# THE IMPACT OF DIVIDEND DISTRIBUTION ANNOUNCEMENTS ON STOCK PRICES: AN EVENT STUDY AT THE ISTANBUL STOCK EXCHANGE 

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#### Abstract

Purpose- The dividend is an essential part of the company's financial image. Because of its long-term growth, it is an overall source of return for an investor and a reliable predictor of the company's valuation. According to dividend distribution theory, when a corporation decides to disclose its dividend payment policy to indicate the market where it is now processing prospects, the price of its shares changes. The purpose of this article is to show how share prices on the Istanbul Stock Exchange react after dividends are distributed. Methodology- The data from the Daily returns Series from the Turkish Financial Market between 2011 and 2017 was used to fulfill the goal of the study. The effect of the 32 dividend announcement events for 8 banks on the 20 -day announced stock price was examined using an event study approach which aid in predicting what stocks will look like in response to an event announcement. Findings- The findings revealed that the market response was positive and the stock values have increased after dividend announcements. The market models $\operatorname{CAR}(5.0)$ and $\operatorname{CAR}(10.0)$ have statistically significant abnormal returns (ARO) and abnormal cumulative returns. Also, The tracking of the daily average return separately for each day showed that AAR's profit distribution day was $0.49 \%$, the fourth day had the highest positive increase of $0.56 \%$, and the fifth day had a positive high positive return of $0.47 \%$. Conclusion- The results of this empirical study show that stock prices change after dividend announcements, and that support the dividend notification theory, which states that dividend announcements have a significant impact on stock prices. The researchers propose extending the run window to 61 days rather than 21 days in order to monitor the continued decline ten days after the event.


Keywords: Dividend distribution, event study, stock market reactions, Istanbul Stock exchange
JEL Codes: G20, G21, G41

## 1. INTRODUCTION

The dividend is a significant aspect of the company's financial profile. It is an overall source of return for an investor and a dependable predictor of the company's valuation because to its long-term growth. However, it is still a very complex variable with a difficult impact on the company's worth (Black, 1976). In general, dealing with it entails either severely disappointing the market or growing natural resources in naturally favorable situations.

There is consensus on the impact of dividend change disclosures on the firm's value. On the other hand, the debate over the cause of this market reaction rages on. The first explanation of the impact of dividend changes on the value of the firm is based on the future income reporting assumption developed by (Bhattacharya, 1979; Miller and Rock, 1985; John and Williams, 1985). With this assumption, managers will use information to inform outside shareholders about the company's current and future earnings via dividends. The greater the change in dividend, the better the expected results, and thus the higher the stock price, and vice versa if dividend cuts are announced. Through the concept of discretionary funds, the agency's theory explains, albeit in part, significant differences in how investors pay dividends. (Jensen,1986) identifies discretionary funds as the source of funds after funding all positive net present value projects at a discount rate equal to the cost of capital. The presence of large prudent funds can lead to a conflict of interest between management and shareholders, as the former tend to invest these funds primarily in projects aimed at increasing the firm's size or diversifying its operations. Second, it
seeks to re-distribute these funds. If changing the dividend is one way to reduce the risk of reducing funds available to executives and investing those funds in projects with negative net present value (excessive investment risk), investors should announce significant dividend changes. Their reaction should be proportional to their exposure to this excessive investment risk: the higher the risk, the more sensitive the stock price should be to the announcement.

This article will add to the existing literature on this topic in a variety of ways. First and foremost, the dividend notification is seen to be in line with the stock market price, and the increase in the price of the securities is also tested. Second, we attempted to identify the factors influencing dividend quality on the Istanbul Stock Exchange. Finally, the effect on stock price is investigated by focusing on stock buying and selling trends that follow stock traders' dividends from stock trading. The study's goal is to see if there is any correlation between the dividend declared by banks and the effect of these announcements on the share price. Other dimensions, such as market efficiency, insider trading, and corporate expenses, should be established based on the announcement's positive or negative impact on returns on equity. Following the collection of bank dividend statements, data collection sequences began with stock returns. There were approximately 32 dividend announcements for which sufficient data was available for the research and forecast window.

This article is organized around three main themes. First, we summarize the current theories and literature review on the impact of dividend announcements. Second, we represent the data and methodological aspects. Finally, the results obtained are presented and interpreted, followed by an overall conclusion.

## 2. THE DIVIDEND ANNOUNCEMENTS THEORIES AND LITERATURE REVIEW

### 2.1. The Market Reactions to Dividend Announcements Theories

Three lines of thought diverge from the extensive literature on dividends and their impact on stock returns. These are the "dividend neutrality" "bad dividends," and "beneficial dividends" schools of thought. As a result, the famous (Modigliani and Miller, 1961) articles were specifically focused on the theories of signaling, agency, and client effects; much work has been done to control the effect of dividend policy on firm value. However, with the current evolution of financial theory and the emergence of so-called behavioral finance, new arguments for market inefficiency are emerging.

### 2.1.1. Signal Theory and Market Reactions to Dividend Announcements

Many studies on the impact of dividend policy have been conducted in various ways, but the analysis in terms of market signaling is the most contentious. While there is widespread agreement that markets react to dividend announcements, there is no irrefutable evidence of a link between dividend policy and stock market response. The dividend is an important signal for investors, according to the majority of authors (Calvi-Reveyron, 1999; Harada and Nguyen, 2005; McCluskey et al., 2006). Dividend increases result in positive returns, while dividend decreases result in negative returns. However, some authors do not agree with these findings. Some studies show that dividend changes have little impact on markets (Conroy et al., 2000) and almost no impact on the company's value (Benartzi et al., 2005).

### 2.1.2. Agency Theory and/or Free Cash Flows and Market Responses in Dividend Announcements

According to agency theory, a dividend increase is beneficial to the firm because it helps to significantly reduce agency costs (Allen et al., 2000). To that end, the risk of overinvestment or free cash flow, or the risk of discretionary funds being invested in unprofitable projects, justifies investors' reaction to dividend changes (Jensen, 1986). If this is the case, it is an effective way to reduce the discretionary funds available to dividend leaders while also lowering the risk of over-investment. Investors should pay close attention to news of significant variations in profits. The severity of this reaction should be proportional to their exposure to such a risk. More importantly, the stock price should be more sensitive to dividend announcements in either direction. The weaker the reaction, the less significant the reaction (Denis et al.,1994) and (Poulain-Rhem, 2005).

### 2.1.3. Dividends and Insider Trading

There is also some work being done on the analysis of market reactions to dividend announcements, as well as transactions made by insiders on the date of the announcement. The insider trading agreement's purpose is to ensure that everyone has access to information that is available at the same time and that everyone has the same information. (Cheng et al., 2007) addressed this aspect of the question; however, their comments generally agree with (John and Lang, 1991) conclusions. Second, it demonstrated that the informative value of a dividend increase is inextricably linked to the second signal, insider trading. As a result, the market will value the informative content of any significant increase in dividends over the activities of participants prior to the announcement date. The most important contribution of this study is that it shows that observed insider trading can cause investors to react negatively to significant increases in dividends unless they anticipate rather than acquire shares. Dividend growth does not always result in value creation. In other words, a significant increase in dividends is bad news for the markets. As a result, the size and significance of insider trading in the period preceding the announcement date influence the announcement effect of a significant dividend increase.

### 2.1.4. Asymmetry Information and Dividends

When a person has more information about risk, information asymmetry occurs, contracts or transactions with another person or people. According to signaling theory, managers obtain more information about real value from investors and use dividends to communicate this information to the market. In other words, there is a positive relationship between information asymmetry and dividend policy (Alamdari, 2016).

Table 1: Comparison between Dividend Theories Impact

| The Theory | The Impact |
| :--- | :--- |
| Signal Theory | Dividend increases result in positive returns, while dividend decreases result in <br> negative returns. |
| Agency Theory | A dividend increase is beneficial to the firm because it helps to significantly reduce <br> agency costs |
| Dividends and Insider <br> Trading | The size and significance of insider trading in the period preceding the announcement <br> date influence the announcement effect of a significant dividend increase. |
| Asymmetry Information and <br> Dividends | There is a positive relationship between information asymmetry and dividend policy |

### 2.2. LITERETURE REVIEW

Many other studies were later conducted to confirm the impact of dividend announcements on stock prices, and their findings were consistent with the previous four theories.

Aditya and Ashok (2017) investigated the stock price reactions to stock dividend announcements 30 days before and after the announcement dates of publicly traded companies from 2006 to 2012 in the CRSP historical data set. The study found a significant reaction in stock prices around the event date. Stock prices rose in response to dividend announcements.

Chanchal and Paromita (2017) empirically examined the price behavior around cash dividend announcements of companies, National Stock Exchange of India Limited (NSE). The article uses standard "event study" methodology based on a market model on a sample of 210 dividend announcements. The study finds that larger payouts experience greater stock returns than smaller payouts immediately after dividend announcements. However, stock returns after dividend announcements do not vary with company size.

Lotfi (2018) investigated the stock price reaction to dividend announcements by firms listed on the Tunisian Stock Exchange (TSE). A traditional event study was created by the researcher. The robust results showed that when the 196 dividend announcements between 1996 and 2004 are examined, the result is inconsistent with signaling theory, as long as no abnormal return is observed on the announcement day (event period).

Om and Goel (2018) studied 60 companies listed on the Bombay Stock Exchange from 20 days before the announcement to 20 days after the announcement. According to the study, there is no statistically significant difference between the pre and post window. The study's findings show no strong evidence that stock prices react significantly to dividend announcements on the stock exchange.

Similarly, Marisetty (2018) conducted an event study on 120 stocks that distributed cash dividends in 2016 and discovered that there is a dividend signaling hypothesis and that the market is semi-strong form efficient to adjust the dividend announcement on the share price within the event window.

Seyedimany (2019) examined the effect of special dividend announcements for five NASDAQ-listed companies from 2014 to 2018. The study looked at stock price reactions to special dividend announcements for 40 days before the event and challenged dividend signaling theory. As a result, do not confirm that the announcement of a dividend has a significant impact on the price of shares. And the findings support Miller and Modigliani's (1961) dividend irrelevance hypothesis.

Ozo and Arun (2019) used the event study methodology to investigate the effect of dividend announcements on stock prices in Nigeria. The findings support the signaling hypothesis: dividend increases are associated with positive stock price reaction, while dividend decreases are associated with negative stock price reaction. Companies that do not change their dividends see marginally positive abnormal returns.

Zahan and Rana (2020) used MAAR and CAAR to test the effect of dividend announcements on the Dhaka Stock Exchange in Bangladesh, using 21 listed companies, which slows significant dividend signaling while some companies are efficient and others are not.

Similarly, Hariyanto and Murhadi (2021) conducted a study in 2018 in ASEAN countries, and the findings agreed with dividend signaling theory and demonstrated the presence of a semi-strong form of efficiency in ASEAN stock markets.

Pournima and Huma (2021) conducted a systematic review of dividend announcements and examined the effect of dividend announcements on stock prices of service providers listed on the National Stock Exchange of India by using event study methodology. The study's findings revealed that stock prices react to a company's dividend announcement event, and thus there is a significant impact of dividend announcement on stock prices during the event window, resulting in abnormal returns.

Chanchal et al., (2021) used 3,671 cash dividend announcements from 2012 to 2019 to examine how stock prices behave following cash dividend announcements in the Indian equity market. they discovered that cash dividend announcements generate abnormal stock returns in the Indian equity market immediately after the dividend announcement. However, this effect is only temporary, and stock prices gradually return to normal.

Furthermore, Chou et al., (2021) examined the reaction from 358 companies from 2016 to 2018 and discovered strong dividend signaling and semi-strong form, as well as a strong relationship between dividend yield and systematic risk on market reaction to dividend announcements, which provides insights on variables controlling market reaction to dividend announcements.

The event study approach was also used in the study of (Nidar and Maraya, 2021) to analyze the return of the reaction of the announcement of stock dividend. The findings revealed that there is no significant positive abnormal return to the announcement of stock dividends around the event period; likewise, no average abnormal return is greater in companies issuing initial stock dividends compared to companies issuing subsequent stock dividends; and finally, no average abnormal return is greater in companies issuing high stock dividend ratio compared to companies issuing low stock dividend ratio.

## 3. DATA AND METHODOLOGY

### 3.1. Sample Selection

The primary goal of this research is to look into the impact of dividend announcements on stock returns. Dividend response will be controlled in stock returns as of the dividend announcement date using Event Study. Data for this study were manually collected from the Turkish Financial Market (www.investing.com) from 2012 to 2017. The most recent observations include 32 dividend announcement events for 8 banks. This study looked at the effect of dividend announcements on stock prices ten days before the announcement date and ten days after the announcement date.

Table 2: Number of Events for Different Banks

| No | Bank Name | Bank Code in Istanbul Stock Exchange | Numbers of Events |
| :---: | :--- | :---: | :---: |
| $\mathbf{1}$ | Akbank | AKBNK | 4 |
| $\mathbf{2}$ | Halkbank | HALKB | 4 |
| $\mathbf{3}$ | Isbank | ISCTR | 4 |
| $\mathbf{4}$ | Garantibank | GARAN | 4 |
| $\mathbf{5}$ | Yapı ve Kredi Bank | YKBNK | 3 |
| $\mathbf{6}$ | Vakıfbank | VAKBN | 6 |
| $\mathbf{7}$ | Albaraka Bank | ALBRK | $\mathbf{2}$ |
| $\mathbf{8}$ | TS Bank | TSKB | 5 |
|  | TOTAL |  | 32 |

### 3.2. Event Study Methodology

Event study methodology is one of the most popular research methods for calculating the economic impact of an event by observing the event's safety effects. Event studies aid in predicting what security will look like in response to an event announcement. The event can have an impact on the security's value, either positively or negatively. Mergers and acquisitions, spin-offs, stock dividends, bonus shares, mergers, and other financial transactions are the most successful applications of event studies. It took place in conjunction with corporate events such as The impact of cash dividend notifications is examined in this context using the event study methodology (Brown and Warner, 1985; Mackinlay, 1997; McWilliams and Siegel, 1997; Peterson, 1989). The reasoning behind using this methodology is to assess the economic impact of an event by observing security prices over a relatively short period of time (Mackinlay, 1997). Within the context of this literature, this study examines the differences in the information conveyed in cash dividend announcements. The event study methodology is a popular approach for calculating abnormal returns (Brown and Warner, 1985; MacKinlay, 1997). It consists of specifying the relevant event, event window, forecast window, and forecast model (Bowman, 1983). To calculate expected (normal) returns, the methodology employs the "market model."

Event studies are statistical techniques used in the analysis of stock prices and returns when a special event occurs in our study (profit share notification). In this case, the case study methodology is as follows (Shweitzer, 1989):

Event date: The profit distribution date on which the board of directors proposes the dividend, denoted by $\mathrm{t}=0$.
Activity window: The activity period is responsible for correcting the time period, including the share prices of the banks. Before this possible pre-event response, a wide selection of event windows $(-10,+10)$ is made, i.e. 10 business days up to 10 business days after the event.

Forecast period: This is the time period preceding the event window that is used to estimate the Market Return parameters ( $\alpha$ i; $\beta$ i).

Figure 1: Time Scale for the Event Study


Daily closing prices were used to calculate the actual return for each stock and the market index using the following formula:

$$
\begin{equation*}
R_{i t}=\frac{P_{i t}}{P_{i t-1}}-1 \tag{1}
\end{equation*}
$$

$R_{i t}$ is the actual rate of return ( $t$ ) on the date of the stock ( $i$ ),
$P_{i t}$ and $P_{i t-1}$ show closing stock prices on dates $t$ and $t-1$.
The rate of return for each stock during the forecast period is used to predict the market model ( $\alpha \mathrm{i} ; \beta \mathrm{i})$.

$$
\begin{equation*}
E\left(R_{i t}\right)=\alpha_{i}+\beta_{i} R m_{t}+\varepsilon_{t} \tag{2}
\end{equation*}
$$

$E\left(R_{i t}\right)$ are the expected returns on stock (i) at date (t)
$R m_{t}$ is the returns on the BIST 100 Market index at ( t ) date.
The market model is then used to calculate the expected rate of return for each stock over a 21-day period, 10 days before and 10 days after the profit distribution announcement day.

Abnormal return $\mathrm{AR}_{\mathrm{it}}$ is calculated for each stock on each of the 21 days:

$$
\begin{equation*}
A R_{i t}=R_{i t}-E\left(R_{i t}\right) \tag{3}
\end{equation*}
$$

The average daily abnormal return $A A R_{t}$ is calculated for each day during the activity period:

$$
\begin{equation*}
A A R_{t}=\sum_{i=1}^{n} \frac{A R_{i t}}{n} \tag{4}
\end{equation*}
$$

The cumulative average abnormal return $C A A R_{j}$ is calculated as:

$$
\begin{equation*}
C A A R_{j}=\sum_{i=1}^{j} A A R_{i t} \tag{5}
\end{equation*}
$$

## 5. FINDINGS AND DISCUSSION

Trough the period between 2012 and 2017, there are 32 events for 8 Turkish banks. Table 3 displays the descriptive statistics and t-test of abnormal returns for various time windows due to profit distribution in the banks studied.

Table 3: Average Abnormal Return, Cumulative Average Abnormal Returns and T-Values of the Stock

| Event | $\operatorname{CAR}(10,0)$ | $\operatorname{CAR}(5,0)$ | $\operatorname{CAR}(2,0)$ | $\operatorname{AR}(0)$ | $\operatorname{CAR}(0,-2)$ | $\operatorname{CAR}(0,-5)$ | $\operatorname{CAR}(0,-10)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| event 1 | $4,06 \%$ | $1,27 \%$ | $-0,25 \%$ | $-0,01 \%$ | $0,12 \%$ | $0,62 \%$ | $-0,49 \%$ |
| event 2 | $2,02 \%$ | $-0,21 \%$ | $-0,87 \%$ | $1,32 \%$ | $-1,64 \%$ | $0,85 \%$ | $-0,27 \%$ |


| event 3 | -1,33\% | 2,19\% | -1,22\% | 0,74\% | 0,09\% | -1,82\% | -0,23\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| event 4 | 2,84\% | 3,14\% | 2,59\% | -0,60\% | 1,31\% | 4,40\% | 4,88\% |
| event 5 | 0,01\% | 1,20\% | -0,81\% | -0,43\% | 3,04\% | 3,27\% | 3,24\% |
| event 6 | 4,06\% | 2,23\% | -0,07\% | -0,12\% | -0,60\% | -1,79\% | -10,04\% |
| event 7 | -0,62\% | -1,67\% | -0,52\% | 1,02\% | 2,39\% | 1,12\% | 0,63\% |
| event 8 | -4,43\% | -2,01\% | -0,23\% | 0,65\% | 0,22\% | 2,18\% | 8,84\% |
| event 9 | 4,74\% | 5,21\% | 1,80\% | -0,54\% | 0,70\% | 1,45\% | 3,69\% |
| event 10 | 1,85\% | 0,18\% | -1,27\% | 0,34\% | 0,42\% | -1,80\% | -3,48\% |
| event 11 | -1,16\% | -0,02\% | -1,48\% | 1,04\% | -0,07\% | -3,29\% | -3,67\% |
| event 12 | 4,25\% | 4,31\% | 2,18\% | 0,41\% | 2,89\% | 3,44\% | 2,83\% |
| event 13 | -1,34\% | 0,17\% | 0,49\% | 1,09\% | -0,91\% | -3,64\% | -1,55\% |
| event 14 | -1,82\% | 3,63\% | 2,17\% | 0,71\% | -3,59\% | -0,85\% | -0,20\% |
| event 15 | -0,13\% | 0,34\% | 0,83\% | 1,58\% | -1,48\% | -1,66\% | -2,54\% |
| event 16 | 0,53\% | -4,46\% | -2,59\% | 0,30\% | 0,09\% | -0,22\% | 0,41\% |
| event 17 | -1,57\% | 1,07\% | -0,50\% | 0,70\% | -1,87\% | -2,71\% | -3,76\% |
| event 18 | 4,98\% | 6,32\% | 1,73\% | 0,02\% | -1,50\% | 3,34\% | 3,22\% |
| event 19 | -1,39\% | 2,71\% | -0,35\% | 2,07\% | -3,54\% | -3,01\% | -1,64\% |
| event 20 | -1,17\% | 0,20\% | 0,11\% | -0,34\% | 2,08\% | 1,37\% | 2,59\% |
| event 21 | 3,38\% | 0,90\% | 0,16\% | 2,31\% | 1,64\% | 4,70\% | 0,30\% |
| event 22 | -4,88\% | -1,27\% | -2,00\% | 0,70\% | -0,54\% | -1,07\% | -3,67\% |
| event 23 | -0,16\% | 1,47\% | -0,77\% | 0,01\% | 2,42\% | 3,93\% | 7,42\% |
| event 24 | 0,75\% | -0,44\% | 0,82\% | -0,94\% | 0,55\% | -5,95\% | -8,04\% |
| event 25 | 5,75\% | 2,74\% | 2,17\% | -1,93\% | 1,18\% | 0,81\% | 1,71\% |
| event 26 | -5,22\% | -1,80\% | -0,50\% | 0,09\% | -0,14\% | -0,24\% | 0,59\% |
| event 27 | 0,39\% | 0,30\% | 0,95\% | 1,47\% | -0,16\% | -0,66\% | -0,82\% |
| event 28 | 0,46\% | 1,15\% | 0,47\% | -0,65\% | 0,03\% | -1,27\% | -1,79\% |
| event 29 | -3,20\% | -1,85\% | -1,30\% | 0,62\% | 0,63\% | -0,41\% | -4,45\% |
| event 30 | 6,64\% | -1,13\% | 1,20\% | 3,51\% | -1,32\% | 1,05\% | -1,73\% |
| event 31 | -0,72\% | -1,72\% | -1,31\% | 1,90\% | 0,14\% | -1,28\% | -4,71\% |
| event 32 | 4,38\% | 6,22\% | 1,22\% | -1,48\% | -2,23\% | 3,00\% | 2,98\% |
| MAX | 6,64\% | 6,32\% | 2,59\% | 3,51\% | 3,04\% | 4,70\% | 8,84\% |
| MIN | -5,22\% | -4,46\% | -2,59\% | -1,93\% | -3,59\% | -5,95\% | -10,04\% |
| AVG | 0,69\% | 0,95\% | 0,09\% | 0,49\% | 0,01\% | 0,12\% | -0,31\% |
| SUM | 21,94\% | 30,38\% | 2,88\% | 15,55\% | 0,35\% | 3,88\% | -9,76\% |
| COUNT (-) | 15 | 11 | 17 | 10 | 14 | 17 | 18 |
| COUNT (+) | 17 | 21 | 15 | 22 | 18 | 15 | 14 |
| $p$-value | 0,11 | 0,02 | 0,35 | 0,01 | 0,49 | 0,40 | 0,67 |
| \% + | 53,125 | 65,625 | 46,875 | 68,75 | 56,25 | 46,875 | 43,75 |
| \% - | 46,875 | 34,375 | 53,125 | 31,25 | 43,75 | 53,125 | 56,25 |

CAR (10,0): Accumulated abnormal returns calculated between 0 and 10 days after the event.
CAR (5.0): cumulative abnormal returns calculated between 0 and 5 days after the event.
CAR (2.0): Total abnormal returns calculated between 0 and 2 days after the event.
AR (0): Abnormal returns generated on 'Day 0 '
CAR ( $0,-2$ ): Total abnormal returns calculated between 0 and 2 days before the event.
CAR (0,-5): Cumulative abnormal returns calculated between Day 0 and Day 5.
CAR ( $0,-10$ ): Cumulative abnormal returns calculated between days 0 and 10 before the event.

The average abnormal returns for the day of the event were AR (0) 0.49 percent, with a range of about $5.44 \%$ between the high and low, indicating a significant difference in the changes in returns in one day.

Following the event, the CAR (2.0), CAR (5.0), and CAR (10.0) averages were $0.09 \%, 0.95 \%$, and $0.69 \%$, respectively. Furthermore, the difference between the maximum and minimum value is $5.18 \%, 10.78 \%$, and $11.85 \%$. Before the event, the mean of CAR $(0,-2)$, CAR $(0,-5)$, and CAR $(0,-10)$ was $0.01 \%, 0.12 \%$, and $-0.31 \%$, respectively. Furthermore, the difference between the maximum and minimum value is $5.18 \%, 10.78 \%$, and $18.88 \%$.

The findings revealed that the market response was positive on average for the CAR (5.0), while the CAR (10.0) showed a decrease in average relative to the CAR (5.0). This drop could be attributed to investors needing time to assess the market impact of the dividend distribution. Table 2 also includes the $P$-value for the z-test, which indicates whether or not abnormal returns are greater than zero. The results revealed that the AR (0) elicited the greatest reaction, which was statistically significant at 0.01 . CAR (5.0) and CAR (10.0) were both significant at 0.05 and 0.1 . Other mean returns did not meet the statistical significance threshold.

To explain some of the results in Table 2, the daily average return should be tracked separately for each day. Table 4 and Figure 2 show that AAR's profit distribution day was 0.49 \% (as previously stated), the fourth day had the highest positive increase of $0.56 \%$, and the fifth day had a positive high positive return of $0.47 \%$. This accounts for the $0.95 \%$ increase in CAR (5.0). An abnormal negative return was observed on the sixth, seventh, eighth, and tenth days, explaining the drop in CAR (10.0) to 0.69 \%.

Table 4: Average Abnormal Returns (AAR), Cumulative Average Abnormal Returns (CAAR)

|  | AAR | CAAR |
| :---: | :---: | :---: |
| 10 | $-0,07 \%$ | $0,87 \%$ |
| 9 | $0,09 \%$ | $0,93 \%$ |
| 8 | $-0,05 \%$ | $0,84 \%$ |
| 7 | $-0,17 \%$ | $0,88 \%$ |
| 6 | $-0,07 \%$ | $1,06 \%$ |
| 5 | $0,47 \%$ | $1,13 \%$ |
| 4 | $0,56 \%$ | $0,66 \%$ |
| 3 | $-0,17 \%$ | $0,10 \%$ |
| 2 | $0,10 \%$ | $0,27 \%$ |
| 1 | $-0,01 \%$ | $0,18 \%$ |
| 0 | $0,49 \%$ | $0,18 \%$ |
| $1-$ | $0,22 \%$ | $-0,31 \%$ |
| $2-$ | $-0,21 \%$ | $-0,53 \%$ |
| $3-$ | $-0,20 \%$ | $-0,32 \%$ |
| $4-$ | $0,05 \%$ | $-0,12 \%$ |
| $5-$ | $0,26 \%$ | $-0,17 \%$ |
| $6-$ | $0,08 \%$ | $-0,43 \%$ |
| $7-$ | $-0,10 \%$ | $-0,50 \%$ |
| $9-$ | $-0,17 \%$ | $-0,40 \%$ |
| $-0,23 \%$ | $-0,23 \%$ |  |
|  |  |  |

Figure 2: Average Abnormal Returns (AAR)


Figure 3: Cumulative Average Abnormal Returns (CAAR)


Figure 3 depicts CAAR exhibiting negative values in the days preceding the event, peaking at day five and then reverting to negative by day ten, with a slight improvement on day ninth. The results revealed that the event had a positive impact during the first five days, but a negative impact began between the sixth and tenth day, indicating that investors needed time to assess the impact of the dividend event.

## 6. CONCLUSION

Dividend announcements are one of the most essential data points made public in order to communicate the company's future prospects and growth to its shareholders. The primary purpose of this study is to investigate the impact of dividend announcements on stock returns. Dividend response in stock returns will be controlled using Event Study as of the dividend announcement date. From 2012 to 2017, data for this study were manually collected from the Turkish Financial Market. The most recent observations include 32 dividend announcement events for eight different banks.

According to the findings, the market reaction was positive, and stock prices increased following dividend announcements. The market models $\operatorname{CAR}(5.0)$ and $\operatorname{CAR}(10.0)$ have statistically significant abnormal returns (ARO) and abnormal cumulative returns. Furthermore, tracking the daily average return separately for each day revealed that AAR's profit distribution day was $0.49 \%$, the fourth day had the highest positive increase of $0.56 \%$, and the fifth day had the highest positive increase of $0.47 \%$. The findings of this empirical study support the dividend notification theory, which states that dividend announcements have a significant impact on stock prices.

The researchers recommend extending the run window to 61 days rather than 21 days in order to monitor the continued decline ten days after the event.

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