also be useful to managers of Malaysian listed firms with regards to deciding upon a dividend policy. In addition, this study it can be helpful for investors and investment managers in understanding the behavior of the market with regard to dividend announcement.

This research can be further expanded in the future in other areas like the impact of merger/acquisitions, stock splits, stock repurchase and their impact on stock prices.

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