



**REPUBLIC OF TURKEY
ADANA ALPARSLAN TÜRKER SCIENCE AND TECHNOLOGY
UNIVERSITY**

**INSTITUTE OF GRADUATE SCHOOL
DEPARTMENT OF INTERNATIONAL TRADE AND FINANCE
PROGRAM OF INTERNATIONAL BUSINESS**

**THE EFFECTS OF NEW EQUITY ANNOUNCEMENTS ON STOCK
RETURNS: AN EXAMINATION IN BIST**

**CUMALİ ÜNAL
MASTER OF SCIENCE**



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**SUPERVISOR
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ADANA 2022



I hereby declare that all information in this thesis has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all information that is not original to this work.

Cumali ÜNAL

ABSTRACT

THE EFFECTS OF NEW EQUITY ANNOUNCEMENTS ON RETURNS: AN EXAMINATION IN BIST

Cumali ÜNAL

Department of International Trade and Finance

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The aim of this thesis was to define the effect of right issue and bonus issue announcements on stock prices and returns. The study examined 35 companies that announced the right issue or bonus issue in BIST-30 and BIST-50 indices between 2010- 2022. 84 different equity issue announcements of these 35 companies were examined. The event study method was employed and two different event windows were created as (-10, +10) and (-5, +5). At the end of the analysis, the equity issue announcements of the companies included in the BIST-30 and BIST-50 indices between 2010- 2022 affected the stock prices. This may reveal, the BIST is not semi-strong efficient. This result is similar to other studies in the literature.

Keywords: right issue, bonus issue, new equity announcement, event study, BIST-30, BIST-50

ÖZET

THE EFFECTS OF NEW EQUITY ANNOUNCEMENTS ON RETURNS: AN EXAMINATION IN BIST

Cumali ÜNAL

Uluslararası Ticaret ve Finans Anabilim Dalı

Danışman: Doç. Dr. Bahadır ERGÜN

Ağustos 2022, 51 sayfa

Bu tezin amacı, bedelli ve bedelsiz sermaye artırım duyurularının hisse senedi fiyatları ve getirileri üzerindeki etkisini tanımlamaktır. Çalışmada, 2010- 2022 yılları arasında BIST-30 ve BIST-50 endekslerinde bedelli veya bedelsiz sermaye artırım duyurusu açıklayan 35 şirket incelenmiştir. 35 şirketin 84 farklı sermaye artırım duyurusu çalışmaya dahil edilmiştir. Çalışmada olay çalışması yöntemi kullanılmış ve (-10, +10) ve (-5, +5) olarak iki farklı olay penceresi oluşturulmuştur. Çalışma sonunda 2010-2022 yılları arasında BIST-30 ve BIST-50 endekslerinde yer alan şirketlerin sermaye artırım duyuruları hisse senedi fiyatlarını etkilemiştir. Bu sonuca göre BIST'in yarı güçlü formda verimli olmadığından sözü edilebilmektedir. Bu sonuç literatürde yer alan diğer çalışmalara benzerlik göstermektedir.

Anahtar Kelimeler: bedelli sermaye artırım, bedelsiz sermaye artırım, sermaye artırım duyurusu, olay çalışması, BIST-30, BIST-50

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NOMENCLATURE

AAR:	Average Abnormal Return
AR:	Abnormal Return
BIST:	Borsa Istanbul
CAAR:	Cumulative Average Abnormal Return
CAR:	Cumulative Abnormal Return
EMH:	Efficient Market Hypothesis
IPO:	Initial Public Offerings
CMB:	Capital Markets Board of Turkey
TL:	Turkish Lira
TOM:	Turn of the Month Effects
TCC:	Turkish Commercial Code

1. INTRODUCTION

Stock returns may vary depending on many factors. These factors can be individual or they can also be market specific. The main factors that affect the stock returns of equity issue announcements are market activities, investor behaviors, and announcement effects. The Effective Markets Hypothesis, which is the theory that deals with these variables, is the Behavioral Finance and Announcement Effect. In short, the Efficient Markets Hypothesis is a theory that the information provided to the markets is distributed equally to everyone and suggests that investors will not be able to get above-average returns. Behavioral finance is a branch of finance that deals with the variables that play a role in the behavior and preferences of investors. The Announcement Effect is a theory that deals with how the information presented to the market is perceived by investors.

Companies may need financing for various reasons, such as performing their activities, maintaining their existence, and growing (Karabulut and Şeker, 2020). Companies may meet these financing needs with debt financing or equity financing. Companies are required to take into account debt and equity in terms of their advantages and disadvantages. Debt financing is a method of financing in which companies procure financing from foreign sources. Companies that have chosen the option of debt financing may meet their financing needs with loans and bonds. The other source of financing for companies is equity financing. In equity financing, companies meet their financing needs by selling their equity. One of the ways to procure financing with equity financing is the issuance of shares. An example of the financing method through the issuance of shares can be in the form of obtaining new investors through the issuance of new shares (rights issue) or the division of shares (bonus issue). Companies that increase their equity with the right issue or bonus issue methods are required to announce their decisions to the market. These right issue or bonus issue announcements may have an impact on stock prices and returns. This study aims to examine the effect of equity issue announcements on stock prices.

1.1. Announcement Effects and Related Concepts

To better understand the effect of new equity announcements on stock prices and returns, it is necessary to have information about several financial concepts. These, include; the Efficient Markets Hypothesis (EMH), as well as the Behavioral Finance and Announcement Effect hypothesis. These concepts are very important in revealing the effect of announcements on stocks, which is the purpose of this study. This is because the information provided to the market and how this information will shape prices is the subject of the Efficient Markets Hypothesis. However, investor psychology, which is effective in price formation, is the subject of Behavioral Finance. Finally, how the information provided to the market will be received by investors is the subject of the Announcement Effect. Therefore, it is very important to have information about these theories to better understand the result of the study.

1.1.1. Efficient Market Hypothesis (EMH)

The Efficient Market Hypothesis (EMH) was first developed by Samuelson (1965) and Fama (1970). According to the definition of Fama (1970), the markets in which the securities are trading and all aspects of the current information are presented are called efficient markets.

According to the Efficient Market Hypothesis, the information released includes risks, returns, etc. Variables concerning the investment match the expectations of the investors. Pricing made in line with the information provided according to the Efficient Market Hypothesis (EMH) is an accurate way of pricing. The reason for this is that investors make their transactions in line with the information presented equally to everyone, and the pricing is formed as a result of these transactions. For this reason, it is assumed that the pricing formed in this way is correct. However, the information presented to the markets is not always provided equally. This is because the expectations from the markets are unequal, not rational, and different from what the market can provide. For example, an investor who wants to earn a return higher than the market average return may think that obtaining information that is not equally presented to everyone in the market enables the investor to achieve the goal of excess return. This information provided to the market can create different pricing according to the efficiency level of the market.

Investors who invest in different market structures can obtain different returns with the information presented according to the type of market. Efficient markets are formed within the framework of information efficiency, and it is a hypothesis that market prices are assumed to fully reflect the information in the market. Markets are divided into three categories, in terms of informational efficiency; weak form, semi-strong form, and strong form (Fama, 1970).

1.1.1.1.Weak-Form Efficient Markets

In such a market, investors cannot obtain an above-average return. In this type of market historical information will shape prices and investors will not be able to predict the future price of the securities, therefore they will not be able to obtain an above-average return (Fama, 1970).

1.1.1.2.Semi-Strong Form Efficient Markets

This form reflects all publicly available information about securities in the market. In addition, historical price information also shapes the price. Investors who invest using historical price information and information disclosed to the public cannot obtain above-average returns in line with this information (Fama, 1970)

1.1.1.3.Strong Form Efficient Markets

In strong form markets, past price fluctuations of securities, publicly offered information, and proprietary information (in-company) are procured to investors. In the prices shaped as a result of these variables, investors prevent them from obtaining above-average returns (Fama, 1970).

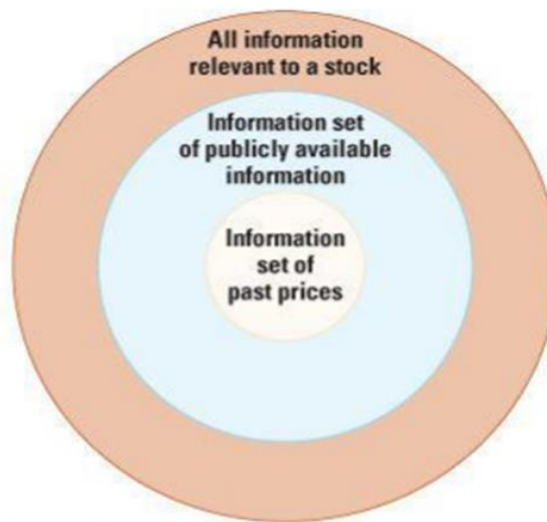


Figure 1: Efficient Market Hypothesis

Source: Ross et al. (2005), “Corporate Finance”, 9th Edition. McGraw- Hill

Market types in these three groups can be considered nested clusters. In this case, the weakest efficient market is in the smallest and semi-efficient market cluster, and the semi-strong efficient market is also in the strong-form efficient market.

In line with the assumption of the Efficient Markets Hypothesis, investors cannot obtain an above average return in line with the information provided. This situation is defined by the random walk theory. According to the random walk theory, it is suggested that prices are randomly generated therefore, prices cannot be predicted in advance (Fama, 1965). For investors to obtain abnormal returns, the market would not be efficient. According to the Efficient Markets Hypothesis, it is assumed that investors have the same amount of information provided by companies to the market. Contrary to the Efficient Markets Hypothesis, asymmetric information is the situation that arises when the information provided to investors is different (Dierkens, 1991). In this case, the party with more information can use this situation for future pricing and obtain an abnormal return.

1.1.2. Behavioral Finance

Psychology is a subject that is considered in many areas as a factor that directly affects human activities. Behavioral Finance is a branch of finance with a wide spectrum; including investor psychology, sociology, and anthropology (Giuseppe, 2003). To have an idea and comment on how the new equity announcements made or to be made by the companies can affect the stock

prices, it is necessary to have information about investor psychology and behavioral finance. This is the branch of finance that examines investor movements. Behavioral finance is very important to understand how new equity announcements will be perceived by investors. Therefore, it is important to have an idea about the possible new value of the firm and the possible new price of the stock.

1.1.2.1. Investors' Decision-Making Stage

Economists and psychologists have different views on investor decision-making. Economists act rationally according to various statistical methods and their resulting expectations to maximize the benefits of investors. However, psychologists argue that investors' momentary moods, emotional states, perspectives, and instincts are influential in the decision-making process (Barak, 2006).

There are investors in the market who make decisions in various ways. Some investors can make decisions according to their logic, some according to their feelings, and some can make decisions both ways.

1.1.2.2. Factors Affecting Investors' Decisions

Investment decisions involve many personal and social psychological factors. No matter how rational a person is, people are structurally affected by emotions. It can be said that investors who prioritize their logic more than their emotions make more rational decisions when investing. This section listed various factors that affect investors' decisions.

1.1.2.2.1. Overconfidence

One of the factors that can hurt investors the most or increase their earnings is overconfidence. When we interpret this self-confidence financially, the investor's psychological position and past experiences may come to the forefront. Although the feeling of trust is a significant factor for investors, overconfidence may harm investors and create negative results. Overconfidence may lead investors away from making rational decisions, but may also cause them to be unable

to make objective interpretations of the results. This is the result of overconfidence, which is caused by investors seeing themselves as smarter than they are (Barberis, 2007).

The number of financial transactions made on the market is directly proportional to the number of confident investors. The reason for this situation can be explained by the fact that investors with overconfidence tend to trade more and it can be interpreted as the spread of overconfidence (Dow & Gorton, 1997). It was found by Barber and Odean (1999) that investors' returns decreased as a result of excessive trading.

Contrary to overconfidence, the right level of confidence may ensure the stability of the investors and enable them to look at their investments from a more rational perspective. This give them the ability to make decisions in possible negative situations and to stand behind their decisions while making and after making these decisions.

1.1.2.2.2. Cognitive Shortcuts

Tversky and Kahneman (1974) explained three practical cognitive shortcuts in their study on people's decision-making and evaluating possibilities. These shortcuts are anchoring, representation, and hibernation.

1.1.2.2.2.1. Anchoring

Anchoring is a reference effect, regardless of whether a piece of information is true or false. In other words, it is the shaping of the investors' focus and expectations around this information, after the information is put forward for the price of a stock (Tversky & Kahneman, 1974). The reference of stock price suggests to investors that it may cause pricing with the anchoring effect. For instance, investors may reference the current price of a stock for its future price.

1.1.2.2.2.2. Representation

Representation is the situation of making inferences from the characteristics specified in the decision-making phase of the person according to the characteristics specified by a representative for a situation (Tversky & Kahneman, 1974). For instance; when a company

owner is introduced as someone who likes sports, is active, and does sport. As these are the characteristics of the owner, investors who may invest in that company, or the new investments of the owner for the company can shape their investments accordingly, taking these characteristics into account.

1.1.2.2.2.3.Presence

Presence is related to the frequency of occurrence of the event and the person's recollection of the event. In other words, this situation states that frequent events come to mind more often, similarly, less-occurring events are less likely to come to mind and are more likely to be forgotten (Tversky & Kahneman, 1974). For instance; Investors may think that the next price movement of a stock that is falling in price may be falling again.

These cognitive shortcuts may put investors in difficult situations against various manipulations. The reason for this is that investors who use these shortcuts may not be able to compose their analysis objectively.

1.1.2.2.3. Mental Accounting

Financial and managerial accounting is simply categorizing, analyzing, and reporting income and expenses. Mental accounting, on the other hand, was introduced to the literature by Thaler and, by definition, can be done by dividing people's gains and losses into categories such as how, where, and how often they occur (Thaler, 1999). For example, investors may be less sensitive to the money they earn easily and more sensitive to the hard-earned. This situation may cause investors to make irrational decisions and over-trade in the markets.

1.1.2.2.4. Sunk Cost Effect

Sunk cost is simply called an investment with no return. In the same way, the state of continuing to invest even though there is no return on investments is called persistence. Persistence may be the main cause of sunk costs. Erdinc, (2004) emphasized that investors should focus on how much return they will get in the future and explained the situation that investors should pay attention to concerning sunk costs that have no return. Investors can take action with the thought

of compensating their losses and making additional investments to their investments that they cannot obtain a return on yet. For instance; the investor who sees that the stock he owns is at a loss of 30%, can act with the thought that he can compensate for this loss, make an additional investment, or not withdraw the investment that has already suffered a loss.

1.1.2.2.5. Avoidance of Regret

Regret is the pain we feel when we realize that the other option had a better outcome and we were too late to change it (Statman, 2002). People may not want to see the results of their decisions in order not to regret seeing the cost of their mistakes and this situation is defined as the avoidance of regret. For example, the investor can resist not selling the stock that he sees as losing value. This may be because the investor will be forced to face the wrong decision he made if he sells the stock that has suffered a loss. Shefrin and Statman (1985) named this situation “the Disposition Effect”. Shiller (1998) mentioned that investors avoid confronting loss because they choose to avoid realizing the loss they experience.

1.1.2.2.6. Reaction

Investors react according to market activity. In other words, while investors react faster in a dynamic market, the reactions of investors in a slow market are also slower. In other words, investors not react strongly enough or may overreact to statements about companies (Abarbanell & Bernard, 1992). Since the speed of information flow to the markets shortens the decision-making time of investors, it may prevent investors from making extensive evaluations. While the over-reaction is caused by the excessive expectations of investors (over-optimism or excessive pessimism), the under-reaction is due to conservatism, that is, the tendency to make slow decisions (Barberis, Shleifer & Vishny, 1998).

1.1.2.2.7. Herd Psychology

Herd psychology is behavioral integrity in which individuals act according to the decisions of others. In financial terms; Döm (2003) interpreted herd behavior in the following way: “Herding behavior occurs as a result of investors acting according to the transactions of others instead of their information, and it is a negative and undesirable type of behavior in many markets where

financial crises are experienced.” For this behavior, which is generally seen as a safe decision for investors, to be called "Herd Psychology," the investor must change their decision according to another investor (Decamps & Lovo, 2002).

In this case, the fact that investors may act in accordance with the analysis of others rather than their own analysis, may both cause rational and abnormal movements in the market and blunt the person's rational decision-making ability.

1.1.2.2.8. Rumors/ Noise

Rumors are called sensations that contain unproven information about investment instruments that are spread or emerged through various channels. Since their accuracy has not yet been proven, distorted statements can be made for the relevant investment. Fisher Black (1986), who first mentioned the concept of noise, suggested that noise should not confuse with knowledge. The author said that it is correct to expect profit after trading with information, but it is wrong to make trade decisions based on rumors and expect a profit (Black, 1986).

However, rumors do have an important role in keeping the markets moving. If there is no noise trading, there will be few trades occurring in individual assets. People will hold on to their individual assets, directly or indirectly, but they will rarely trade them (Black, 1986). Contrary to the positive side of rumors, they can distract investors from rationality. The reason for this is the possibility of confusion between rumors and factual information.

1.1.2.2.9. Anomalies

According to the Efficient Markets Hypothesis, investors cannot earn more returns than the market normally does. This is because the Efficient Market Hypothesis assumes that information about firms reaches investors equally. However, returns above the market normal can still be obtained in the markets. In this case, anomalies are often involved. By definition, anomalies are observations or realities that are not found in theory but can occur in real life. At the same time, anomalies can be defined as paradigms that are difficult to rationalize (Thaler, 1987a). Anomalies are divided into three groups.

1.1.2.2.9.1.Firm Anomalies

Known as firm anomalies, these occur when less valued stocks in the market provide more returns than other stocks. Firm anomalies are divided into two separate categories; firm size anomalies and neglected firm anomalies (Ergün, 2009).

1.1.2.2.9.1.1. Neglected Firm Anomalies

Not every stock in the market can be taken into account by investors. However, in some cases, less preferred stocks can provide higher returns than more preferred stocks. This situation is called the neglected firm anomaly. Bauman (1964), who conducted the first research of this anomaly in his study on popular and unpopular American stock returns, concluded that unpopular stocks provided more returns. Although unpopular stocks can provide more returns than popular stocks, the reason why investors still do not prefer these stocks can be explained by the concept of lesser-known stocks being considered riskier (Arbel et al., 1983).

1.1.2.2.9.1.2. Size Anomaly

Firm size anomalies, which are another type of firm anomaly, are briefly defined as the situation where small firms provide more returns than larger firms (Uğurlu & Demir, 2016). It can be interpreted that the reason why small firms provide more returns is that they are growth-oriented. In addition, small firms may be riskier than large firms.

1.1.2.2.9.2.Calendar Anomalies

This type of anomaly, known to exhibit performance outside the periodical normal performance of the investment instrument, is termed the calendar anomaly (Doğukanlı & Ergün, 2011). Calendar anomalies can be classified under four headings. These are the weekend effect, the holiday effect, the moon-turn effect, and the daily effect (Thaler, 1987).

1.1.2.2.9.2.1. The Weekend Effect

Returns other than the systematically continuing normal returns that occur on Monday are called the weekend effect. French (1980), in his Calendar Time Hypothesis, argued that prices should rise on Monday because there are three days between Friday and Monday, so Monday's returns are expected to be three times that of the other days. In the same study, French (1980) suggested in his Trading Time Hypothesis that the returns are the same every day of the week. According to this hypothesis, an anomaly should not be found on Monday. However, studies in the literature have shown that the "Weekend Effect" is an internationally occurring anomaly.

1.1.2.2.9.2.2. The Holiday Effect

The Holiday Effect (or anomaly) is an occurrence created by holidays in the market. In addition to the situations that French (1980) mentioned about the weekend effect, situations similar to the weekend anomaly, related to public and religious holidays, may also occur. Researchers examining this situation (Fields (1934), Ariel (1990), Lakonishok and Smidt (1987), Kim and Park (1994), Tangjitprom (2010), Chancharat, Maporn, Phuensane, and Chancharat (2018)) all mentioned the existence of the holiday anomaly.

1.1.2.2.9.2.3. Turn of the Month Effect (TOM)

The situation where the return of stocks at the end of one month and the beginning of the next month yields more of a return than at other times of the month is known as the month-end effect. Martikainen, Perttunen and Puttonen (1995) mentioned the existence of the end-of-month effect in their study on the Finnish Stock Market. Strong effects were observed in their study, especially in the last week of the month. Lakonishok and Smidt (1988) in their study on the Dow Jones Index found that the returns in the last and first week of the month are higher than the average returns of those stocks during the remainder of the month long period.

1.1.2.2.9.2.4. Intraday Effects

Intraday anomalies occur when the returns at certain times of the day are greater than the returns at the rest of the day. Eyuboglu, and Yamak (2016), in their study on 24 indices in Borsa Istanbul, found that all indices they examined had intraday effects. In addition, it was revealed that the lowest return provided by companies in 19 different sectors was achieved on

Wednesday afternoon. Harris (1986), in his study on the NYSE, stated that the outcome of the weekend effect is seen strongly in the first 45 minutes of Monday, adding that prices increase in the first 45 minutes of the day when compared to other days, except for this minute of the day when prices fall. In addition, he stated a finding that the returns are high towards the end of the day.

1.1.2.2.9.3.Price Anomalies

A price anomaly is a deviation from the mean price that occurs in two ways underreaction and overreaction (Topaloğlu et al. 2012).

1.1.2.2.9.3.1. Low Response Anomalies

A low response anomaly is the price anomaly that occurs as a result of the fact that stocks are less preferred by the investors in a one-year (1-12 month) period. That is, they are insufficiently taken into account and shown insufficient interest. There are some reasons why investors react less often than they normally would. Examples of these reasons include conservatism, as suggested by Barberis, Shleifer, and Vishny (1998), and delayed reaction, which is the situation suggested by Chopra et al. (1992). The main reason why investors show insufficient interest in stocks can be interpreted as being related to their indecision.

1.1.2.2.9.3.2. Overreaction Anomalies

Overreaction anomalies, which DeBondt and Thaler (1985, 1987) brought to the literature, are anomalies in which investors overreact to news about stocks. These reactions of investors can be very low or very high. The recovery period for this anomaly is between 3 to 5 years (Özer, 2000).

1.1.3. Announcement Effects on the Stock Prices

Announcements are the information given by companies on the decisions taken regarding their business with the public. These announcements may be administrative, economic, activity-related, etc. The effect of economic news and announcements on returns has been increasingly

investigated in the literature recently. The reason for this is the effect of these announcements on the returns of companies. By definition, the announcement effect is defined as the change in stock prices after the news that companies present to the market (Cikrikci and Ozyesil, 2018). In the literature, there is no common opinion about the outcome of the announcement effect on stock prices. While some studies have found that the announcement effect has a positive effect on stock prices, some studies have found a negative effect. The reason for this situation may be related to the influence of variables such as how announcements are perceived by investors and the level of effectiveness of the market. Signal theory is an important concept for understanding the impact of market news on prices.

In the signal effect, a new stock price is formed according to the way investors perceive the announcements made by businesses.

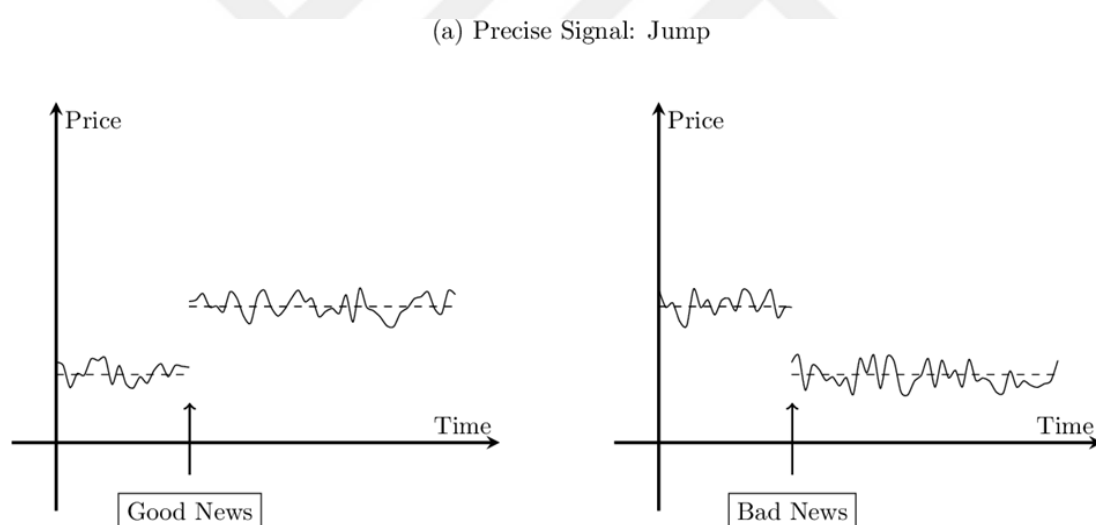


Figure 2: Signal Effect

Source: Sahneh, M., & Seoane, H.D. (2016). Efficient Market Hypothesis: Shiller Meets.

As indicated in the figure, when the information presented to the market is well accepted by the investors, it can be observed that the stock price increases due to the reactions of the investors. In the same way, it was stated that the "bad news" released to the market caused low reactivity in the investors and thus at decrease in the stock price. Bhattacharya (1979) stated in his study that stock pricing could be based on this information.

2. NEW EQUITY ISSUES

In this part of the thesis study, the stock issuance and equity issuance methods, which are types of equity financing, were both explained. The reason why these topics are discussed in a separate section is that the main topic of the study is related to the effect of new equity issues on stock prices and returns.

2.1. Stock Issue

One of the methods for meeting the financing needs of the enterprises is the issuance of the shares of a company. Equity issuance is the most preferred method of equity financing by businesses. By definition, the stock is a financial instrument that is issued to meet the funding needs of businesses and provides various rights to its owner (Büker, Aşıkoğlu and Sevil, 2009).

Businesses incur some costs during the issuance process, apart from the funds they acquire with stocks. Intermediary institution payments, fees paid to the Capital Markets Board (CMB), issuance promotion expenses, and official transaction costs can be listed as the main share issuance costs (Okka, 2009).

The increase made by issuing new shares after the payment of the existing stock prices of the enterprises is called equity issue. Businesses raise their equity in two ways. These methods to issue equity are; the right issue and the bonus issue methods. In the following sections, information about these augmentation methods are given.

2.1.1. Right Issue

In short, the right issue method is a way to increase the equity of companies with new resources. Another definition states it as the situation where companies increase their equity by issuing new shares; this is known as a right issue (Karan, 2004). The existing shareholders in the right issue method can own the newly issued shares in proportion to their existing shares, thanks to their pre-emptive rights (Lambrechts and Mostert, 1980). In addition, the right issue provides additional financing resources to the companies. Companies can benefit in many areas from the

new investors they have gained with new shares. These benefits, according to Tuna (2014), are mainly:

- New investor profiles,
- New partners and
- New visions

In addition to these advantages, the main disadvantages of the right issue method are (Akkranupornpong & Kleiner, 2004):

- Increases or changes in audits on company management
- Sharing company control
- Increasing reporting costs in line with the number of new investors

In addition to this, there are 4 right issue models (Broyles, Cooper and Archer, 1983).

- Stock distribution according to share ratio
- Calls to buy stocks at a different rate than the share rate
- Initial public offerings (IPO)
- Sales to specific buyer

These models are chosen by enterprises according to the purpose of the enterprise and the characteristics of the export.

The preemptive right is a concept that requires explanation with regards to the right issue method. Preemptive rights can be defined as the priority that a company gives to its shareholders in the equity issue before the right issue (Moroglu, 2015). The preemptive right aims to prevent the shareholders of a company from being adversely affected by the rights provided by their shares after the equity issue (Erureten, 1988). As stated in Article 461 of Law No. 6102 of the TCC, the preemptive right is transferable. In addition, the preemptive right is a right that is not mandatory and can be used optionally or not used if so desired (Yıldız, 2012).

As an example of the right issue; it is considered that an enterprise established with a equity of 200,000 TL and having 200,000 divided shares will make a 100% right issue (the number of 200,000 shares will be increased to 400,000). In this case, the value of one share of the company is 1 TL. It is assumed that the company has obtained an additional equity of 200,000 TL from the shareholders in the right issue and the market value of the shares traded in the market is 5 TL. Accordingly, the market value of the company before the right issue is 1,000,000 TL and the number of shares is 200,000. After the right issue, the market value of the company is 1,200,000 TL and the number of shares is 400,000. In this case, the value of one share of the company decreases to 3 TL. However, while the asset of an investor holding one share before the equity issue is 5 TL, after the equity issue, the asset of the investor will increase from 3 TL each to a total of 6 TL. Because the investor will have one more stock. The difference of 1 TL was obtained from the money put forward by the shareholders in the right issue, that is, from the preemptive right. Shareholders who do not participate in the right issue and wish to transfer their preemptive right can transfer the opportunity to own a new share with the initial value of 1 TL instead of the new market value of 3 TL. In this case, the value of the preemptive right to be transferred and to be obtained by the transferor shareholder is 2 TL.

2.1.2. Bonus Issue

In addition to the right issue method, companies can also increase their equity through bonus issues. In this way of equity issue, company partners acquire new assets without paying any price. Dividends, emission premium, revaluation value increase, reserves, profits from participation, and fixed asset sales are listed as resources used in bonus equity issue (Yavuz, 2013).

In addition, the Turkish Commercial Code (TCC) defined bonus issues in the first paragraph of article 462 of law number 6102 as: "The equity can be increased from internal resources by converting the freely usable parts of the legal reserves and the legal reserves set aside by the articles of association or the resolution of the general assembly and not allocated for a specific purpose, and the funds allowed by the legislation to be included in the balance sheet and added to the equity." In short, in the bonus issues, businesses distribute their resources to company stakeholders according to their share ratios without demanding any compensation (Malhotra, Thenmozhi, and Kumar, 2007: 1).

As an example of a bonus issue: an enterprise established with a equity of 200,000 TL and having 200,000 divided shares will make a 100% bonus issue (the number of 200,000 shares will be increased to 400,000). In this case, the value of one share of the company is 1 TL. At the same time, the equity of the company is 200.000 TL. It is thought that the market value of one share price of the relevant company is 5 TL. Let's say this company earns 100,000 TL from its operations and decides to keep it in the company and use it as a resource in the company's operations. That is, it decides to use this amount as retained earnings. In line with this information, the market value of the company is 1,000,000 TL and its book value is 300,000 TL. After the company's bonus issue, the price of one share becomes 2.5 TL. In other words, an investor who owns 100 shares for 5 TL before the equity issue has 2.5 TL for 200 shares after the increase. While the value of the share decreases, the number of shares increases, but the total assets of the investor and the company making the increase remain the same.

The bonus issue method provides companies with some advantages and disadvantages. The main advantages are:

- Tax benefits
- The chance to strengthen weakened equities
- Investment opportunities for small investors, hence the release gain

In addition, the main disadvantage of the bonus issue method is the inability to obtain funds from outside of the enterprise (Küçüksille and Mizrahi, 2015).

Partners who own shares of companies also have certain rights. According to the Turkish Commercial Code No. 6102 (TCC) enacted in 2011, the rights of shareholders are as follows:

- The right to participate in the general assembly (m.425),
- The right to vote (m.434),
- The right to receive and review information (m.437),
- The right to request the appointment of a special auditor (m.438),
- Pre-emptive right (m.461),
- Dividend right (m.509),

- The right to request interest for the preparatory period (m.510),
- The right to request the distribution of the remaining balance as a result of liquidation (m.543).

2.2.The Equity Issue Process

The issuance of stocks, which is one of the equity-increasing methods, is subject to the Turkish Capital Markets Board (CMB) in Turkey. The share issuance is done through a public offering. Public offering includes announcements of new share issuances. There are steps that a company must go through to issue a new stock. These stages are listed as the following for Turkey (Büker, Aşıkoğlu and Sevil, 2009).

-First of all, for the company to issue shares, the shares must comply with the conditions of the Capital Markets Board. In addition, the company must obtain permission from the Capital Markets Board for the issuance of stocks.

-The company is required to pay a fee of 0.3% of the nominal value of the shares to the Capital Markets Board after permission is granted for the issuance of shares.

-Shares to be issued must be issued and sold within a maximum of three months after the authorization.

-The prospectus document of the shares to be offered to the public must be published in a daily newspaper.

-All of the previously issued shares must be sold and their costs must be collected before the new share issuance.

-For new shares to be traded on the stock exchange, the company's stocks must be listed on the stock exchange. For the listing process, the company should apply to the stock exchange chairmanship at the end of the sale period or within 30 days of learning that the shares have been sold to the public.

Companies have to cover some costs during the stock issuance process (Okka, 2009). These costs include;

- Fees and commission to be paid to the brokerage house agreed upon during the issuance process.

- Fees to be paid to the Capital Markets Board; registration fees, tuition fees, special transaction fees, etc.

- Listing fees, market registration fees, contributions to education, special transaction taxes, etc. paid to Borsa Istanbul.

- Expenses for the promotion of the issuance, report fees to be returned to the audit institutions, etc.

- Paper fees are due for official transactions; notary public, court certification, registration fees, etc.

The format of the text for the announcements on the issuance of rights and the issuance of bonuses is available on the CMB's website (<https://www.spk.gov.tr/Sayfa/Index/12/0/12>).

In the next section, studies in the related literature are given.

3. LITERATURE REVIEW ABOUT EQUITY ISSUE ANNOUNCEMENT EFFECTS ON STOCK PRICES

In this section, a literature review on the impact of right issues and bonus issues on stock prices is given. There are various findings on this topic in the literature. In some studies, it has been found that equity issues have a positive effect, but in some studies, a negative effect has also been found. In several studies, it has been found that their effects depend on certain variables. The literature review on the topic is given below.

Tsangarakis (1993) examined 34 stocks and their price relations that had the right issue on the Athens Stock Exchange between 1981 and 1990. The event method was used in the study. At the end of the study, it was observed that investors who invest in companies with the right issue cannot obtain abnormal returns. In addition, the Greek market was found to be at semi-effective strength.

Özer and Yücel (2000) examined the companies that increased their equity between 1990- 1996 and made a total of 686 observations. Two types of equity issues were also included in the study. The study was carried out with the event study method. While the effect of stock issuances on stock returns was positive on the day of the issue, this effect turned negative on the days after the issue.

Barnes and Ma (2001) examined the reaction of the stock price to the bonus issue. The study covers the Chinese stock market and the event study method was used in the study. The results indicated that stock prices depended on bonus plans (size and direction of bonus) of bonus issues. In the study, it was found that medium and large-scale bonus issues have a positive effect, but small-scale bonus issue announcements have a negative effect. It was stated that the reason for this was that the Chinese stock market was in semi-strong form.

Ginglinger and Gajewski (2002) investigated the effect of right issues on stock prices. In the study on French stocks, during the period of 1986-1996, the event study method was used. At the end of the study, a negative effect was observed on the returns of the companies that employed the right issue.

Sabri (2004) examined the effect of right issuances on stock prices. The study was conducted on Sri Lankan companies that announced the issuance of rights between 1994- 2001 and the event study was used as a working method. At the end of the study, it was found that the rights issue announcements had negative effects on the price. It was observed that these negative effects continued before, during, and after the announcement.

Tripathy (2007) examined the effects of bonus issues on the stock market. The study was conducted with the case study method on thirty companies that made bonus issue announcements and traded in the Indian market between 2004- 2005. At the end of the study, abnormal returns were observed in stocks before the bonus issue announcement date. In addition, it was stated that the Indian market was a semi-strong form.

Fernando and Guneratne (2009) examined stock performance with bonus issue announcements. The study was carried out on companies that traded in the Colombo Stock Market and focused on data from the period between 1991- 2007. Three methodologies established by the event study (the market-adjusted model, the risk-adjusted model, and the mean-adjusted model) were used in the study. At the end of the study, an abnormal arbitrage opportunity was found until the sixth day of the announcement and the issuance of the bonus.

Raja and Sudhahar (2010) investigated the effect of bonus issue announcements on stock prices. In the study, the announcements of 43 companies that traded on the Bombay Stock Exchange (BSE) were examined. The event study method was used in the study, and the years between 2000- 2007 were chosen as the period. At the end of the study, it was found that bonus issue announcements had a positive effect on stock prices, and this positive effect continued for 15 days after the announcement date. In addition, it was observed that the highest return was obtained on the announcement date.

Cotterell (2011) examined the effect of right issue announcements on stock prices. In the study, 35 announcements made on the Johannesburg Stock Exchange (JSE) were examined. The study was carried out using 2001-2010 data and the event study method was used. At the end of the study, it was found that right issue announcements have a negative effect on stock prices.

Bashir (2013) investigated the effect of right issue announcements on stock prices. In the study, 31 right issues announced on the Karachi Stock Exchange (KSE) between 2008 and 2011 were examined. The event study method was used in the study. At the end of the study, it was found that positive abnormal returns were obtained on the announcement date.

Kithinji, Oluoch, and Mugo (2014) examined the effect of stock rights issuances on stock performance. In the study, the data from 20 companies that traded in the Nairobi Securities Exchange during the years of 2007-2012 were used. The descriptive study method was used in the study. According to the results, it was found that right issuance announcements had a positive effect on stock prices.

Mahmood, Mirza, and Mushtaq (2014) examined the effect of issuance announcements on the stock market in the case of Pakistan. With the case study method, the rights issuance announcements made from 2005 through 2012 were studied. At the end of the research, it was found that the right issuances made in Pakistan harmed stock prices.

Ramesh and Rajumesh (2014) analyzed 78 right right-issue announcements of 61 companies that traded on the Colombo Stock Exchange. In the study, the event study method was used and the study period was between 2008- 2012. At the end of the study, it was found that the right issue announcement had a positive effect and provided the highest return with 7.44% in the next 10 days after the announcement date.

Küçüksille and Mizrahi (2015) worked only on companies that were traded on the Borsa Istanbul Stock Market between 2010 and 2014 that solely announced a right issue. According to the results of the study, it was found that after one, four, and nine days after the announcement, statistically significant negative average returns were obtained. It was stated that the BIST market was not efficient in semi-strong form and was affected by the equity issue announcements. However, no significant changes were observed in the yields within 10 days without the right issue, but the returns reached the lowest level nine days after the announcement.

Küçüksille and Mizrahi (2015) examined the effects of the bonus issue announcements on stock prices. The study examined companies that traded on the Borsa Istanbul Stock Market between

2012 and 2014 and analyzed them with the event study method. At the end of the study, it was found that the companies that made bonus issue announcements could obtain cumulative abnormal returns five days before the announcement and five days after the announcement.

Otieno, Ochieng, and Duncan (2015) researched 12 companies that employed right issue shares in the Nairobi Securities Exchange. The study examined the years between 2007- 2014 and the event method was used. The results show that prices and returns had increased before the right issuance announcement. In addition, a decrease was observed in these cases after the announcement. Based on this result, stock prices and returns were interpreted as being dependent on the announcement.

Kendirli and Elmali (2016) examined the relationship between rights issuance announcements and stock returns. In the study, five rights exclusion notices were studied with the event method. These announcements were made by three different companies between 2009 and 2014. At the end of the study, it was found that abnormal returns could be obtained up to ten days after the announcement date. The average abnormal cumulative return was negative ten days after the announcement date.

Khurana and Warne (2016) examined the relationship between bonus issue announcements and stock prices. In the study, 34 companies in 11 sectors in NSE 100 were examined. The years 2006-2012 were studied and the event study method was used. At the end of the study, abnormal returns were observed in the period 8 days before the announcement date. Additionally, the Indian Stock Exchange was found to have semi-strong efficiency.

Başkaya and Kaderli (2017) researched the companies that made a equity issue announcement among the companies that traded in Borsa Istanbul between the years of 2015-2016. Two types of equity issue (right issue and bonus issue) were also included in the study. According to the results of the research, it was found that 27 companies whose stocks made an announcement were positively affected by 37 announcements. In addition, it has been determined that the market was not in an efficient form.

Erol and Aytekin (2018) investigated whether companies that received bonus issue approval would obtain abnormal returns. In the study, bonus issue announcements of companies listed

on the BIST in 2016-2017 were examined. At the end of the study, it was found that abnormal returns can be obtained in the days before and after the event date. It has been found from the announcements that the company's stock returns would decrease due to the short position that the investors would take. It has also been found that the Borsa Istanbul market was not efficient in semi-strong form.

Sakarya, Çalış, and Kayacan (2018) studied the stock prices of companies that announced dividend payments in the case of Turkey. The study was carried out with the data from 2016 and the event study method was used. As a result of the study, both positive and negative effects were found. It was found that the Turkish market was not efficient in semi-strong form and investors could obtain abnormal returns on stocks.

Sezgin and Aytekin (2020) investigated the returns on stocks from the sale of shares held ready for sale with the equity issue. The stocks that were kept ready for sale between the years of 2013- 2020 were studied and the event study method was used. According to the result, it was found that the share sales for equity issue provided positive returns on the stocks. However, it was stated that there were no positive returns in the long run and that these returns may yield abnormal returns in the short run.

In the majority of the studies in the literature, the effect of new equity announcements on stock returns was found negative. However, some studies find that these announcements have positive effect on stock returns. However, some studies have concluded that these announcements may vary depending on several factors. According to the majority of studies in the literature, it can said that the impact of new equity announcements on stock returns is negative. In the following sections of the study, the validity of this assumption, which is supported by a majority of the literature, for the BIST-30 and BIST-50 indices is investigated.

4. MATERIALS AND METHODS

4.1.Data

In this study, companies that were traded in the BIST-30 and BIST-50 between 2010 and 2022 and that announced a equity issue in these indices on the date of trade were examined. Companies that announced a equity issue while in the BIST-30 or BIST-50 indices were included in this study. The study first started with the analysis of the BIST-30 index. Subsequently, the BIST-50 index was added in the study to expand the data set. This study examined 35 companies that announced the right issue and bonus issue in the BIST-30 and BIST-50 indices between 2010- 2022. For the BIST-30, 10 right issue announcements of 8 companies and 40 bonus issue announcements of 14 companies were detected. For the BIST-50, 17 right issue announcements of 14 companies and 64 bonus issue announcements from 23 companies were detected.

In the study, firstly, companies that were traded in the BIST-30 and BIST-50 between 2010-2022 from the Borsa Istanbul Historic and Reference Data Platform (datastore.borsaistanbul.com/) were found. After that, the equity issue dates were obtained from the Is Yatırım website (<https://www.isyatirim.com.tr/tr-tr/analiz/hisse/Sayfalar/Temel-Degerler-Ve-Oranlar.aspx#page-2>). In line with the dates obtained, announcements regarding the increase date were obtained from the Public Disclosure Platform (KAP) (<https://www.kap.org.tr/tr/bildirim-sorgu>). After the equity issue, announcement dates of the companies and the type of increase were determined, and the market values of the companies and the BIST-100 were obtained from the Yahoo Finance (<https://finance.yahoo.com/>) website. Data was selected from the value from one year ago to the announcement date 10 days later. Some companies were not included in the analysis due to lack of data in the study. These companies are; İş Bankası, Koza Altın, MLP Sağlık. The companies whose equity issue announcements were examined in the study are listed in the table below.

Table 1.1: Companies whose equity issue announcement.

1	Ak enerji	19	İş Gmyo
2	Akbank	20	İzmir Demir
3	Alarko	21	Kardemir
4	Anadolu Efes	22	Koç Holding
5	Anadolu Sigorta	23	Koza Maden
6	Aselsan	24	Netaş
7	Bagfaş	25	Odaş
8	Bim	26	Petkim
9	Eczacıbaşı	27	Sasa
10	Emlak konut	28	Selçuk Ecza
11	Enka	29	Sinpaş
12	Ereğli	30	Şekerbank
13	Galatasaray	31	Şişecam
14	Gübre Fabrik	32	THY
15	Halk bank	33	TSKB
16	İhlas	34	Vakıfbank
17	İpek Doğal	35	Yapı Kredi
18	İş Bankası		

4.2.Event Study

In the study, the event study method was employed to examine the effect of equity issue announcements on stock returns. The event study is an econometric method that allows

researchers to reach a conclusion or make a prediction based on the effect of an event (Serra, 2002). At the same time, event study methods are used in academia to reveal the effects of macroeconomic events as well as in accounting and finance (Campbell et al. 1997:149). The reason for using the event study method in this study is that this method reveals the effect of an event on stock prices, and therefore serves the purpose of the study directly (Sakarya, 2011). In this study, the market model approach, which is one of the event study method, was used. Two different event windows (-10, +10) and (-5, +5) were created in this study. The reason for this is that the (-10, +10) event window is frequently used in studies in the literature. Adding the (-5, +5) event window to the study enables the measure of the effects on a shorter period after the event. It is also due to the findings of Ryngaert and Netter (1990) that the shorter event window in general reveals the significant impact of the relevant event. For the bonus issues, the estimation window of the study was 229 days for the (-10, +10) event window and 234 days for the (-5, +5) event window. For right issues, the forecast window of the study was 237 days for the (-10, +10) event window, and 242 days for the (-5, +5) event window.

The following formulas were used in the analysis of the study.

$$R_{it} = \ln \left(\frac{P_t}{P_{t-1}} \right)$$

R_{it} : stock return,

P_t : the closing price of the stock in period t,

P_{t-1} : the closing price in period t-1.

Abnormal returns were obtained with the estimation errors (ϵ_{it}) of the market model (Cowan and Sergeant, 1996:1734).

$$R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_{it}$$

R_{it} : the return of stock i at time t,

R_{mt} : market return at time t,

α_i : constant coefficient of the model (intercept),

β_i : stock beta (slope).

In the calculation of abnormal return (AR_{it});

$$AR_{it} = R_{it} - (\hat{\alpha} + \hat{\beta}R_{mt})$$

To calculate the abnormal returns (AAR_t) of the days of the event window;

$$AAR_t = \frac{1}{N} \sum_{i=1}^N AR_{it}$$

To calculate the cumulative average abnormal return ($CAAR_t$) starting from the -10th day in the event window;

$$CAAR_t = \sum_{t=-10}^{10} AAR_t$$

To calculate the cumulative average abnormal return ($CAAR_t$) from day -5 in the event window;

$$CAAR_t = \sum_{t=-5}^5 AAR_t$$

formulas were used.

The formulas used to calculate the t statistics of abnormal returns are given below (Brown and Warner, 1985,7).

$$t = \frac{AAR}{S(AAR_t)}$$

To calculate the t statistics of right issue announcements;

$$S(AAR_t) = \sqrt{\frac{1}{236} \sum_{t=-247}^{t=-11} (AAR_t - AAR)^2}$$

$$AAR = \frac{1}{237} \sum_{t=-247}^{t=-11} AAR_t$$

To calculate the t statistics of bonus issue announcements;

$$S(AAR_t) = \sqrt{\frac{1}{228} \sum_{t=-239}^{t=-11} (AAR_t - AAR)^2}$$

$$AAR = \frac{1}{229} \sum_{t=-239}^{t=-11} AAR_t$$

5. RESULTS AND DISCUSSIONS

In this part, the results of the analysis are provided. First of all, the analysis findings of the companies that made BIST-30 right issue announcements were included.

Table 2.1: Analysis results of companies that announced the right issue in BIST-30.

T	AAR	t-statistic AAR	CAAR (10 days)	CAAR (5 days)
10	-0,38%	-0,618987729	-8,71%	
9	-0,48%	-0,774598735	-8,33%	
8	-0,03%	-0,047001165	-7,85%	
7	-0,45%	-0,722072391	-7,82%	
6	0,58%	0,939946679	-7,38%	
5	-0,08%	-0,12334309	-7,96%	-8,57%
4	0,59%	0,959623795	-7,88%	-8,49%
3	-0,58%	-0,943489849	-8,48%	-9,08%
2	1,10%	1,780796373	-7,89%	-8,50%
1	-3,70%	-5,992540583	-8,99%	-9,60%
0	-3,39%	-5,486331281	-5,29%	-5,90%
-1	-0,81%	-1,317294351	-1,91%	-2,52%
-2	-0,32%	-0,522612052	-1,10%	-1,70%
-3	-0,61%	-0,98808463	-0,77%	-1,38%
-4	-0,77%	-1,248067987	-0,16%	-0,77%

-5	0,00%	-0,002364145	0,61%	0,00%
-6	-0,31%	-0,497285178	0,61%	
-7	-0,09%	-0,149123847	0,92%	
-8	0,84%	1,35696175	1,01%	
-9	0,12%	0,190192005	0,17%	
-10	0,05%	0,086044294	0,05%	

In Table 2, abnormal return (AR), 10-day cumulative abnormal return (CAR), and 5-day cumulative abnormal return (CAR) of companies that announced the right issue in the BIST-30 are calculated. In Table 3, average abnormal returns (AAR), t-statistics of abnormal returns, 10-day cumulative average abnormal returns (CAAR), and 5-day cumulative average abnormal returns (CAAR) are calculated. The most striking situation in the analysis results is the statistically significant -3.39% and -3.70% values seen on the announcement date and the next day. According to 10-day CAAR values, the highest 10-day cumulative value is 1.01% eight days before the announcement date (t_{-8}) and the lowest value is on the first day after the announcement date (t_{+1}) observed as 8.99%. Likewise, according to the 5-day CAAR values, the highest value was observed as 0.00% on the fifth day before the announcement date (t_{-5}), and the lowest value was observed as -9.60% on the first day after the announcement date (t_{+1}). The highest values in both two cumulative average abnormal return (CAAR) windows occurred before the announcement date and before the lowest values. In this case, the negative effect of equity issue announcements can be mentioned.

In the charts below, the calculated AARs and CAARs of companies that announced right issues in the BIST-30 are graphically indicated. To visualize the price changes over time, graphs have been used.

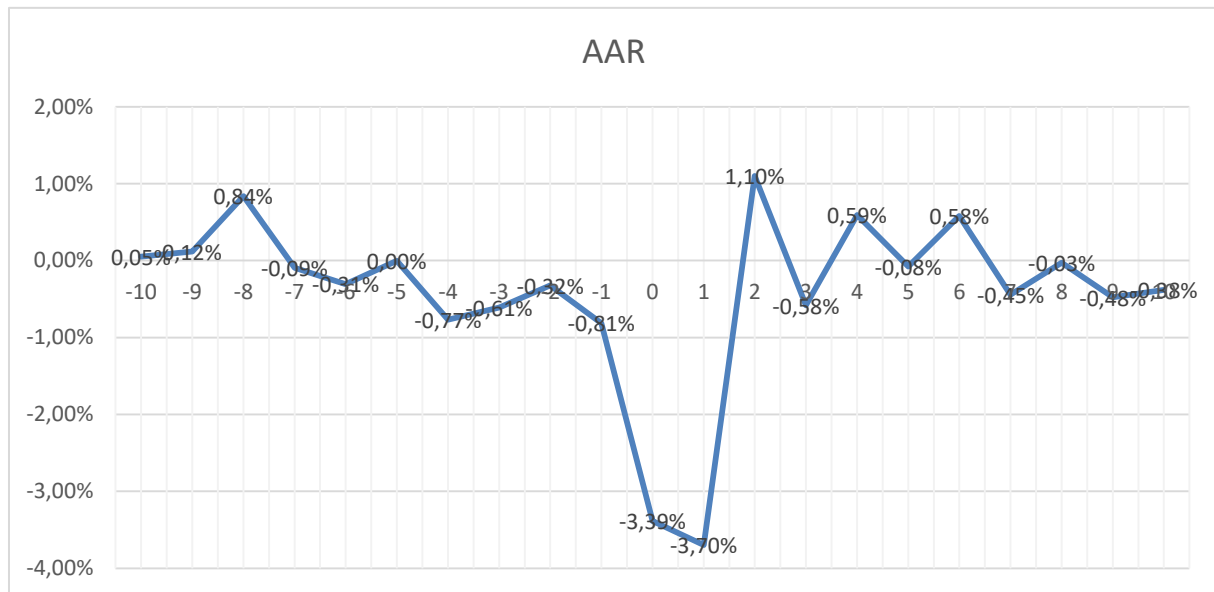


Figure 3: AARs of companies that announced a right issue in BIST-30.

In the AAR chart above, the decrease in the average return on the announcement date (t) and the first day after the announcement date (t_{+1}) and the increase on the second day is easily seen easily. It can be interpreted that the major declines in Koza Madencilik, Ihlas Holding, and Emlak Konut GYO played a role as the reason for this decrease. The reason for reaching the highest value on the second day after the announcement date is the values in Koza Madencilik and Ihlas Holding.

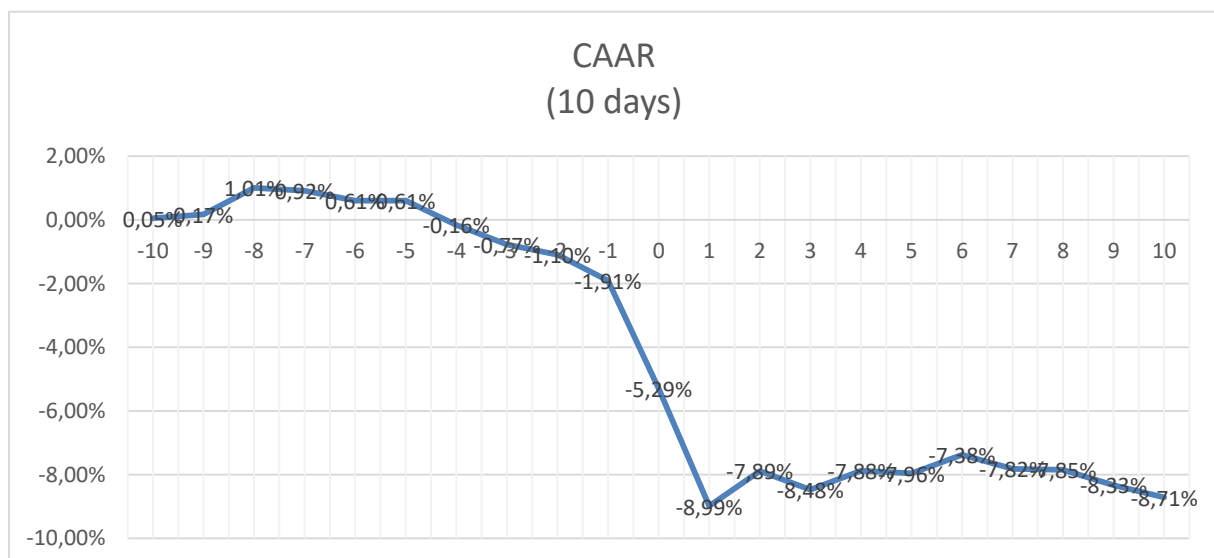


Figure 4: 10 days CAARs of companies that announced a right issue in BIST-30.

In the above 10-day CAAR chart, the highest value of the event window, 1.01%, which is the data from the eighth day before the announcement date, and the lowest value, -8.99%, the value

of the day after the announcement date, are demonstrated more visibly. At the same time, the decrease in the event date (t) and the first day after the event date (t_{+1}) are shown.

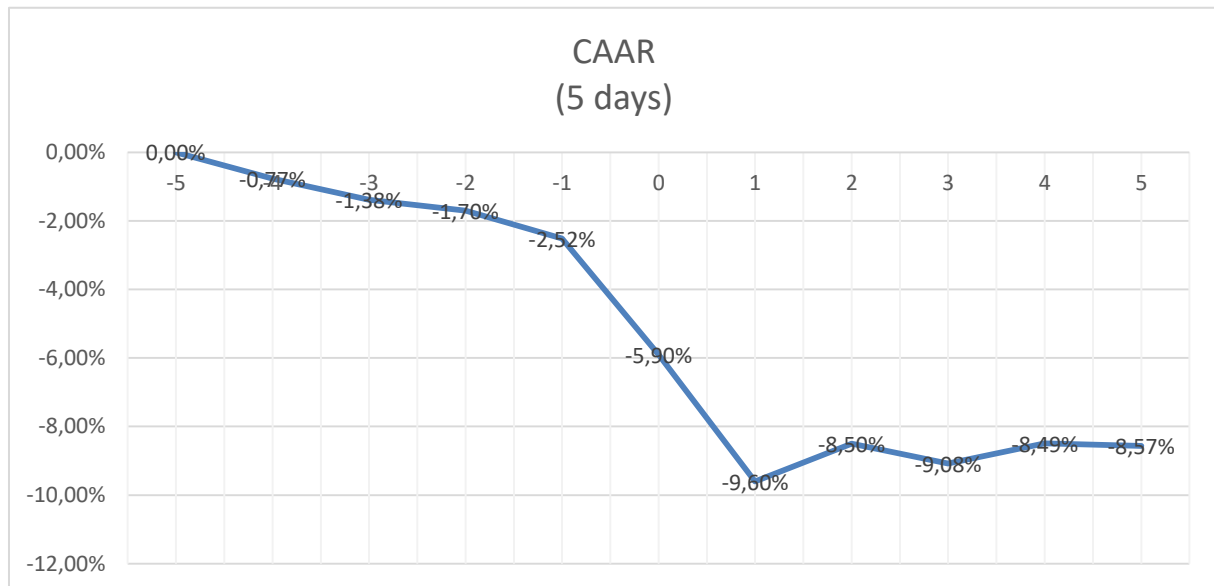


Figure 5: 5 days CAARs of companies that announced a right issue in BIST-30.

In the above 5-day CAAR chart, the highest value of the event window, the value of 0.00%, which is the data from the fifth day before the announcement date (t_{-5}), and the value of -9.60%, the value from the first day after the announcement date (t_{+1}), which is the lowest value, is more noticeable. In addition, the decrease in the event date (t) and the day after the event date (t_{+1}) is clearly distinguishable.

The analysis findings of the companies that announced the bonus issues in the BIST-30 are given below.

Table 3.1: Analysis results of companies that announced the bonus issue in BIST-30.

T	AAR	t-statistic AAR	CAAR (10 days)	CAAR (5 days)
10	-0,36%	-1,203383025	-2,25%	
9	-0,35%	-1,19303605	-1,89%	
8	0,11%	0,377476852	-1,54%	
7	0,54%	1,809345289	-1,65%	
6	0,16%	0,549475173	-2,19%	
5	-0,41%	-1,396055216	-2,35%	-1,58%
4	-0,60%	-2,040667804	-1,94%	-1,16%
3	-0,46%	-1,567621507	-1,33%	-0,56%
2	-0,11%	-0,376208761	-0,87%	-0,09%
1	0,35%	1,186536719	-0,76%	0,02%
0	0,07%	0,248023223	-1,11%	-0,33%
-1	-0,02%	-0,081795248	-1,18%	-0,41%
-2	0,08%	0,285480341	-1,16%	-0,38%
-3	-0,43%	-1,454032563	-1,24%	-0,47%
-4	-0,03%	-0,117310164	-0,81%	-0,04%
-5	0,00%	-0,007959177	-0,78%	0,00%
-6	-0,33%	-1,111288806	-0,77%	
-7	-0,01%	-0,018609272	-0,45%	
-8	-0,31%	-1,030961161	-0,44%	
-9	-0,65%	-2,207898268	-0,13%	
-10	0,52%	1,752067156	0,52%	

In Table 3, average abnormal returns (AAR), t-statistics of abnormal returns, 10-day cumulative average abnormal returns (CAAR), and 5-day cumulative average abnormal returns (CAAR) are calculated. There are two remarkable points in the average abnormal returns (AAR) calculated in this analysis. These are statistically significant at -0.65% on the ninth day before

the equity issue announcement (t_{-9}) and a statistically significant -0.65% on the fourth day after the announcement date (t_{+4}). Accordingly, it has been observed that the equity issue announcement has a statistically significant negative effect on returns. In the 10-day cumulative average abnormal returns (CAAR), the highest value of the event window is 0.52% on the tenth day before the announcement date (t_{-10}) and the lowest value is -2.35 on the fifth day after the announcement date. In addition, the positive value (t_{-10}) on the tenth day before the announcement date decreased to the negative value after this date and continued as the negative value. According to the 5-day cumulative average abnormal returns (CAAR), the highest value of the event window is seen as 0.02% on the first day after the announcement date (t_{+1}). Also, the lowest value is on the fifth day after the announcement date (t_{+5}) observed as 1.58%.

In the charts below, the calculated AARs and CAARs of companies that have announced a bonus issue in the BIST-30 are displayed graphically.

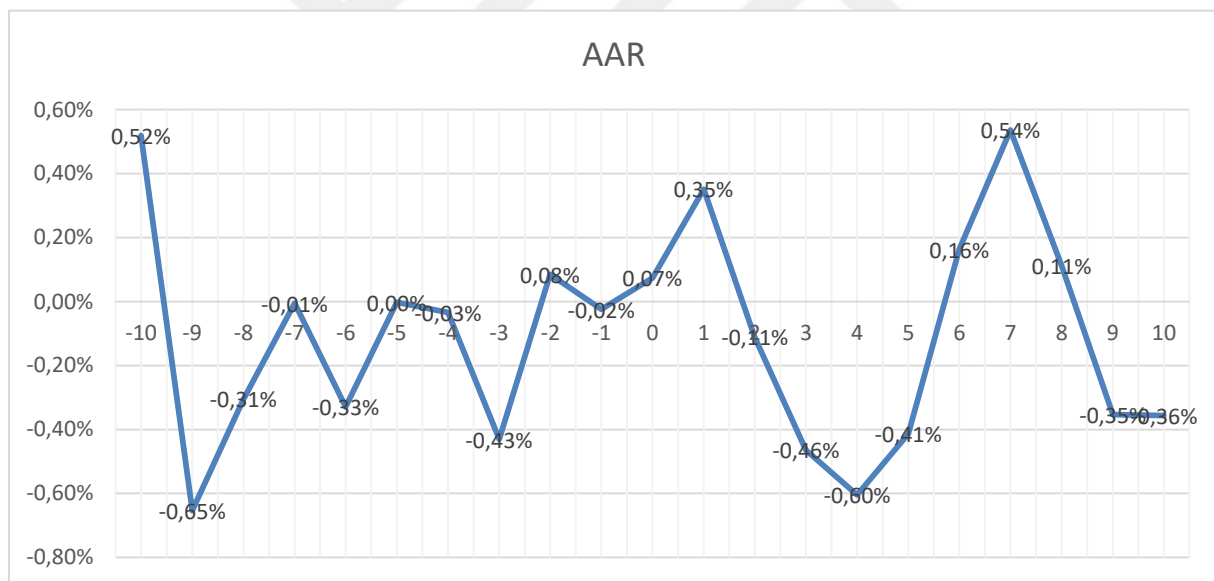


Figure 6: AARs of companies that announced a bonus issue in BIST-30.

The changes in the calculated AAR values over time can easily be seen in the chart above. According to the graph, the changes in the tenth (t_{-10}) and ninth days (t_{-9}) before the announcement date and the changes on the seventh day (t_{+7}) after the announcement date are noteworthy. Sasa has an important share in the value changes at these two points.

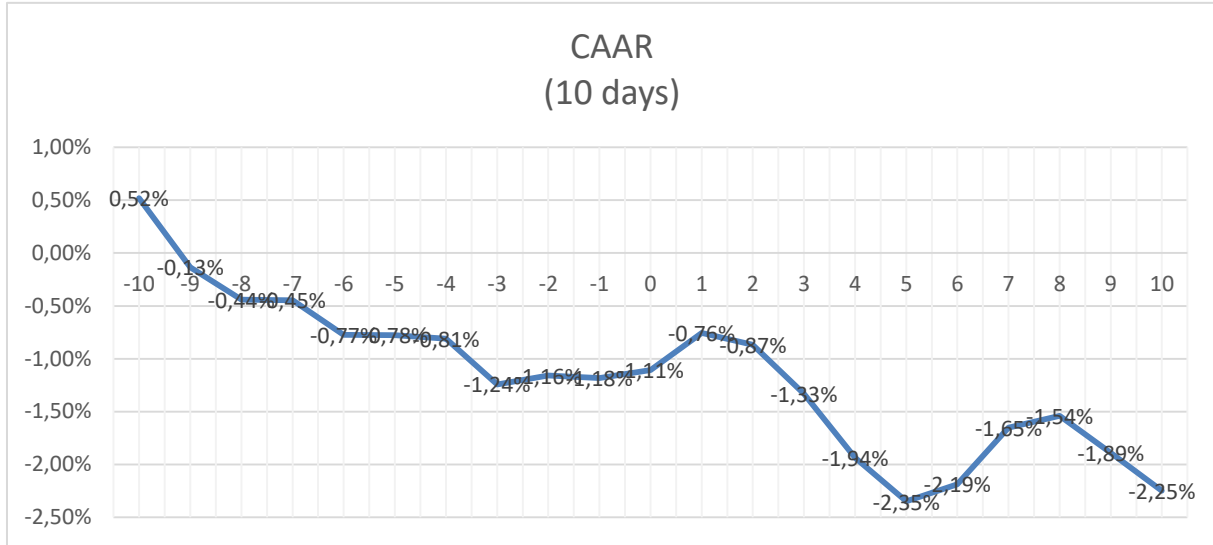


Figure 7: 10 days CAARs of companies that announced a bonus issue in BIST-30.

In the above 10-day cumulative average abnormal return (CAAR) graph, the negative progress starts from the ninth day (t_{-9}) before the event date and continues until the tenth day (t_{+10}) after the announcement is seen. The reasons for the continued decline in the CAAR graph are the high negative CAAR values in Petkim, Turkish Airlines, Şekerbank, and Aselsan.

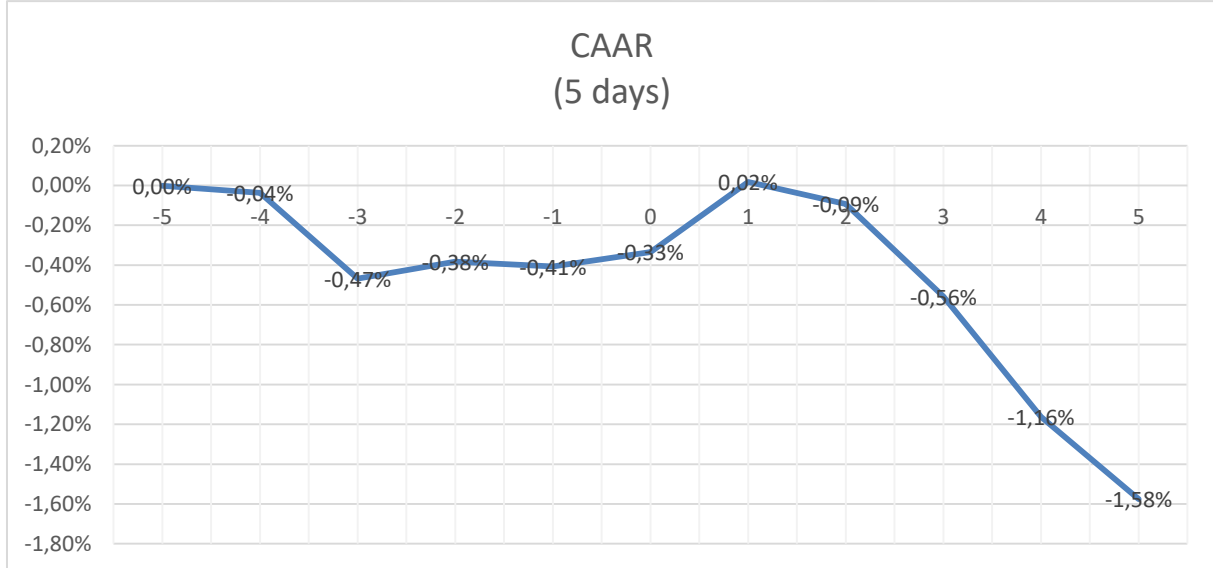


Figure 8: 5 days CAARs of companies that announced a bonus issue in BIST-30.

In the 5-day cumulative average abnormal return (CAAR) graph above, the value was 0.00% on the fifth day before the announcement date (t_{-5}), but continued to be negative until the announcement date (t) and changed to a positive value (t_{+1}) on the first day after the announcement date. This value is the highest in the event window. After reaching the highest

value, it decreased to negative values again and reached the lowest value of the event window on the fifth day (t_{+5}) after the announcement date.

After the findings of the BIST-30 were analyzed, the BIST-50 analysis will be included in this part of the study. The findings of the companies that first announced the right issues in the BIST-50 are given in the table below.

Table 4.1: Analysis results of companies that announced the right issue in BIST-50.

T	AAR	t-statistic AAR	CAAR (10 days)	CAAR (5 days)
10	-0,42%	-0,716875823	-10,27%	
9	-1,06%	-1,807666864	-9,85%	
8	0,25%	0,419962535	-8,79%	
7	-0,50%	-0,853047148	-9,04%	
6	0,97%	1,649453826	-8,54%	
5	-0,41%	-0,705213544	-9,51%	-9,90%
4	-0,07%	-0,12800882	-9,09%	-9,49%
3	-0,71%	-1,221091446	-9,02%	-9,41%
2	1,16%	1,97869481	-8,30%	-8,70%
1	-4,59%	-7,83944625	-9,46%	-9,86%
0	-2,04%	-3,48918317	-4,87%	-5,27%
-1	-1,07%	-1,820292198	-2,83%	-3,22%
-2	0,04%	0,076417257	-1,76%	-2,16%
-3	-0,57%	-0,970568115	-1,81%	-2,20%
-4	-0,87%	-1,480709242	-1,24%	-1,64%
-5	-0,77%	-1,312667514	-0,37%	-0,77%
-6	-0,21%	-0,365303203	0,40%	
-7	0,01%	0,011149627	0,61%	
-8	0,35%	0,598164785	0,60%	

-9	0,06%	0,101869294	0,25%	
-10	0,19%	0,330926769	0,19%	

In Table 4, average abnormal returns (AAR), t-statistics of abnormal returns, 10-day cumulative average abnormal returns (CAAR), and 5-day cumulative average abnormal returns (CAAR) are calculated. There are three remarkable points in the average abnormal returns (AAR) calculated in this analysis. These are statistically significant, at -2.04% value at the equity issue announcement date (t) and a statistically significant -4.59% value on the first day after the announcement date (t_{+1}). Also, a statistically significant value was found on the second day after the announcement date (t_{+2}) at a statistically significant value of 1.16%. Accordingly, it was observed that the equity issue announcement had a statistically significant negative effect on the returns on the announcement date and the first day after it. However, this effect was reversed on the second day. The positive return value was not permanent and continued to change from negative and positive values. However, these values were statistically insignificant. From this situation, it can be deduced that abnormal returns may be obtained on the announcement date and the next two days. In the 10-day cumulative average abnormal returns (CAAR), the highest value of the event window is 0.61% on the seventh day before the announcement date (t_{-7}), and the lowest value is -10.27% on the tenth day after the announcement date (t_{+10}). In addition, the value that was positive until the sixth day before the announcement date (t_{-6}) turned negative after this date and continued negatively. According to the 5-day cumulative average abnormal returns (CAAR), the highest value of the event window is seen as -0.77% on the fifth day before the announcement date (t_{-5}). Additionally, the lowest value is on the fifth day after the announcement date (t_{+5}) observed as -9.90%.

In the charts below, the calculated AARs and CAARs of companies that announced right issues in the BIST-50 are graphically displayed.

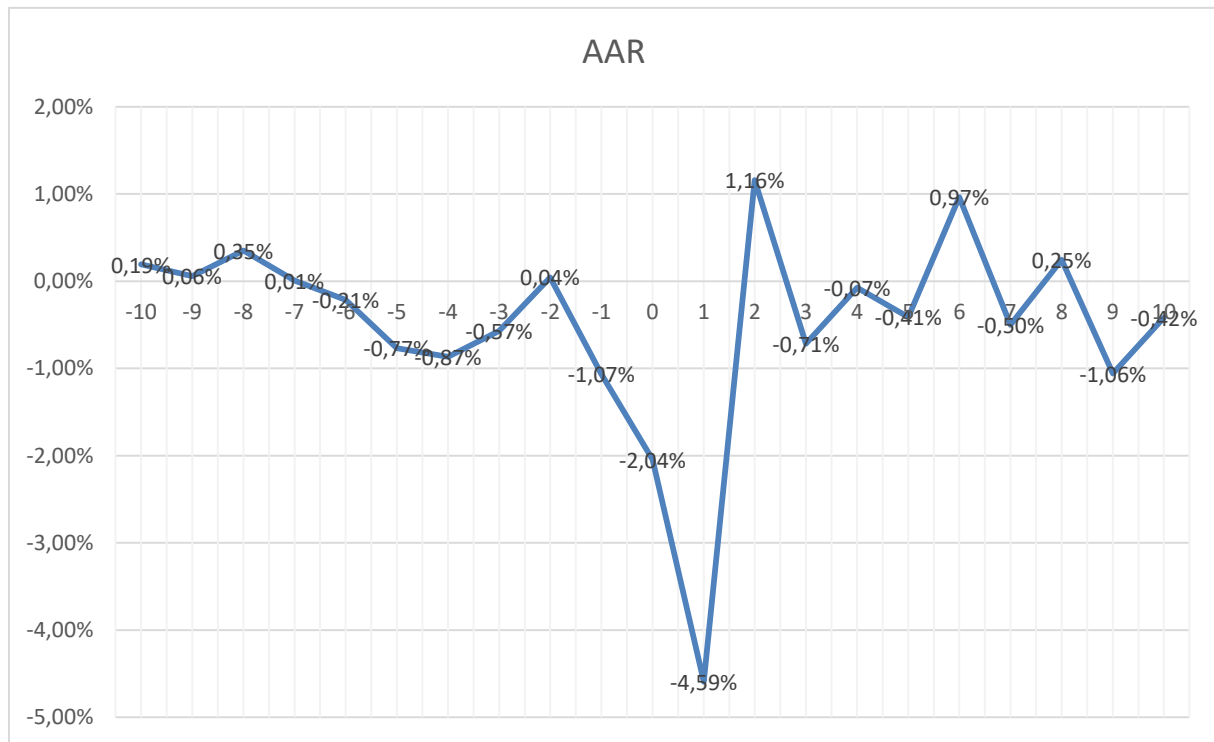


Figure 9: AARs of companies that announced the right issue in BIST-50.

The changes in the calculated AAR values over time are shown in the chart above. The striking point in the graph is demonstrated in the values of the announcement date (t), the first day after the announcement (t_{+1}), and the second day (t_{+2}) after the announcement date. While the AAR value calculated on the first day after the announcement date (t_{+1}) decreased to the lowest value of the event window, the AAR value calculated on the second day after the announcement date (t_{+2}) reached the highest value of the event window. The reasons for the decrease on the date of the announcement are related to Emlak Konut Gyo, Koza Madencilik Ihlas Holding, and Ipek Doğal Enerji. The reasons for the decrease the day after the announcement date concerns Koza Madencilik, Ihlas Holding, Ipek Doğal Enerji, Galatasaray Sportif, and Odas. The reason for reaching the highest value on the second day after the announcement date is in regards to the values of Koza Madencilik, İhlas Holding, and Galatasaray Sportif.

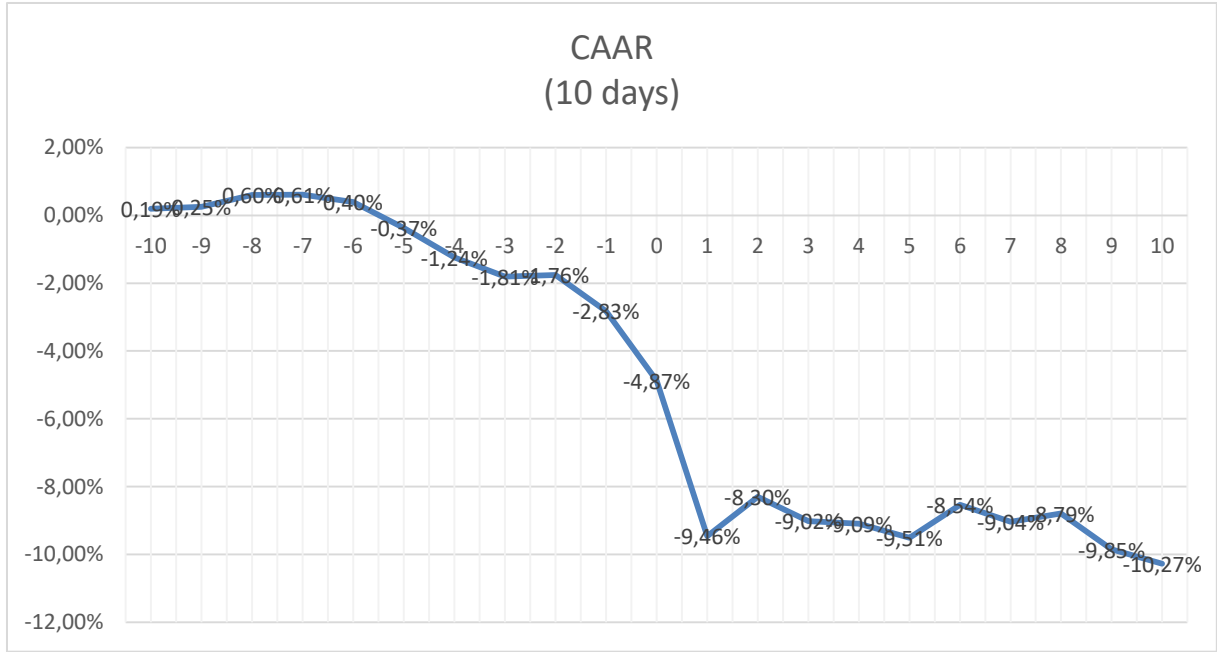


Figure 10: 10 days CAARs of companies that announced the right issue in BIST-50.

In the above 10-day cumulative average abnormal return (CAAR) graph, the negative progress that started on the first day (t_{-1}) before the announcement date and continued until the last day of the event window is displayed. The companies that have a large share in the formation of this situation are Emlak Konut GYO, Koza Madencilik, Vakıfbank, Ipek Doğal Enerji, Galatasaray Sportif and Odas.

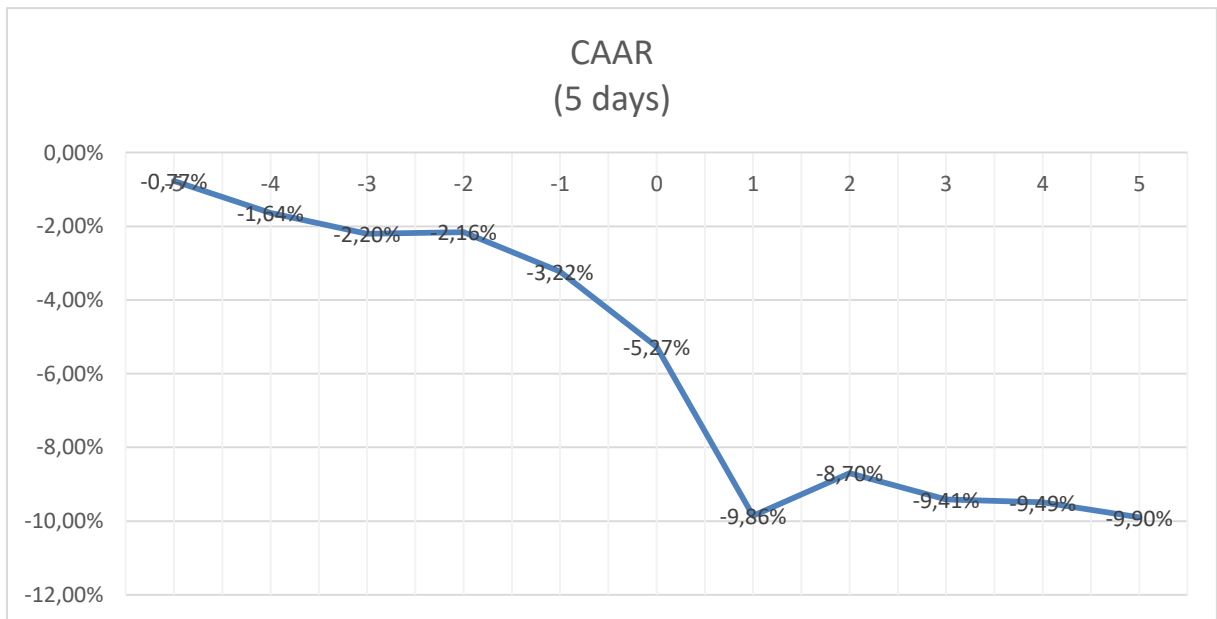


Figure 11: 5 days CAARs of companies that announced a right issue in BIST-50.

The above 5-day cumulative average abnormal return (CAAR) chart is also similar to the 10-day cumulative average abnormal return chart. This is due to the effects on companies, which are also noted in the 10-day cumulative average abnormal return table.

The analysis findings of the companies that announced bonus issues in the BIST-50, which is the next and final analysis of the study, are as follows:



Table 5.1: Analysis results of companies that announced the bonus issue in BIST-50.

T	AAR	t-statistic AAR	CAAR (10 days)	CAAR (5 days)
10	-0,62%	-2,470874341	-0,43%	
9	-0,36%	-1,422265461	0,18%	
8	0,23%	0,9170259	0,54%	
7	0,09%	0,354866981	0,31%	
6	0,13%	0,537089163	0,22%	
5	0,02%	0,078881693	0,09%	1,05%
4	-0,23%	-0,910177905	0,07%	1,03%
3	0,03%	0,106818268	0,30%	1,26%
2	0,29%	1,138626319	0,27%	1,23%
1	0,67%	2,683224106	-0,02%	0,95%
0	0,39%	1,574020687	-0,69%	0,28%
-1	0,08%	0,32988485	-1,08%	-0,12%
-2	0,15%	0,592917712	-1,16%	-0,20%
-3	-0,37%	-1,460273479	-1,31%	-0,35%
-4	-0,02%	-0,081608183	-0,95%	0,02%
-5	0,04%	0,147260289	-0,93%	0,04%
-6	-0,40%	-1,608817946	-0,96%	
-7	-0,28%	-1,131453781	-0,56%	
-8	-0,22%	-0,869064007	-0,28%	
-9	-0,26%	-1,033142721	-0,06%	
-10	0,20%	0,793851988	0,20%	

In Table 5, average abnormal returns (AAR), t-statistics of abnormal returns, 10-day cumulative average abnormal returns (CAAR), and 5-day cumulative average abnormal returns (CAAR) are calculated. There are two statistically significant points in the average abnormal returns (AAR) calculated in this analysis. These are a statistically significant 0.67% value on the first

day after the equity issue announcement date (t_{+1}) and a statistically significant -4.59% value on the tenth day after the announcement date (t_{+10}). Also, a statistically significant value on the second day after the announcement date (t_{+2}) has a value of -0.62%. In this case, it can be deduced that high-value abnormal returns cannot be obtained in equity issue announcements. In 10-day cumulative average abnormal returns (CAAR), the highest value of the event window is 0.54% on the eighth day after the announcement date (t_{+8}), and the lowest value is -1.31% on the third day before the announcement date (t_{-3}). In addition, the positive value on the tenth day (t_{-10}) before the announcement date turned negative after this date and continued to be negative on the second day after the announcement date (t_{+2}). Also, values continued from the second day after the announcement day (t_{+2}) to the ninth day after the announcement date (t_{+9}) positively, but on the tenth day after the announcement (t_{+10}), they became negative again. According to the 5-day cumulative average abnormal returns (CAAR), the highest value of the event window is 1.26% on the third day after the announcement date (t_{+3}), while the lowest value is on the third day before the announcement date (t_{-3}), observed as 0.35%. In addition, within this event window, the first (t_{-1}), second (t_{-2}), and third (t_{-3}) days before the announcement date have negative values.

In the charts, the calculated AARs and CAARs of companies that have announced a bonus issue in the BIST-50 are given below.

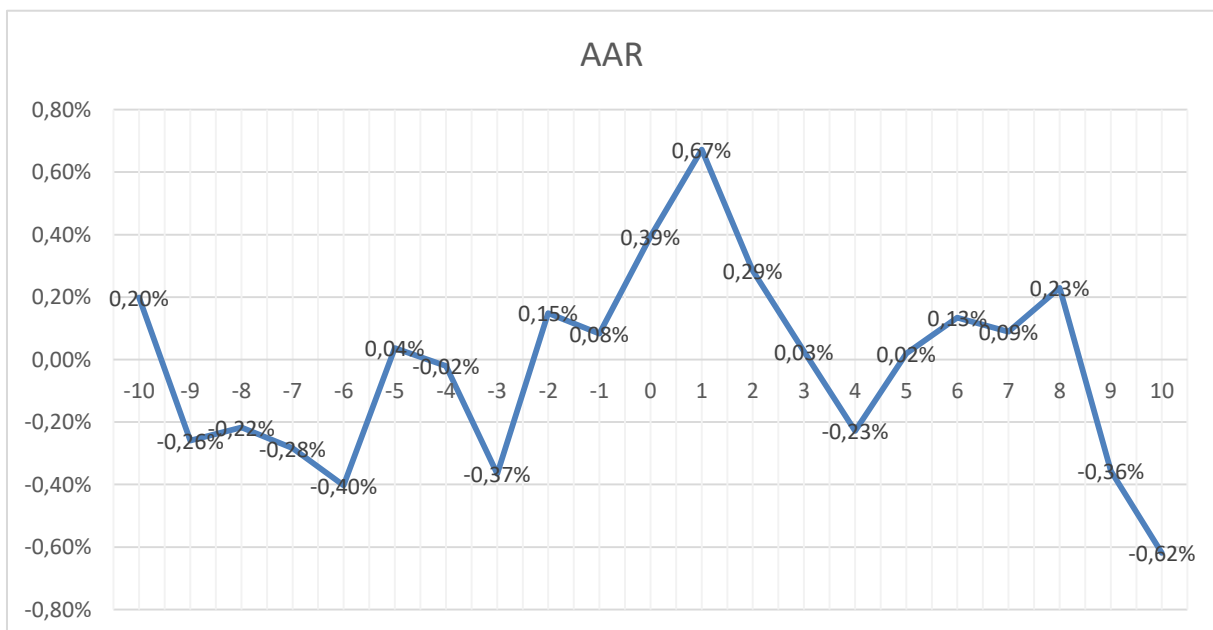


Figure 12: AARs of companies that announced the bonus issue in BIST-50.

The changes in the calculated AAR values over time are shown in the chart above. The striking points in the graph are the 0.67% value obtained on the first day after the announcement date (t_{+1}) and the -0.62% value obtained on the tenth day after the announcement date (t_{+10}). At the same time, these values are the lowest and highest values of the event window. Companies that play a role in the formation of these values include Bim Magazaları, Enka İnşaat, Ereğli Demir Çelik, Petkim, Aselsan, Sasa, Eczacıbaşı İlaç, Gübre Fabrikaları, İzmir Demir Çelik and Netas. Especially Gübre Fabrikaları and Netas are major contributing factors for this situation.

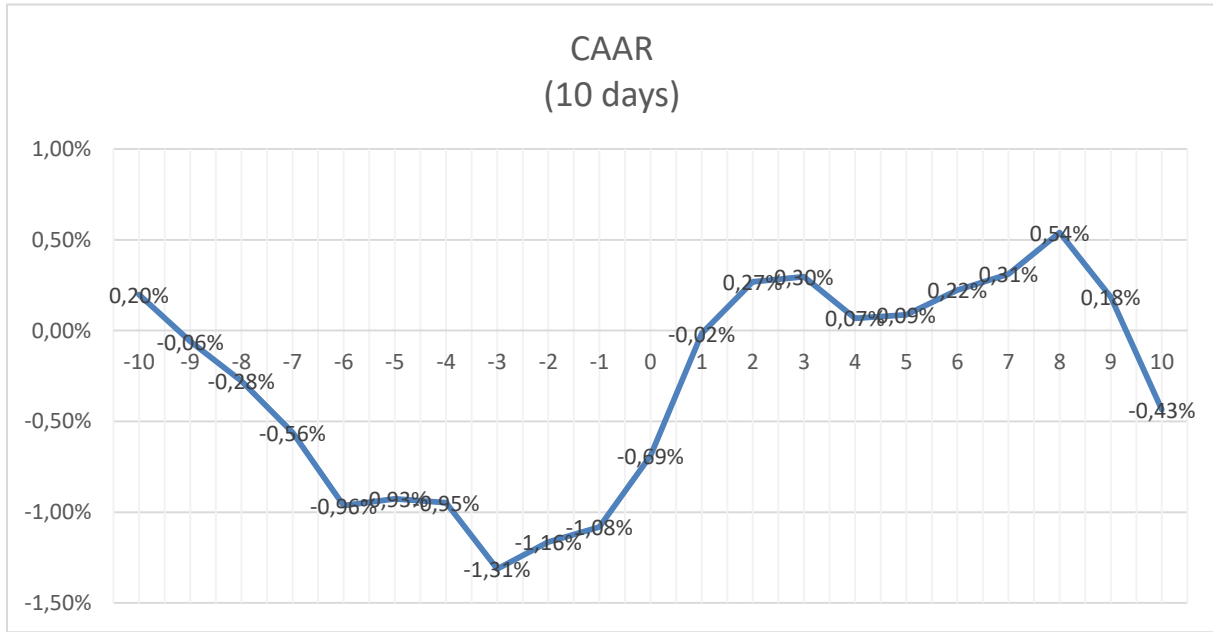


Figure 13: 10 days CAARs of companies that announced the bonus issue in BIST-50.

In the 10-day cumulative average abnormal return (CAAR) chart above, the values decreased to a negative value on the eighth day (t_{-8}) before the announcement date. Afterwards, it continued negative until the first day (t_{+1}) after the announcement date and then achieve a positive value on this date. This is the point that draws attention in this analysis. In addition, it is noteworthy that the event window decreased to a negative value on the last day. This situation is similar to the AAR chart and is caused by the values of the same companies.

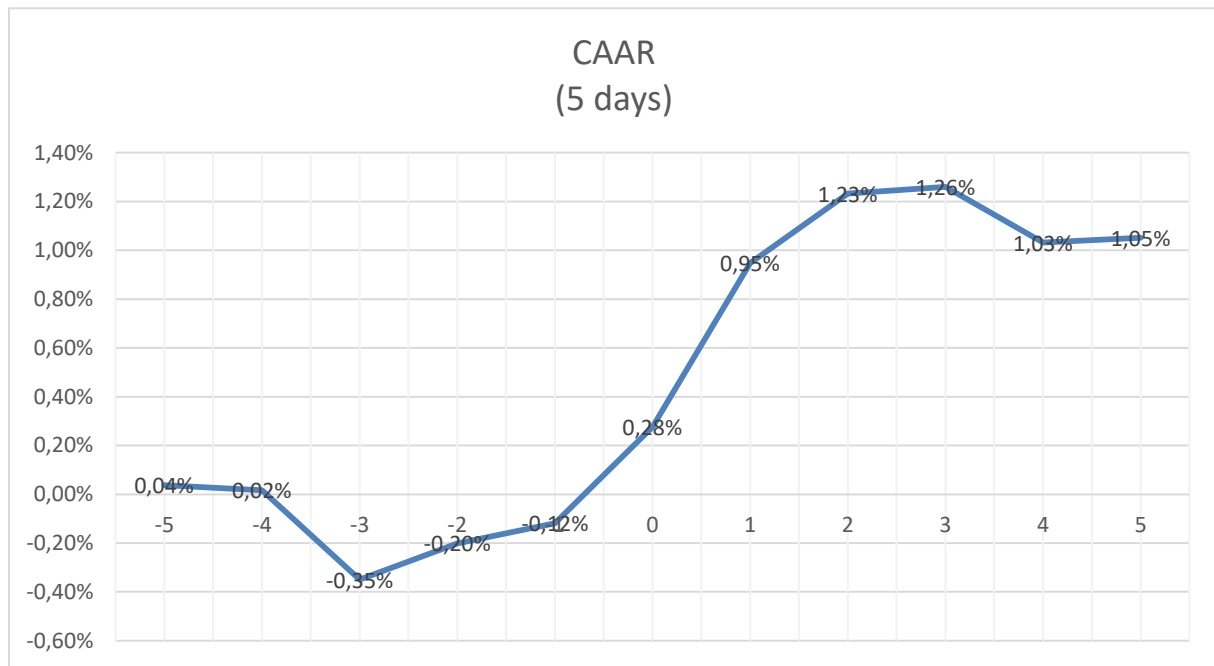


Figure 14: 5 days CAARs of companies that announced the bonus issue in BIST-50.

A similar situation to the above graphs draws attention to the 5-day cumulative average abnormal return (CAAR) graph above. The very high and low values of the companies mentioned in the AAR and 10-day CAAR charts caused the charts to be formed in this way.

Below are the tables of the cumulative average abnormal returns (CAAR) of firms.

Table 6.1: CAAR's of companies that announce the right issue

COMPANY	STOCK CODE	EVENT DATE	CAAR (-10) %	CAAR (+10) %	CAAR (-5) %	CAAR (+5) %
Akbank	AKBNK	5.12.2018	-0,86	-8,82	-1,45	-9,06
Ak Enerji	AKENR	28.08.2012	-0,60	-6,76	-1,36	-7,28
Anadolu Efes	AEFES	6.03.2012	0,82	-4,52	-1,18	-8,22
Aselsan	ASELS	18.05.2018	-0,63	-11,59	-0,80	-1,74
Bagfař	BAGFS	26.03.2012	0,05	5,21	-0,56	3,06
Emlak Konut GYO	EKGYO	8.02.2013	0,37	-7,33	1,10	-10,59
Galatasaray Sportif	GSRAY	2.05.2012	0,28	-20,49	-6,45	-7,99
İhlas Holding	IHLAS	18.04.2011	-1,19	-28,07	-2,70	-23,88
İpek Doğal Enerji	IPEKE	28.11.2011	0,38	-28,94	-0,61	-32,91
Koza Madencilik	KOZAA	28.11.2011	0,14	-17,94	-1,27	-23,31
Odař Elektrik	ODAS	31.05.2021	1,01	-21,11	-2,23	-18,47
T. Halk Bankası	HALKB	19.12.2014	0,07	-6,30	-1,87	-4,78
		15.05.2020	0,04	-2,85	5,54	-4,30
		1.03.2022	1,03	-6,08	-0,64	-5,89
Vakıflar Bankası	VAKBN	15.05.2020	-0,46	-6,93	3,63	-7,52
		1.03.2022	0,83	-10,85	-0,66	-10,84
Yapı ve Kredi Bankası	YKBNK	26.04.2018	2,04	8,78	-1,56	5,39

According to the table above, both event windows end after the right issue announcement (-10, +10) and (-5, +5) the company with the highest CAAR value is Yapı ve Kredi Bankası. In addition, after the announcement, both event windows at the end of (-10, +10) and (-5, +5) the company with the least CAAR value is İpek Doğal Enerji.

Table 7.1: CAAR's of companies that announce the bonus issue

COMPANY	STOCK CODE	EVENT DATE	CAAR (-10) %	CAAR (+10) %	CAAR (-5) %	CAAR (+5) %
Akbank	AKBNK	23.02.2010	-2,42	-1,47	0,38	-0,16
Alarko Holding	ALARK	20.06.2018	-0,98	10,76	2,23	6,07
Anadolu Sigorta	ANSGR	10.03.2010	-3,23	-0,41	4,2	3,70
Aselsan	ASELS	31.05.2012	-2,46	1,07	-1,74	5,66
		24.03.2016	-0,56	3,72	-1,20	0,75
		29.06.2020	-0,40	-12,58	-2,45	-7,42
Bim Mağazalar	BIMAS	17.03.2010	1,05	6,10	-0,03	7,25
		26.03.2013	2,36	1,18	-0,54	-1,65
		6.03.2019	0,67	-13,31	1,56	-1,55
Eczacıbaşı İlaç	ECILC	23.06.2016	0,54	7,54	-0,58	9,88
Enka İnşaat	ENKAI	30.04.2010	-0,42	-6,02	-1,29	-4,54
		1.06.2011	-0,49	-2,31	-0,93	-1,02
		2.05.2012	0,79	-10,45	-0,89	-4,48
		18.04.2013	-0,25	-4,26	0,26	-5,28
		4.04.2014	-2,08	-6,91	0,75	-0,99
		1.04.2015	1,56	9,49	-1,02	5,44
		31.03.2016	3,28	0,61	-0,03	-4,03
		31.03.2017	-0,41	-0,97	0,95	-2,04
		12.04.2018	0,13	-5,74	0,76	-3,14
		6.04.2020	4,28	6,83	0,61	13,59
Ereğli Demir Çelik	EREGL	26.01.2011	0,92	3,94	0,40	1,72
		16.02.2012	-0,12	-4,98	-1,67	-2,74
		20.02.2013	0,32	-8,02	1,62	-1,88
Gübre Fabrik.	GUBRF	25.07.2013	1,12	16,57	0,48	12,45
İş Bankası C	ISCTR	25.02.2022	1,08	-8,75	-0,31	-6,16
İş GMYO	ISGYO	11.04.2011	0,57	0,52	-1,18	-0,64
		4.04.2016	-0,53	3,22	0,5	4,21
İzmir Demir Çelik	IZMDC	15.05.2012	0,55	2,44	1,32	1,89
Kardemir (D)	KRDMD	13.05.2013	3,16	-22,98	6,12	-16,18
		4.07.2014	1,95	12,18	-0,76	5,21
Koç Holding	KCHOL	7.05.2012	0,22	-3,68	0,14	-0,77
Netaş Telekom.	NETAS	11.04.2012	-0,55	61,87	1,11	66,35
Petkim	PETKM	28.04.2010	0,36	21,83	-3,74	12,02
		9.12.2015	2,41	8,60	1,20	5,38
		16.05.2018	0,05	-38,87	-2,25	-17,4
		30.04.2019	0,37	14,96	0,27	4,51
		9.10.2020	0,78	-2,35	1,52	9,66
Sasa	SASA	18.04.2018	-1,88	-8,22	-4,16	7,93
		10.04.2019	0,69	1,35	-2,76	-6,65
		5.04.2021	-1,34	-13,70	-3,04	-14,75
		1.04.2022	2,01	1,98	2,53	-1,33

Selçuk Ecza Deposu	SELEC	28.04.2010	-0,14	-5,66	0,62	-3,84
Sinpaş	SNGYO	10.05.2010	-0,58	-10,69	1,12	-2,85
		6.04.2011	-0,07	-4,42	-0,80	-2,01
Şekerbank	SKBNK	17.02.2010	0,53	-14,67	-1,32	-6,34
		28.01.2011	-0,11	-2,61	0,35	0,72
Şişe Cam	SISE	10.05.2010	0,56	0,72	0,70	-0,62
		26.05.2011	1,80	2,79	-0,20	-5,41
		11.06.2012	0,75	5,05	0,86	5,91
		16.05.2013	-0,74	6,54	2,20	3,02
		15.05.2014	1,09	5,41	0,85	-0,29
		14.05.2015	-0,72	0,94	1,21	4,66
		30.05.2016	-0,86	5,78	-1,15	-3,08
		26.05.2017	4,03	4,80	0,04	1,96
T.S.K.B.	TSKB	26.02.2010	0,31	-6,92	-0,72	-0,80
		28.02.2011	-2,70	-12,65	0,07	1,27
		27.02.2013	-0,80	-3,53	0,57	-0,28
		28.02.2014	-1,08	-1,03	-0,92	3,64
		26.02.2015	-0,58	1,74	-0,44	5,58
		25.02.2016	-0,60	5,75	1,96	5,16
		28.02.2017	0,57	-3,75	0,26	-0,34
Türk Hava Yolları	THYAO	5.04.2010	-1,91	-18,51	0,49	-10,92
		22.04.2011	-0,35	7,02	-0,92	-0,03
		8.04.2013	1,23	-10,67	-0,83	-8,39

According to the table above, both event windows end after the bonus issue announcement (-10, +10) and (-5, +5) the company with the highest CAAR value is Netaş. The company with the least CAAR value of both window period (-10, +10) and (-5, +5) is Petkim with its announcement dated 16.05.2018.

6. CONCLUSIONS

Equity issue is a financing method that companies perform for certain reasons. Companies carry out this method in two ways. These are the right issue and the bonus issue. In short, the right issue is the company's acquisition of new shareholders by issuing new shares. In other words, equity issue with external resources is referred to as the right issue method. The bonus issue method is the form of equity issue with the company's internal resources. The main difference between these two equity issue methods is that while money enters the company from outside the company in the right issue method, there is no outside cash inflow to the company in a bonus issue method.

Companies should disclose any equity issue decisions to the market. How these announcements are perceived by the investors in the market and how the share prices and returns shaped in this direction have been examined by many researchers in the literature. This is because changes in share prices and returns are also related to the fields of market efficiency and behavioral finance. According to the Efficient Market Hypothesis, the information released to the market is evenly distributed, and the prices formed in this way suggest that they are correct prices. There are three types of markets in the Efficient Markets Hypothesis. These are weak form, semi-strong form, and strong form efficient markets. In these market types, the information provided to the market is different from each other, but they cannot obtain above-average returns in all three market types. Behavioral finance, which is another subject, is a field that studies the investment approaches of investors. Both of these issues are issues that have an impact on the stock prices of equity issues.

In this study, the stock prices and returns of the companies that announced right issues and bonus issues on the dates when the relevant companies were included in the BIST-30 and BIST-50 were examined. The study examined 35 companies that announced the right issue or bonus issues in the BIST-30 and BIST-50 indices between 2010- 2022. For BIST-30, 10 right issue announcements of 8 companies and 40 bonus issue announcements of 14 companies were examined. In addition, for the BIST-50, 17 equity issue announcements of 14 companies and 64 bonus issues from 23 companies were examined. The event study method was used as the

analysis method and two different event windows were created; as (-10, +10) and (-5, +5) event windows.

In the analysis of companies that announced a right issue in the BIST-30, it is possible to obtain statistically significant negative abnormal returns on the announcement date (t) and the first day after the announcement date $(t+1)$. In the analysis of companies that announced a bonus issue within the BIST-30, it is possible to obtain statistically significant negative abnormal returns four days after the announcement date $(t+4)$ and on the ninth day before the announcement date $(t-9)$. It is possible to obtain statistically significant negative abnormal returns on the announcement date (t) and the first day after the announcement date $(t+1)$ in the analysis of companies that announced the right issue in the BIST-50. In addition, it was found that it is possible to obtain statistically significant positive abnormal returns on the second day after the announcement date $(t+2)$. Also, it is possible to obtain statistically significant positive abnormal returns on the first day after the announcement date $(t+1)$ in the analysis of companies that announced a bonus issue in the BIST-50. However, it has been found that it is possible to obtain statistically significant negative abnormal returns on the tenth day after the announcement date $(t+10)$.

In the cumulative abnormal average return analysis, in which the event window of the companies that announced a right issue in the BIST-30 (-10, +10) was examined, it was observed that there was no significant change until the fourth day before the announcement date $(t-4)$. However, after this date, the cumulative abnormal averages were found to decrease rapidly and remained negative until the end of the event window. Results similar to the (-10, +10) analysis were found in the event window (-5, +5). In the cumulative abnormal average return analysis, in which the event window of the companies that announced a bonus issue in BIST-30 was examined, it decreased to negative values on the ninth day before the announcement date $(t-9)$ and there was no significant change. However, a rapid decrease was observed on the fourth day after the announcement date $(t+4)$. Similar results were found in the

(-5, +5) event window (-10, +10) analysis, but five days before the announcement date (t_{+5}) the yield decreased to 0.00%. In the cumulative abnormal average return analysis, in which the event window (-10, +10) of the companies that announced a right issue in the BIST-50 was examined, the return values that were positive until the fifth day before the announcement date (t_{-5}) decreased to negative values at this date. This decrease accelerated one day before the announcement date (t_{-1}). This decline continued until the last day of the event window. Similar results were found in the (-5, +5) event window (-10, +10) analysis, but the difference did not decrease from positive to negative. Negative values continued to shrink. In the cumulative abnormal average return analysis, which examines the event window of the companies (-10, +10) that announced the bonus issue in the BIST-50, the returns decreased to negative values on the ninth day before the announcement date (t_{-9}). It continued to be negative until the second day after the announcement date (t_{+2}) and increased to positive values again on this date. However, on the tenth day after the announcement date (t_{+10}), it decreased to negative values again. In the event window (-5, +5), the returns decreased to negative values on the third day before the announcement date (t_{-3}), increased to positive values at the announcement date (t), and remained positive until the end of the event window.

According to these results, it can be said that the BIST-30 and BIST-50 indices were affected by the right issue announcements made to the public in the analyzed period, and the Borsa Istanbul Market (BIST) was not efficient in a semi-strong form. The right issue result of the study is similar to the results of Kendirli and Elmalı (2016), Küçüksille and Mizrahi (2015), Mahmood, Mirza and Mushtaq (2014), Özer and Yücel (2000), Ginglinger and Gajewski (2002) and Cotterell (2011) in the literature. The results of the bonus issue of the study are similar to the results of Erol and Aytakin (2018), Küçüksille and Mizrahi (2015), Özer and Yücel (2000), and Sakarya, Çalış and Kayacan (2018), which are included in the literature. On the other hand, Kaderli and Başkaya (2017), Tripathy (2007), and Raja and Sudhahar (2010) found in their studies that there is a positive effect on the bonus issue. Accordingly, the statistical significance in the BIST-50 that were found in this study, both positive and negative, may be due to the attitudes of investors.

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APPENDICES



Appendix 1. Names, stock codes, number of announcements and dates of announcements of companies making right issue announcements in BIST-30.

COMPANY NAME	STOCK CODE	NUMBER OF ANNOUNCEMENTS	ANNOUNCEMENT DATE
Akbank	AKBNK	1	5.12.2018
Aselsan	ASELS	1	18.05.2018
Emlak Konut GYO	EKGYO	1	8.02.2013
İhlas Holding	IHLAS	1	18.04.2011
Koza Madencilik	KOZAA	1	28.11.2011
T. Halk Bankası	HALKB	3	19.12.2014
			15.05.2020
			01.03.2022
Vakıflar Bankası	VAKBN	1	15.05.2020
Yapı ve Kredi Bankası	YKBNK	1	26.04.2018

Appendix 2. Names, stock codes, number of announcements and dates of announcements of companies making bonus issue announcements in BIST-30.

COMPANY NAME	STOCK CODE	NUMBER OF ANNOUNCEMENTS	ANNOUNCEMENT DATE
Akbank	AKBNK	1	23.02.2010
Aselsan	AELS	1	29.06.2020
Bim Mağazalar	BIMAS	3	17.03.2010 26.03.2013 06.03.2019
Enka İnşaat	ENKAI	8	30.04.2010 01.06.2011 02.05.2012 18.04.2013 04.04.2014 01.04.2015 31.03.2016 31.03.2017
Ereğli Demir Çelik	EREGL	3	26.01.2011 16.02.2012 20.02.2013
İş Bankası C	ISCTR	1	25.02.2022
Kardemir (D)	KRDMD	2	13.05.2013 04.07.2014
Koç Holding	KCHOL	1	7.05.2012
Petkim	PETKM	5	28.04.2010 09.12.2015 16.05.2018 30.04.2019 09.10.2020
Sasa	SASA	2	05.04.2021 01.04.2022
Sinpaş GMYO	SNGYO	1	6.04.2011
Şekerbank	SKBNK	1	17.02.2010
Şişe Cam	SISE	8	10.05.2010 26.05.2011 11.06.2012 16.05.2013 15.05.2014 14.05.2015 30.05.2016 26.05.2017
Türk Hava Yolları	THYAO	3	05.04.2010 22.04.2011 08.04.2013

Appendix 3. Names, stock codes, number of announcements and dates of announcements of companies making right issue announcements in BIST-50.

COMPANY NAME	STOCK CODE	NUMBER OF ANNOUNCEMENTS	ANNOUNCEMENT DATE
Akbank	AKBNK	1	5.12.2018
Ak Enerji	AKENR	1	28.08.2012
Anadolu Efes	AEFES	1	6.03.2012
Aselsan	ASELS	1	18.05.2018
Bagfař	BAGFS	1	26.03.2012
Emlak Konut GYO	EKGYO	1	8.02.2013
Galatasaray Sportif	GSRAY	1	2.05.2012
İhlas Holding	IHLAS	1	18.04.2011
İpek Doęal Enerji	IPEKE	1	28.11.2011
Koza Madencilik	KOZAA	1	28.11.2011
Odař Elektrik	ODAS	1	31.05.2021
T.Halk Bankası	HALKB	3	19.12.2014 15.05.2020 01.03.2022
Vakıflar Bankası	VAKBN	2	15.05.2020 01.03.2022
Yapı ve Kredi Bankası	YKBNK	1	26.04.2018

Appendix 4. Names, stock codes, number of announcements and dates of announcements of companies making bonus issue announcements in BIST-50.

COMPANY NAME	STOCK CODE	NUMBER OF ANNOUNCEMENTS	ANNOUNCEMENT DATE
Akbank	AKBNK	1	23.02.2010
Alarko Holding	ALARK	1	20.06.2018
Anadolu Sigorta	ANSGR	1	10.03.2010
Aselsan	ASELS	3	31.05.2012 24.03.2016 29.06.2020
Bim Mağazalar	BIMAS	3	17.03.2010 26.03.2013 06.03.2019
Eczacıbaşı İlaç	ECILC	1	23.06.2016
Enka İnşaat	ENKAI	10	30.04.2010 01.06.2011 02.05.2012 18.04.2013 04.04.2014 01.04.2015 31.03.2016 31.03.2017 12.04.2018 06.04.2020
Ereğli Demir Çelik	EREGL	3	26.01.2011 16.02.2012 20.02.2013
Gübre Fabrik.	GUBRF	1	25.07.2013
İş Bankası C	ISCTR	1	25.02.2022
İş GMYO	ISGYO	2	11.04.2011 04.04.2016
İzmir Demir Çelik	IZMDC	1	15.05.2012
Kardemir (D)	KRDMD	2	13.05.2013 04.07.2014
Koç Holding	KCHOL	1	7.05.2012
Netaş Telekom.	NETAS	1	11.04.2012
Petkim	PETKM	5	28.04.2010 09.12.2015 16.05.2018 30.04.2019 09.10.2020
Sasa	SASA	4	18.04.2018 10.04.2019 05.04.2021 01.04.2022
Selçuk Ecza Deposu	SELEC	1	28.04.2010
Sinpaş GMYO	SNGYO	2	10.05.2010 6.04.2011
Şekerbank	SKBNK	2	17.02.2010 28.01.2011
			10.05.2010 26.05.2011

Şişe Cam	SİSE	8	10.05.2010 26.05.2011 11.06.2012 16.05.2013 15.05.2014 14.05.2015 30.05.2016 26.05.2017
T.S.K.B.	TSKB	7	26.02.2010 28.02.2011 27.02.2013 28.02.2014 26.02.2015 25.02.2016 28.02.2017
Türk Hava Yolları	THYAO	3	05.04.2010 22.04.2011 08.04.2013

Appendix 5. Analysis results of companies that announced right issue in BIST-30.

T	AKBNK			EKGYO			HALKB (1)			HALKB (2)			HALKB (3)		
	5.12.2018			8.02.2013			19.12.2014			15.05.2020			1.03.2022		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	-0,94%	-8,82%		0,61%	-7,33%		-0,60%	-6,30%		-0,14%	-2,85%		-0,14%	-6,08%	
9	1,87%	-7,88%		-1,14%	-7,94%		0,85%	-5,70%		-0,87%	-2,71%		-0,24%	-5,94%	
8	2,32%	-9,75%		1,65%	-6,80%		-0,55%	-6,55%		-0,79%	-1,84%		-0,38%	-5,70%	
7	0,11%	-12,07%		0,21%	-8,45%		-1,44%	-6,00%		0,05%	-1,05%		1,28%	-5,32%	
6	-3,01%	-12,18%		2,70%	-8,67%		1,49%	-4,56%		-0,04%	-1,10%		0,58%	-6,60%	
5	-0,79%	-9,17%	-9,06%	-2,08%	-11,37%	-10,59%	0,19%	-6,05%	-4,78%	-0,64%	-1,07%	-4,30%	-0,94%	-7,19%	-5,89%
4	-0,09%	-8,39%	-8,28%	0,76%	-9,28%	-8,51%	0,40%	-6,25%	-4,98%	-1,14%	-0,43%	-3,65%	-0,38%	-6,25%	-4,95%
3	0,27%	-8,30%	-8,19%	1,21%	-10,05%	-9,27%	0,20%	-6,64%	-5,38%	-0,52%	0,72%	-2,51%	2,00%	-5,87%	-4,57%
2	1,87%	-8,57%	-8,46%	1,15%	-11,26%	-10,48%	0,80%	-6,84%	-5,57%	-2,20%	1,24%	-1,99%	-0,83%	-7,87%	-6,57%
1	-2,81%	-10,44%	-10,33%	-0,82%	-12,41%	-11,63%	4,15%	-7,64%	-6,37%	2,02%	3,44%	0,21%	-0,13%	-7,04%	-5,74%
0	-4,82%	-7,63%	-7,52%	-8,95%	-11,59%	-10,82%	-0,57%	-3,49%	-2,22%	2,44%	5,46%	2,23%	-1,16%	-6,91%	-5,61%
-1	-1,75%	-2,81%	-2,70%	-3,36%	-2,64%	-1,87%	-1,71%	-2,92%	-1,65%	-1,25%	3,02%	-0,20%	-0,49%	-5,75%	-4,45%
-2	-0,26%	-1,06%	-0,95%	-0,05%	0,72%	1,49%	0,09%	-1,21%	0,06%	-1,71%	4,28%	1,05%	-0,16%	-5,26%	-3,96%
-3	1,38%	-0,80%	-0,69%	1,08%	0,76%	1,54%	-0,02%	-1,30%	-0,03%	-1,41%	5,99%	2,76%	-2,51%	-5,10%	-3,80%
-4	-0,62%	-2,18%	-2,07%	-0,64%	-0,31%	0,46%	1,86%	-1,28%	-0,01%	-1,36%	7,40%	4,17%	-0,65%	-2,59%	-1,29%
-5	-1,45%	-1,56%	-1,45%	1,10%	0,33%	1,10%	-1,87%	-3,14%	-1,87%	5,54%	8,77%	5,54%	-0,64%	-1,94%	-0,64%
-6	0,01%	-0,11%		-1,38%	-0,77%		-0,99%	-1,27%		0,84%	3,23%		-0,73%	-1,30%	
-7	0,06%	-0,12%		0,33%	0,61%		-0,66%	-0,28%		-0,14%	2,39%		-0,64%	-0,57%	
-8	0,60%	-0,17%		0,63%	0,28%		0,56%	0,38%		1,34%	2,54%		0,26%	0,07%	
-9	0,09%	-0,77%		-0,72%	-0,35%		-0,25%	-0,18%		1,16%	1,19%		-1,22%	-0,19%	
-10	-0,86%	-0,86%		0,37%	0,37%		0,07%	0,07%		0,04%	0,04%		1,03%	1,03%	

T	KOZAA			VAKBN			YKBNK			IHLAS			ASELS		
	28.11.2011			15.05.2020			26.04.2018			18.04.2011			18.05.2018		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	0,27%	-17,94%		-0,49%	-6,93%		-2,13%	8,78%		-2,32%	-28,07%		2,06%	-11,59%	
9	-0,16%	-18,22%		-1,32%	-6,44%		1,78%	10,91%		-2,76%	-25,75%		-2,79%	-13,65%	
8	1,81%	-18,05%		-0,61%	-5,12%		1,60%	9,13%		-1,55%	-22,99%		-3,80%	-10,87%	
7	-1,87%	-19,86%		-0,24%	-4,50%		-2,66%	7,53%		-0,88%	-21,44%		0,99%	-7,07%	
6	4,18%	-17,99%		0,74%	-4,26%		0,82%	10,20%		-0,68%	-20,56%		-0,98%	-8,06%	
5	0,38%	-22,17%	-23,31%	-1,31%	-4,99%	-7,52%	3,22%	9,37%	5,39%	0,45%	-19,88%	-23,88%	0,76%	-7,08%	-1,74%
4	-1,32%	-22,55%	-23,69%	-1,42%	-3,68%	-6,21%	3,60%	6,15%	2,17%	3,28%	-20,33%	-24,33%	2,22%	-7,83%	-2,50%
3	0,92%	-21,23%	-22,37%	-2,63%	-2,26%	-4,79%	-0,96%	2,55%	-1,43%	-1,99%	-23,61%	-27,62%	-4,31%	-10,06%	-4,72%
2	6,57%	-22,15%	-23,29%	-0,27%	0,37%	-2,16%	0,70%	3,52%	-0,46%	5,02%	-21,62%	-25,63%	-1,84%	-5,75%	-0,41%
1	-14,61%	-28,72%	-29,86%	-1,60%	0,64%	-1,89%	-0,64%	2,82%	-1,17%	-9,40%	-26,64%	-30,65%	-0,82%	-3,91%	1,42%
0	-10,33%	-14,11%	-15,25%	0,93%	2,24%	-0,29%	-0,17%	3,45%	-0,53%	-9,30%	-17,25%	-21,26%	-1,93%	-3,09%	2,25%
-1	-1,30%	-3,79%	-4,93%	-0,65%	1,30%	-1,22%	0,64%	3,62%	-0,36%	-1,35%	-7,95%	-11,96%	3,10%	-1,16%	4,18%
-2	0,95%	-2,49%	-3,63%	-1,87%	1,95%	-0,58%	0,64%	2,99%	-1,00%	-1,18%	-6,60%	-10,60%	0,32%	-4,26%	1,08%
-3	-0,68%	-3,44%	-4,58%	-0,88%	3,82%	1,29%	-0,37%	2,34%	-1,64%	-4,23%	-5,42%	-9,42%	1,55%	-4,58%	0,76%
-4	-2,63%	-2,76%	-3,90%	-1,47%	4,69%	2,17%	0,29%	2,72%	-1,27%	-2,50%	-1,19%	-5,20%	0,01%	-6,13%	-0,79%
-5	-1,27%	-0,13%	-1,27%	3,63%	6,16%	3,63%	-1,56%	2,42%	-1,56%	-2,70%	1,31%	-2,70%	-0,80%	-6,14%	-0,80%
-6	0,28%	1,14%		0,88%	2,53%		0,97%	3,98%		-1,38%	4,01%		-1,56%	-5,34%	
-7	-0,42%	0,86%		-0,02%	1,64%		0,22%	3,01%		0,98%	5,39%		-0,62%	-3,78%	
-8	1,47%	1,28%		1,01%	1,66%		-1,02%	2,79%		6,62%	4,41%		-3,10%	-3,16%	
-9	-0,34%	-0,19%		1,11%	0,65%		1,77%	3,81%		-1,01%	-2,21%		0,58%	-0,06%	
-10	0,14%	0,14%		-0,46%	-0,46%		2,04%	2,04%		-1,19%	-1,19%		-0,63%	-0,63%	

Appendix 6. Analysis results of companies that announced bonus issue in BIST-30.

T	AKBNK			BIMAS (1)			BIMAS (2)			BIMAS (3)			ENKAI (1)			ENKAI (2)		
	23.02.2010			17.03.2010			26.03.2013			6.03.2019			30.04.2010			1.06.2011		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	0,57%	-1,47%		-0,04%	6,10%		-0,27%	1,18%		-2,81%	-13,31%		-1,17%	-6,02%		0,55%	-2,31%	
9	2,26%	-2,04%		-2,12%	6,13%		-0,84%	1,46%		-0,98%	-10,50%		-1,41%	-4,86%		-0,45%	-2,86%	
8	-0,50%	-4,30%		1,64%	8,26%		0,64%	2,29%		-0,98%	-9,52%		-1,80%	-3,45%		-0,32%	-2,42%	
7	-0,16%	-3,80%		1,40%	6,62%		0,88%	1,66%		1,41%	-8,54%		2,09%	-1,65%		-0,59%	-2,09%	
6	0,74%	-3,64%		0,22%	5,22%		1,45%	0,77%		-2,02%	-9,95%		1,41%	-3,75%		1,06%	-1,50%	
5	1,25%	-4,38%	-0,16%	0,48%	5,00%	7,25%	0,83%	-0,67%	-1,65%	0,16%	-7,93%	-1,55%	-0,83%	-5,15%	-4,54%	0,51%	-2,57%	-1,02%
4	0,22%	-5,63%	-1,41%	-0,58%	4,52%	6,78%	0,10%	-1,50%	-2,48%	0,52%	-8,09%	-1,71%	0,01%	-4,32%	-3,71%	-0,15%	-3,08%	-1,53%
3	-0,71%	-5,85%	-1,63%	-3,77%	5,11%	7,36%	-0,16%	-1,60%	-2,57%	-4,41%	-8,61%	-2,23%	-3,19%	-4,33%	-3,72%	-0,96%	-2,93%	-1,38%
2	0,49%	-5,14%	-0,93%	2,49%	8,87%	11,13%	-0,41%	-1,44%	-2,42%	2,20%	-4,20%	2,18%	0,44%	-1,13%	-0,52%	-0,70%	-1,97%	-0,42%
1	-1,57%	-5,63%	-1,42%	4,50%	6,38%	8,64%	-0,76%	-1,04%	-2,01%	3,22%	-6,39%	-0,01%	1,26%	-1,58%	-0,97%	0,14%	-1,28%	0,27%
0	-0,23%	-4,07%	0,15%	4,67%	1,88%	4,14%	0,64%	-0,28%	-1,25%	0,48%	-9,62%	-3,23%	1,07%	-2,84%	-2,23%	0,87%	-1,42%	0,13%
-1	0,11%	-3,83%	0,38%	0,19%	-2,78%	-0,53%	1,79%	-0,92%	-1,89%	-2,09%	-10,10%	-3,72%	-0,21%	-3,91%	-3,30%	-0,44%	-2,29%	-0,74%
-2	0,11%	-3,95%	0,27%	0,75%	-2,97%	-0,71%	-0,69%	-2,71%	-3,69%	-2,28%	-8,01%	-1,63%	-0,44%	-3,71%	-3,10%	2,37%	-1,85%	-0,30%
-3	-0,30%	-4,06%	0,16%	-1,54%	-3,72%	-1,46%	-2,19%	-2,02%	-3,00%	1,74%	-5,74%	0,65%	0,16%	-3,27%	-2,66%	-1,54%	-4,22%	-2,67%
-4	0,08%	-3,76%	0,46%	0,11%	-2,18%	0,07%	-0,27%	0,17%	-0,81%	-2,65%	-7,47%	-1,09%	-1,53%	-3,44%	-2,82%	-0,20%	-2,68%	-1,13%
-5	0,38%	-3,84%	0,38%	-0,03%	-2,29%	-0,03%	-0,54%	0,44%	-0,54%	1,56%	-4,82%	1,56%	-1,29%	-1,90%	-1,29%	-0,93%	-2,48%	-0,93%
-6	-2,38%	-4,22%		-1,36%	-2,25%		0,06%	0,97%		-2,29%	-6,38%		1,12%	-0,61%		-0,16%	-1,55%	
-7	1,16%	-1,84%		0,68%	-0,90%		-1,03%	0,91%		1,12%	-4,09%		0,53%	-1,73%		-1,51%	-1,40%	
-8	-1,64%	-3,00%		-1,22%	-1,58%		-1,07%	1,95%		-5,67%	-5,21%		-2,03%	-2,26%		1,66%	0,11%	
-9	1,06%	-1,36%		-1,42%	-0,36%		0,65%	3,01%		-0,21%	0,46%		0,19%	-0,24%		-1,06%	-1,55%	
-10	-2,42%	-2,42%		1,05%	1,05%		2,36%	2,36%		0,67%	0,67%		-0,42%	-0,42%		-0,49%	-0,49%	

T	ENKAI (3)			ENKAI (4)			ENKAI (5)			ENKAI (6)			ENKAI (7)			ENKAI (8)		
	2.05.2012			18.04.2013			4.04.2014			1.05.2015			31.03.2016			31.03.2017		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	-3,28%	-10,45%		0,62%	-4,26%		0,80%	-6,91%		1,80%	9,49%		-0,47%	0,61%		0,95%	-0,97%	
9	-4,32%	-7,17%		-0,30%	-4,87%		1,52%	-7,71%		-1,68%	7,69%		0,22%	1,09%		-2,62%	-1,92%	
8	0,21%	-2,85%		-2,26%	-4,57%		1,13%	-9,24%		1,59%	9,37%		-1,09%	0,86%		0,20%	0,70%	
7	0,63%	-3,06%		0,36%	-2,32%		-2,63%	-10,37%		0,24%	7,79%		-0,33%	1,95%		-0,36%	0,50%	
6	-0,66%	-3,69%		0,39%	-2,68%		-0,57%	-7,74%		1,55%	7,55%		0,62%	2,28%		0,02%	0,86%	
5	-1,70%	-3,03%	-4,48%	-0,45%	-3,07%	-5,28%	2,67%	-7,17%	-0,99%	0,94%	5,99%	5,44%	-0,62%	1,66%	-4,03%	-3,17%	0,83%	-2,04%
4	-2,44%	-1,32%	-2,78%	-1,17%	-2,62%	-4,83%	-0,46%	-9,84%	-3,66%	1,39%	5,05%	4,50%	-0,53%	2,28%	-3,41%	0,47%	4,00%	1,13%
3	-1,17%	1,11%	-0,34%	0,84%	-1,45%	-3,67%	0,88%	-9,38%	-3,20%	0,35%	3,66%	3,11%	-1,87%	2,81%	-2,89%	1,08%	3,53%	0,66%
2	1,37%	2,28%	0,82%	-2,05%	-2,30%	-4,51%	-0,10%	-10,26%	-4,08%	-1,02%	3,31%	2,76%	0,47%	4,68%	-1,02%	0,11%	2,45%	-0,43%
1	3,15%	0,91%	-0,55%	1,30%	-0,24%	-2,45%	-1,37%	-10,16%	-3,98%	-0,12%	4,33%	3,77%	-0,84%	4,21%	-1,48%	0,59%	2,34%	-0,53%
0	0,99%	-2,24%	-3,69%	-0,86%	-1,55%	-3,76%	-1,52%	-8,78%	-2,60%	0,16%	4,44%	3,89%	0,81%	5,06%	-0,64%	-0,36%	1,76%	-1,12%
-1	1,08%	-3,22%	-4,68%	1,06%	-0,69%	-2,90%	-1,10%	-7,26%	-1,09%	1,19%	4,28%	3,73%	-2,00%	4,25%	-1,45%	0,72%	2,11%	-0,76%
-2	-1,38%	-4,31%	-5,76%	-0,29%	-1,75%	-3,96%	-1,25%	-6,17%	0,01%	0,17%	3,09%	2,54%	-0,25%	6,25%	0,55%	-1,42%	1,39%	-1,48%
-3	-2,08%	-2,93%	-4,38%	-2,17%	-1,46%	-3,67%	-0,20%	-4,92%	1,26%	0,96%	2,93%	2,37%	0,63%	6,51%	0,81%	-1,22%	2,81%	-0,07%
-4	-1,41%	-0,84%	-2,30%	-1,76%	0,71%	-1,50%	0,71%	-4,71%	1,46%	2,43%	1,96%	1,41%	0,21%	5,88%	0,18%	0,21%	4,03%	1,16%
-5	-0,89%	0,57%	-0,89%	0,26%	2,47%	0,26%	0,75%	-5,42%	0,75%	-1,02%	-0,47%	-1,02%	-0,03%	5,67%	-0,03%	0,95%	3,83%	0,95%
-6	0,65%	1,46%		0,40%	2,21%		-0,40%	-6,18%		-0,65%	0,55%		0,91%	5,70%		-1,34%	2,88%	
-7	-2,07%	0,81%		1,30%	1,81%		-2,49%	-5,78%		2,04%	1,21%		0,24%	4,78%		2,90%	4,22%	
-8	1,32%	2,88%		0,69%	0,51%		1,39%	-3,30%		0,00%	-0,84%		-1,92%	4,55%		0,76%	1,32%	
-9	0,77%	1,56%		0,06%	-0,19%		-2,61%	-4,69%		-2,40%	-0,83%		3,19%	6,46%		0,97%	0,56%	
-10	0,79%	0,79%		-0,25%	-0,25%		-2,08%	-2,08%		1,56%	1,56%		3,28%	3,28%		-0,41%	-0,41%	

T	EREGL (1)			EREGL (2)			EREGL (3)			ISCTR			KCHOL			KRDMD (1)		
	26.01.2011			16.02.2012			20.02.2013			25.02.2022			7.05.2012			13.05.2013		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	-1,54%	3,94%		-0,11%	-4,98%		0,50%	-8,02%		-0,38%	-8,75%		0,42%	-3,68%		-2,22%	-22,98%	
9	1,99%	5,48%		-1,18%	-4,87%		-0,32%	-8,52%		-0,90%	-8,37%		-0,24%	-4,10%		-0,60%	-20,76%	
8	0,39%	3,49%		0,18%	-3,69%		-2,04%	-8,19%		2,26%	-7,47%		1,11%	-3,86%		0,95%	-20,16%	
7	-0,69%	3,09%		2,73%	-3,87%		-0,42%	-6,15%		-0,62%	-9,74%		-2,83%	-4,97%		1,93%	-21,11%	
6	-0,60%	3,78%		2,65%	-6,61%		0,42%	-5,74%		-2,13%	-9,12%		0,43%	-2,14%		0,84%	-23,04%	
5	-1,77%	4,39%	1,72%	0,30%	-9,25%	-2,74%	0,93%	-6,16%	-1,88%	-0,38%	-6,99%	-6,16%	-0,01%	-2,57%	-0,77%	-4,19%	-23,88%	-16,18%
4	-0,49%	6,16%	3,49%	-0,81%	-9,55%	-3,04%	0,76%	-7,08%	-2,81%	-1,48%	-6,60%	-5,78%	-1,03%	-2,55%	-0,76%	-8,09%	-19,69%	-11,99%
3	0,36%	6,65%	3,98%	-1,08%	-8,74%	-2,22%	2,40%	-7,84%	-3,57%	-0,11%	-5,12%	-4,29%	-1,67%	-1,52%	0,28%	0,38%	-11,60%	-3,89%
2	0,55%	6,29%	3,62%	-0,08%	-7,66%	-1,14%	-1,58%	-10,24%	-5,97%	-0,10%	-5,01%	-4,18%	0,59%	0,15%	1,95%	-3,87%	-11,98%	-4,28%
1	0,12%	5,73%	3,07%	1,18%	-7,57%	-1,06%	0,14%	-8,66%	-4,39%	0,74%	-4,91%	-4,09%	1,04%	-0,44%	1,35%	-2,31%	-8,10%	-0,40%
0	-3,29%	5,62%	2,95%	-1,90%	-8,75%	-2,24%	-3,36%	-8,80%	-4,53%	-1,19%	-5,65%	-4,82%	0,38%	-1,49%	0,31%	0,12%	-5,79%	1,91%
-1	2,83%	8,91%	6,25%	-0,63%	-6,86%	-0,34%	-0,27%	-5,44%	-1,17%	-2,24%	-4,46%	-3,63%	0,80%	-1,86%	-0,07%	-2,00%	-5,91%	1,79%
-2	2,59%	6,08%	3,41%	-0,08%	-6,23%	0,29%	-1,16%	-5,17%	-0,90%	-0,94%	-2,22%	-1,39%	-0,94%	-2,67%	-0,87%	2,92%	-3,91%	3,79%
-3	0,39%	3,49%	0,82%	1,48%	-6,14%	0,37%	-0,40%	-4,01%	0,26%	0,66%	-1,28%	-0,46%	0,39%	-1,73%	0,07%	-2,23%	-6,83%	0,87%
-4	0,03%	3,09%	0,43%	0,57%	-7,62%	-1,10%	-0,96%	-3,61%	0,66%	-0,80%	-1,94%	-1,11%	-0,46%	-2,12%	-0,32%	-3,02%	-4,60%	3,10%
-5	0,40%	3,07%	0,40%	-1,67%	-8,19%	-1,67%	1,62%	-2,65%	1,62%	-0,31%	-1,14%	-0,31%	0,14%	-1,65%	0,14%	6,12%	-1,58%	6,12%
-6	0,19%	2,66%		-1,26%	-6,52%		-2,10%	-4,27%		-0,11%	-0,83%		-1,03%	-1,80%		-3,10%	-7,70%	
-7	1,40%	2,47%		-0,91%	-5,26%		0,06%	-2,17%		-1,36%	-0,72%		-1,03%	-0,76%		-5,11%	-4,60%	
-8	0,55%	1,07%		-1,11%	-4,35%		-1,78%	-2,24%		0,18%	0,64%		0,75%	0,27%		-2,37%	0,51%	
-9	-0,39%	0,52%		-3,12%	-3,23%		-0,78%	-0,46%		-0,62%	0,46%		-0,70%	-0,48%		-0,29%	2,87%	
-10	0,92%	0,92%		-0,12%	-0,12%		0,32%	0,32%		1,08%	1,08%		0,22%	0,22%		3,16%	3,16%	

	KRDMD (2)			PETKM (1)			PETKM (2)			PETKM (3)			PETKM (4)			PETKM (5)		
	4.07.2014			28.04.2010			9.12.2015			16.05.2018			30.04.2019			9.10.2020		
T	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	-0,54%	12,18%		-0,57%	21,83%		-0,56%	8,60%		-0,82%	-38,87%		-2,14%	14,96%		-2,65%	-2,35%	
9	-1,15%	12,72%		0,62%	22,40%		-1,55%	9,15%		-1,05%	-38,06%		2,53%	17,10%		-2,34%	0,30%	
8	3,70%	13,87%		3,76%	21,78%		0,15%	10,70%		-0,75%	-37,01%		0,06%	14,56%		-1,49%	2,63%	
7	-1,59%	10,16%		-0,36%	18,02%		-0,12%	10,55%		0,72%	-36,26%		4,81%	14,50%		0,05%	4,12%	
6	2,09%	11,75%		1,21%	18,38%		2,59%	10,67%		-1,49%	-36,98%		2,98%	9,69%		-4,28%	4,07%	
5	-0,03%	9,66%	5,21%	-0,37%	17,17%	12,02%	0,15%	8,08%	5,38%	-2,41%	-35,49%	-17,40%	2,16%	6,71%	4,51%	-0,64%	8,34%	9,66%
4	3,22%	9,69%	5,25%	1,48%	17,54%	12,39%	-0,04%	7,93%	5,23%	-1,34%	-33,08%	-14,98%	2,88%	4,55%	2,35%	-3,40%	8,98%	10,30%
3	2,07%	6,47%	2,03%	-1,51%	16,06%	10,91%	-1,53%	7,97%	5,28%	-2,15%	-31,74%	-13,65%	-0,34%	1,67%	-0,53%	6,61%	12,38%	13,69%
2	-2,67%	4,41%	-0,04%	2,26%	17,57%	12,42%	-1,66%	9,50%	6,80%	0,40%	-29,59%	-11,49%	1,42%	2,02%	-0,18%	-2,07%	5,77%	7,09%
1	-4,38%	7,07%	2,63%	11,09%	15,31%	10,16%	3,17%	11,16%	8,46%	-4,46%	-29,99%	-11,89%	0,34%	0,59%	-1,61%	0,22%	7,84%	9,16%
0	1,78%	11,46%	7,01%	-1,93%	4,23%	-0,92%	1,85%	7,98%	5,29%	4,61%	-25,53%	-7,43%	-0,99%	0,25%	-1,95%	3,60%	7,62%	8,94%
-1	-0,32%	9,67%	5,23%	-0,54%	6,16%	1,00%	1,40%	6,14%	3,44%	-2,99%	-30,14%	-12,05%	-0,36%	1,24%	-0,96%	0,77%	4,02%	5,33%
-2	4,95%	9,99%	5,54%	2,74%	6,70%	1,55%	-1,28%	4,73%	2,04%	0,82%	-27,15%	-9,06%	-0,42%	1,59%	-0,61%	1,95%	3,25%	4,56%
-3	0,52%	5,04%	0,59%	1,40%	3,96%	-1,19%	0,85%	6,01%	3,32%	-5,39%	-27,97%	-9,87%	0,52%	2,01%	-0,19%	-0,80%	1,30%	2,61%
-4	0,84%	4,53%	0,08%	1,15%	2,56%	-2,59%	1,27%	5,17%	2,47%	-2,23%	-22,58%	-4,48%	-0,97%	1,50%	-0,70%	1,89%	2,09%	3,41%
-5	-0,76%	3,69%	-0,76%	-3,74%	1,42%	-3,74%	1,20%	3,90%	1,20%	-2,25%	-20,35%	-2,25%	0,27%	2,47%	0,27%	1,52%	0,21%	1,52%
-6	3,36%	4,45%		-1,13%	5,15%		-1,77%	2,70%		-5,66%	-18,09%		-1,60%	2,20%		-0,37%	-1,31%	
-7	-0,71%	1,09%		2,42%	6,28%		3,81%	4,47%		-1,73%	-12,44%		1,49%	3,80%		0,70%	-0,94%	
-8	3,62%	1,80%		3,10%	3,86%		-1,14%	0,66%		-10,35%	-10,71%		1,62%	2,31%		-1,11%	-1,64%	
-9	-3,77%	-1,82%		0,40%	0,77%		-0,61%	1,80%		-0,40%	-0,35%		0,32%	0,69%		-1,31%	-0,53%	
-10	1,95%	1,95%		0,36%	0,36%		2,41%	2,41%		0,05%	0,05%		0,37%	0,37%		0,78%	0,78%	

T	SISE (1)			SISE (2)			SISE (3)			SISE (4)			SISE (5)			SISE (6)		
	10.05.2010			26.05.2011			11.06.2012			16.05.2013			15.05.2014			14.05.2015		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	-0,47%	0,72%		-1,74%	2,79%		-0,10%	5,05%		-0,20%	6,54%		2,64%	5,41%		2,01%	0,94%	
9	-0,15%	1,20%		-0,31%	4,54%		0,03%	5,15%		-0,58%	6,74%		0,91%	2,77%		-1,56%	-1,06%	
8	-1,13%	1,34%		-0,96%	4,84%		-0,62%	5,12%		1,49%	7,32%		-0,58%	1,86%		-0,54%	0,50%	
7	0,86%	2,48%		2,82%	5,81%		-0,80%	5,74%		3,45%	5,82%		1,96%	2,44%		0,29%	1,04%	
6	-0,79%	1,62%		-1,64%	2,98%		-2,25%	6,54%		0,52%	2,37%		0,78%	0,48%		-0,46%	0,75%	
5	-0,49%	2,41%	-0,62%	-3,02%	4,63%	-5,41%	-0,72%	8,79%	5,91%	0,24%	1,85%	3,02%	-1,13%	-0,30%	-0,29%	0,93%	1,20%	4,66%
4	2,39%	2,90%	-0,12%	-6,35%	7,65%	-2,39%	2,63%	9,51%	6,64%	0,08%	1,61%	2,79%	0,62%	0,83%	0,84%	0,32%	0,28%	3,73%
3	-0,99%	0,51%	-2,51%	1,48%	14,00%	3,96%	0,20%	6,88%	4,00%	-1,80%	1,53%	2,71%	-0,39%	0,21%	0,21%	2,10%	-0,04%	3,41%
2	-3,14%	1,51%	-1,52%	4,90%	12,52%	2,48%	2,45%	6,68%	3,80%	2,90%	3,34%	4,51%	-0,33%	0,60%	0,60%	-0,10%	-2,13%	1,32%
1	-1,54%	4,65%	1,62%	-5,18%	7,61%	-2,43%	1,42%	4,23%	1,36%	-0,18%	0,44%	1,61%	1,00%	0,93%	0,94%	1,75%	-2,03%	1,42%
0	1,84%	6,19%	3,17%	2,05%	12,79%	2,75%	0,43%	2,81%	-0,06%	-0,30%	0,61%	1,79%	-0,87%	-0,07%	-0,06%	-0,99%	-3,78%	-0,33%
-1	0,68%	4,35%	1,33%	1,99%	10,74%	0,70%	0,50%	2,38%	-0,49%	1,57%	0,91%	2,09%	-1,09%	0,80%	0,81%	-0,67%	-2,79%	0,66%
-2	0,39%	3,68%	0,65%	-3,54%	8,74%	-1,29%	-1,83%	1,88%	-1,00%	0,08%	-0,66%	0,51%	0,17%	1,89%	1,90%	-1,89%	-2,12%	1,33%
-3	-0,82%	3,29%	0,27%	-1,99%	12,29%	2,25%	-1,46%	3,71%	0,83%	-2,02%	-0,74%	0,43%	1,38%	1,72%	1,73%	0,84%	-0,23%	3,23%
-4	0,38%	4,11%	1,08%	4,44%	14,28%	4,24%	1,43%	5,17%	2,29%	0,25%	1,28%	2,45%	-0,50%	0,34%	0,35%	1,18%	-1,06%	2,39%
-5	0,70%	3,72%	0,70%	-0,20%	9,84%	-0,20%	0,86%	3,74%	0,86%	2,20%	1,03%	2,20%	0,85%	0,84%	0,85%	1,21%	-2,24%	1,21%
-6	0,62%	3,02%		5,58%	10,04%		3,93%	2,88%		0,91%	-1,17%		0,25%	-0,01%		1,18%	-3,45%	
-7	0,45%	2,40%		2,50%	4,46%		-1,83%	-1,05%		-0,21%	-2,08%		-0,18%	-0,26%		-0,63%	-4,63%	
-8	-0,16%	1,96%		-0,75%	1,96%		-1,61%	0,78%		-0,37%	-1,87%		-0,66%	-0,07%		-0,79%	-4,00%	
-9	1,56%	2,12%		0,92%	2,72%		1,64%	2,39%		-0,76%	-1,50%		-0,51%	0,58%		-2,48%	-3,21%	
-10	0,56%	0,56%		1,80%	1,80%		0,75%	0,75%		-0,74%	-0,74%		1,09%	1,09%		-0,72%	-0,72%	

T	SISE (7)			SISE (8)			SKBNK			THYAO (1)			THYAO (2)			THYAO (3)		
	30.05.2016			26.05.2017			17.02.2010			5.04.2010			22.04.2011			8.04.2013		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	2,57%	5,78%		-0,32%	4,80%		-1,00%	-14,67%		-1,91%	-18,51%		2,57%	7,02%		-0,03%	-10,67%	
9	1,20%	3,21%		0,02%	5,13%		-0,23%	-13,67%		1,46%	-16,59%		0,57%	4,45%		-0,89%	-10,64%	
8	0,17%	2,01%		-0,05%	5,11%		1,92%	-13,44%		1,69%	-18,05%		3,40%	3,88%		-1,00%	-9,75%	
7	-0,36%	1,84%		-0,20%	5,15%		0,78%	-15,36%		-1,78%	-19,74%		-0,09%	0,48%		1,14%	-8,75%	
6	3,28%	2,20%		-0,90%	5,35%		0,80%	-16,14%		0,58%	-17,96%		-0,58%	0,57%		1,82%	-9,89%	
5	-1,21%	-1,08%	-3,08%	1,96%	6,25%	1,96%	-0,93%	-16,94%	-6,34%	-2,01%	-18,54%	-10,92%	-0,49%	1,15%	-0,03%	1,41%	-11,71%	-8,39%
4	0,79%	0,13%	-1,88%	-0,33%	4,29%	-0,54%	-4,43%	-16,01%	-5,41%	-1,25%	-16,53%	-8,91%	-0,02%	1,64%	0,46%	-3,68%	-13,12%	-9,79%
3	-1,70%	-0,66%	-2,67%	-0,21%	4,62%	-0,21%	-1,15%	-11,58%	-0,98%	-2,11%	-15,27%	-7,65%	0,02%	1,66%	0,48%	-1,71%	-9,44%	-6,11%
2	0,85%	1,04%	-0,96%	-0,34%	4,83%	-0,17%	-1,72%	-10,43%	0,17%	-2,58%	-13,16%	-5,54%	-0,11%	1,64%	0,47%	-1,57%	-7,73%	-4,40%
1	1,42%	0,19%	-1,82%	0,17%	5,17%	0,17%	1,44%	-8,71%	1,89%	-2,03%	-10,58%	-2,96%	1,13%	1,75%	0,58%	0,61%	-6,15%	-2,83%
0	-0,43%	-1,23%	-3,23%	1,14%	5,00%	0,79%	-0,82%	-10,15%	0,45%	-0,11%	-8,55%	-0,93%	0,08%	0,62%	-0,55%	-1,52%	-6,76%	-3,44%
-1	0,20%	-0,80%	-2,80%	-0,35%	3,87%	-0,35%	-0,80%	-9,33%	1,27%	1,12%	-8,43%	-0,81%	-0,49%	0,54%	-0,63%	-2,24%	-5,25%	-1,92%
-2	-0,76%	-0,99%	-3,00%	2,37%	4,22%	0,86%	2,85%	-8,53%	2,07%	-1,72%	-9,55%	-1,93%	-0,42%	1,04%	-0,14%	0,94%	-3,01%	0,32%
-3	0,09%	-0,24%	-2,24%	-1,51%	1,85%	-1,51%	1,38%	-11,38%	-0,78%	-0,18%	-7,83%	-0,21%	1,57%	1,46%	0,28%	0,96%	-3,95%	-0,63%
-4	-1,18%	-0,33%	-2,33%	0,70%	3,35%	0,74%	-0,84%	-12,76%	-2,16%	-0,52%	-7,65%	-0,03%	-0,38%	-0,12%	-1,29%	-0,76%	-4,92%	-1,59%
-5	-1,15%	0,86%	-1,15%	0,04%	2,65%	0,04%	-1,32%	-11,92%	-1,32%	0,49%	-7,13%	0,49%	-0,92%	0,26%	-0,92%	-0,83%	-4,15%	-0,83%
-6	2,97%	2,01%		-1,36%	2,61%		-2,68%	-10,60%		-2,77%	-7,62%		-0,26%	1,18%		0,04%	-3,33%	
-7	-1,98%	-0,96%		-1,24%	3,97%		-3,46%	-7,92%		0,31%	-4,85%		-0,69%	1,44%		-0,97%	-3,37%	
-8	-0,71%	1,01%		2,64%	5,21%		-4,93%	-4,46%		-1,33%	-5,16%		1,91%	2,13%		-0,85%	-2,39%	
-9	2,58%	1,72%		-1,46%	2,57%		-0,07%	0,46%		-1,92%	-3,83%		0,58%	0,22%		-2,78%	-1,55%	
-10	-0,86%	-0,86%		4,03%	4,03%		0,53%	0,53%		-1,91%	-1,91%		-0,35%	-0,35%		1,23%	1,23%	

T	SNGYO			ASELS			SASA (1)			SASA (2)		
	6.04.2011			29.06.2020			5.04.2021			1.04.2022		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	1,00%	-4,42%		-2,06%	-12,58%		-3,01%	-13,70%		-0,81%	1,98%	
9	1,78%	-5,42%		0,11%	-10,52%		-1,63%	-10,70%		0,01%	2,79%	
8	-4,24%	-7,20%		1,40%	-10,63%		-3,42%	-9,06%		0,18%	2,78%	
7	-0,27%	-2,95%		-0,13%	-12,03%		9,16%	-5,64%		-1,96%	2,60%	
6	0,38%	-2,69%		-0,81%	-11,90%		-1,45%	-14,81%		-1,70%	4,56%	
5	0,18%	-3,07%	-2,01%	-2,37%	-11,09%	-7,42%	-4,41%	-13,35%	-14,75%	1,75%	6,26%	-1,33%
4	-0,18%	-3,25%	-2,19%	-0,80%	-8,72%	-5,05%	-3,13%	-8,94%	-10,34%	0,15%	4,52%	-3,08%
3	-1,08%	-3,08%	-2,02%	-1,40%	-7,93%	-4,25%	-0,80%	-5,82%	-7,21%	0,63%	4,36%	-3,23%
2	-0,19%	-2,00%	-0,94%	1,76%	-6,52%	-2,85%	-2,57%	-5,02%	-6,41%	-1,13%	3,74%	-3,86%
1	-0,34%	-1,81%	-0,75%	0,29%	-8,28%	-4,61%	-2,74%	-2,45%	-3,84%	0,46%	4,87%	-2,73%
0	-1,46%	-1,47%	-0,41%	0,62%	-8,57%	-4,90%	-1,44%	0,30%	-1,10%	-1,70%	4,40%	-3,19%
-1	-0,61%	-0,01%	1,05%	-0,49%	-9,19%	-5,52%	4,02%	1,74%	0,34%	-1,08%	6,11%	-1,49%
-2	-0,10%	0,60%	1,66%	-0,20%	-8,70%	-5,03%	0,69%	-2,28%	-3,68%	-0,17%	7,19%	-0,41%
-3	0,87%	0,71%	1,77%	-1,53%	-8,50%	-4,83%	-0,57%	-2,97%	-4,37%	-3,87%	7,36%	-0,24%
-4	1,70%	-0,16%	0,90%	-0,85%	-6,98%	-3,30%	-0,76%	-2,40%	-3,80%	1,10%	11,22%	3,63%
-5	-0,80%	-1,86%	-0,80%	-2,45%	-6,13%	-2,45%	-3,04%	-1,64%	-3,04%	2,53%	10,12%	2,53%
-6	-0,17%	-1,06%		-1,43%	-3,67%		-4,89%	1,39%		4,96%	7,60%	
-7	-1,94%	-0,89%		0,28%	-2,24%		7,57%	6,28%		-0,11%	2,63%	
-8	1,16%	1,04%		-1,99%	-2,51%		9,18%	-1,29%		2,80%	2,74%	
-9	-0,04%	-0,11%		-0,13%	-0,53%		-9,14%	-10,47%		-2,07%	-0,06%	
-10	-0,07%	-0,07%		-0,40%	-0,40%		-1,34%	-1,34%		2,01%	2,01%	

Appendix 7. Analysis results of companies that announced right issue in BIST-50.

T	AKBNK			EKGYO			HALKB (1)			HALKB (2)			HALKB (3)			KOZAA		
	5.12.2018			8.02.2013			19.12.2014			15.05.2020			1.03.2022			28.11.2011		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	-0,94%	-8,82%		0,61%	-7,33%		-0,60%	-6,30%		-0,14%	-2,85%		-0,14%	-6,08%		0,27%	-17,94%	
9	1,87%	-7,88%		-1,14%	-7,94%		0,85%	-5,70%		-0,87%	-2,71%		-0,24%	-5,94%		-0,16%	-18,22%	
8	2,32%	-9,75%		1,65%	-6,80%		-0,55%	-6,55%		-0,79%	-1,84%		-0,38%	-5,70%		1,81%	-18,05%	
7	0,11%	-12,07%		0,21%	-8,45%		-1,44%	-6,00%		0,05%	-1,05%		1,28%	-5,32%		-1,87%	-19,86%	
6	-3,01%	-12,18%		2,70%	-8,67%		1,49%	-4,56%		-0,04%	-1,10%		0,58%	-6,60%		4,18%	-17,99%	
5	-0,79%	-9,17%	-9,06%	-2,08%	-11,37%	-10,59%	0,19%	-6,05%	-4,78%	-0,64%	-1,07%	-4,30%	-0,94%	-7,19%	-5,89%	0,38%	-22,17%	-23,31%
4	-0,09%	-8,39%	-8,28%	0,76%	-9,28%	-8,51%	0,40%	-6,25%	-4,98%	-1,14%	-0,43%	-3,65%	-0,38%	-6,25%	-4,95%	-1,32%	-22,55%	-23,69%
3	0,27%	-8,30%	-8,19%	1,21%	-10,05%	-9,27%	0,20%	-6,64%	-5,38%	-0,52%	0,72%	-2,51%	2,00%	-5,87%	-4,57%	0,92%	-21,23%	-22,37%
2	1,87%	-8,57%	-8,46%	1,15%	-11,26%	-10,48%	0,80%	-6,84%	-5,57%	-2,20%	1,24%	-1,99%	-0,83%	-7,87%	-6,57%	6,57%	-22,15%	-23,29%
1	-2,81%	-10,44%	-10,33%	-0,82%	-12,41%	-11,63%	-4,15%	-7,64%	-6,37%	-2,02%	3,44%	0,21%	-0,13%	-7,04%	-5,74%	-14,61%	-28,72%	-29,86%
0	-4,82%	-7,63%	-7,52%	-8,95%	-11,59%	-10,82%	-0,57%	-3,49%	-2,22%	2,44%	5,46%	2,23%	-1,16%	-6,91%	-5,61%	-10,33%	-14,11%	-15,25%
-1	-1,75%	-2,81%	-2,70%	-3,36%	-2,64%	-1,87%	-1,71%	-2,92%	-1,65%	-1,25%	3,02%	-0,20%	-0,49%	-5,75%	-4,45%	-1,30%	-3,79%	-4,93%
-2	-0,26%	-1,06%	-0,95%	-0,05%	0,72%	1,49%	0,09%	-1,21%	0,06%	-1,71%	4,28%	1,05%	-0,16%	-5,26%	-3,96%	0,95%	-2,49%	-3,63%
-3	1,38%	-0,80%	-0,69%	1,08%	0,76%	1,54%	-0,02%	-1,30%	-0,03%	-1,41%	5,99%	2,76%	-2,51%	-5,10%	-3,80%	-0,68%	-3,44%	-4,58%
-4	-0,62%	-2,18%	-2,07%	-0,64%	-0,31%	0,46%	1,86%	-1,28%	-0,01%	-1,36%	7,40%	4,17%	-0,65%	-2,59%	-1,29%	-2,63%	-2,76%	-3,90%
-5	-1,45%	-1,56%	-1,45%	1,10%	0,33%	1,10%	-1,87%	-3,14%	-1,87%	5,54%	8,77%	5,54%	-0,64%	-1,94%	-0,64%	-1,27%	-0,13%	-1,27%
-6	0,01%	-0,11%		-1,38%	-0,77%		-0,99%	-1,27%		0,84%	3,23%		-0,73%	-1,30%		0,28%	1,14%	
-7	0,06%	-0,12%		0,33%	0,61%		-0,66%	-0,28%		-0,14%	2,39%		-0,64%	-0,57%		-0,42%	0,86%	
-8	0,60%	-0,17%		0,63%	0,28%		0,56%	0,38%		1,34%	2,54%		0,26%	0,07%		1,47%	1,28%	
-9	0,09%	-0,77%		-0,72%	-0,35%		-0,25%	-0,18%		1,16%	1,19%		-1,22%	-0,19%		-0,34%	-0,19%	
-10	-0,86%	-0,86%		0,37%	0,37%		0,07%	0,07%		0,04%	0,04%		1,03%	1,03%		0,14%	0,14%	

T	VAKBN (1)			VAKBN (2)			YKBNK			IHLAS			ASELS			AEFES		
	15.05.2020			1.03.2022			26.04.2018			18.04.2011			18.05.2018			6.03.2012		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	-0,49%	-6,93%		0,47%	-10,85%		-2,13%	8,78%		-2,32%	-28,07%		2,06%	-11,59%		-0,76%	-4,52%	
9	-1,32%	-6,44%		-0,59%	-11,33%		1,78%	10,91%		-2,76%	-25,75%		-2,79%	-13,65%		0,34%	-3,77%	
8	-0,61%	-5,12%		0,27%	-10,73%		1,60%	9,13%		-1,55%	-22,99%		-3,80%	-10,87%		0,36%	-4,10%	
7	-0,24%	-4,50%		-0,44%	-11,01%		-2,66%	7,53%		-0,88%	-21,44%		0,99%	-7,07%		-0,49%	-4,46%	
6	0,74%	-4,26%		0,73%	-10,57%		0,82%	10,20%		-0,68%	-20,56%		-0,98%	-8,06%		1,09%	-3,97%	
5	-1,31%	-4,99%	-7,52%	-1,02%	-11,30%	-10,84%	3,22%	9,37%	5,39%	0,45%	-19,88%	-23,88%	0,76%	-7,08%	-1,74%	-0,72%	-5,06%	-8,22%
4	-1,42%	-3,68%	-6,21%	-0,72%	-10,28%	-9,81%	3,60%	6,15%	2,17%	3,28%	-20,33%	-24,33%	2,22%	-7,83%	-2,50%	-0,32%	-4,34%	-7,50%
3	-2,63%	-2,26%	-4,79%	1,09%	-9,56%	-9,09%	-0,96%	2,55%	-1,43%	-1,99%	-23,61%	-27,62%	-4,31%	-10,06%	-4,72%	-0,65%	-4,02%	-7,18%
2	-0,27%	0,37%	-2,16%	-1,04%	-10,65%	-10,19%	0,70%	3,52%	-0,46%	5,02%	-21,62%	-25,63%	-1,84%	-5,75%	-0,41%	0,01%	-3,37%	-6,53%
1	-1,60%	0,64%	-1,89%	-0,21%	-9,62%	-9,15%	-0,64%	2,82%	-1,17%	-9,40%	-26,64%	-30,65%	-0,82%	-3,91%	1,42%	-1,69%	-3,38%	-6,53%
0	0,93%	2,24%	-0,29%	-1,12%	-9,41%	-8,94%	-0,17%	3,45%	-0,53%	-9,30%	-17,25%	-21,26%	-1,93%	-3,09%	2,25%	-0,15%	-1,69%	-4,85%
-1	-0,65%	1,30%	-1,22%	-1,09%	-8,29%	-7,82%	0,64%	3,62%	-0,36%	-1,35%	-7,95%	-11,96%	3,10%	-1,16%	4,18%	-3,19%	-1,54%	-4,70%
-2	-1,87%	1,95%	-0,58%	-0,16%	-7,19%	-6,72%	0,64%	2,99%	-1,00%	-1,18%	-6,60%	-10,60%	0,32%	-4,26%	1,08%	-3,16%	1,64%	-1,51%
-3	-0,88%	3,82%	1,29%	-3,41%	-7,04%	-6,57%	-0,37%	2,34%	-1,64%	-4,23%	-5,42%	-9,42%	1,55%	-4,58%	0,76%	1,43%	4,80%	1,65%
-4	-1,47%	4,69%	2,17%	-2,50%	-3,63%	-3,16%	0,29%	2,72%	-1,27%	-2,50%	-1,19%	-5,20%	0,01%	-6,13%	-0,79%	1,39%	3,37%	0,22%
-5	3,63%	6,16%	3,63%	-0,66%	-1,13%	-0,66%	-1,56%	2,42%	-1,56%	-2,70%	1,31%	-2,70%	-0,80%	-6,14%	-0,80%	-1,18%	1,98%	-1,18%
-6	0,88%	2,53%		0,18%	-0,47%		0,97%	3,98%		-1,38%	4,01%		-1,56%	-5,34%		-1,03%	3,15%	
-7	-0,02%	1,64%		-0,74%	-0,65%		0,22%	3,01%		0,98%	5,39%		-0,62%	-3,78%		-0,12%	4,19%	
-8	1,01%	1,66%		0,29%	0,09%		-1,02%	2,79%		6,62%	4,41%		-3,10%	-3,16%		2,95%	4,31%	
-9	1,11%	0,65%		-1,03%	-0,20%		1,77%	3,81%		-1,01%	-2,21%		0,58%	-0,06%		0,54%	1,36%	
-10	-0,46%	-0,46%		0,83%	0,83%		2,04%	2,04%		-1,19%	-1,19%		-0,63%	-0,63%		0,82%	0,82%	

T	AKENR			BAGFS			IPEKE			GSRAY			ODAS		
	28.08.2012			26.03.2012			28.11.2011			2.05.2012			31.05.2021		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	0,12%	-6,76%		0,15%	5,21%		1,47%	-28,94%		-7,04%	-20,49%		2,26%	-21,11%	
9	0,24%	-6,89%		-0,50%	5,06%		-0,93%	-30,41%		-10,12%	-13,46%		-1,64%	-23,37%	
8	0,50%	-7,13%		3,31%	5,56%		1,76%	-29,48%		-0,56%	-3,33%		-1,17%	-21,73%	
7	-0,56%	-7,62%		1,01%	2,25%		-1,09%	-31,24%		-0,41%	-2,77%		-2,06%	-20,56%	
6	1,56%	-7,06%		0,45%	1,24%		1,86%	-30,15%		1,26%	-2,36%		3,67%	-18,50%	
5	-0,62%	-8,62%	-7,28%	-0,13%	0,79%	3,06%	-0,64%	-32,01%	-32,91%	-0,52%	-3,62%	-7,99%	-2,61%	-22,17%	-18,47%
4	-1,87%	-8,00%	-6,66%	-1,42%	0,92%	3,19%	-3,38%	-31,37%	-32,27%	0,74%	-3,10%	-7,47%	-0,21%	-19,57%	-15,86%
3	-0,56%	-6,13%	-4,79%	2,07%	2,35%	4,61%	-0,26%	-27,99%	-28,89%	-5,54%	-3,84%	-8,21%	-2,49%	-19,35%	-15,65%
2	-0,85%	-5,56%	-4,23%	-1,98%	0,27%	2,54%	1,86%	-27,73%	-28,63%	6,56%	1,70%	-2,67%	4,14%	-16,87%	-13,16%
1	-3,61%	-4,72%	-3,38%	-0,20%	2,25%	4,52%	-16,10%	-29,59%	-30,49%	-9,04%	-4,86%	-9,23%	-10,19%	-21,01%	-17,30%
0	1,42%	-1,11%	0,22%	4,47%	2,45%	4,72%	-10,69%	-13,48%	-14,38%	5,82%	4,18%	-0,19%	-0,62%	-10,82%	-7,11%
-1	0,33%	-2,53%	-1,19%	-0,43%	-2,02%	0,25%	-2,24%	-2,79%	-3,69%	-1,47%	-1,64%	-6,01%	-1,92%	-10,20%	-6,49%
-2	0,77%	-2,86%	-1,53%	-0,54%	-1,59%	0,68%	0,23%	-0,56%	-1,46%	8,65%	-0,17%	-4,54%	-1,81%	-8,28%	-4,58%
-3	-0,70%	-3,63%	-2,30%	-0,76%	-1,06%	1,21%	-1,20%	-0,78%	-1,68%	-2,52%	-8,82%	-13,19%	3,60%	-6,47%	-2,77%
-4	-0,23%	-2,93%	-1,59%	2,53%	-0,30%	1,97%	0,13%	0,41%	-0,49%	-4,22%	-6,30%	-10,67%	-4,14%	-10,07%	-6,36%
-5	-1,36%	-2,70%	-1,36%	-0,56%	-2,83%	-0,56%	-0,61%	0,29%	-0,61%	-6,45%	-2,08%	-6,45%	-2,23%	-5,93%	-2,23%
-6	0,30%	-1,34%		-0,78%	-2,27%		-0,66%	0,90%		1,62%	4,37%		-0,20%	-3,71%	
-7	-1,33%	-1,64%		0,31%	-1,49%		-0,08%	1,56%		3,55%	2,75%		-0,56%	-3,51%	
-8	0,10%	-0,31%		-1,33%	-1,80%		1,38%	1,63%		-1,71%	-0,80%		-4,10%	-2,95%	
-9	0,19%	-0,41%		-0,52%	-0,47%		-0,12%	0,26%		0,62%	0,91%		0,15%	1,16%	
-10	-0,60%	-0,60%		0,05%	0,05%		0,38%	0,38%		0,28%	0,28%		1,01%	1,01%	

Appendix 8. Analysis results of companies that announced bonus issue in BIST-50.

T	AKBNK			BIMAS (1)			BIMAS (2)			BIMAS (3)			ENKAI (1)			ENKAI (2)		
	23.02.2010			17.03.2010			26.03.2013			6.03.2019			30.04.2010			1.06.2011		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	0,57%	-1,47%		-0,04%	6,10%		-0,27%	1,18%		-2,81%	-13,31%		-1,17%	-6,02%		0,55%	-2,31%	
9	2,26%	-2,04%		-2,12%	6,13%		-0,84%	1,46%		-0,98%	-10,50%		-1,41%	-4,86%		-0,45%	-2,86%	
8	-0,50%	-4,30%		1,64%	8,26%		0,64%	2,29%		-0,98%	-9,52%		-1,80%	-3,45%		-0,32%	-2,42%	
7	-0,16%	-3,80%		1,40%	6,62%		0,88%	1,66%		1,41%	-8,54%		2,09%	-1,65%		-0,59%	-2,09%	
6	0,74%	-3,64%		0,22%	5,22%		1,45%	0,77%		-2,02%	-9,95%		1,41%	-3,75%		1,06%	-1,50%	
5	1,25%	-4,38%	-0,16%	0,48%	5,00%	7,25%	0,83%	-0,67%	-1,65%	0,16%	-7,93%	-1,55%	-0,83%	-5,15%	-4,54%	0,51%	-2,57%	-1,02%
4	0,22%	-5,63%	-1,41%	-0,58%	4,52%	6,78%	0,10%	-1,50%	-2,48%	0,52%	-8,09%	-1,71%	0,01%	-4,32%	-3,71%	-0,15%	-3,08%	-1,53%
3	-0,71%	-5,85%	-1,63%	-3,77%	5,11%	7,36%	-0,16%	-1,60%	-2,57%	-4,41%	-8,61%	-2,23%	-3,19%	-4,33%	-3,72%	-0,96%	-2,93%	-1,38%
2	0,49%	-5,14%	-0,93%	2,49%	8,87%	11,13%	-0,41%	-1,44%	-2,42%	2,20%	-4,20%	2,18%	0,44%	-1,13%	-0,52%	-0,70%	-1,97%	-0,42%
1	-1,57%	-5,63%	-1,42%	4,50%	6,38%	8,64%	-0,76%	-1,04%	-2,01%	3,22%	-6,39%	-0,01%	1,26%	-1,58%	-0,97%	0,14%	-1,28%	0,27%
0	-0,23%	-4,07%	0,15%	4,67%	1,88%	4,14%	0,64%	-0,28%	-1,25%	0,48%	-9,62%	-3,23%	1,07%	-2,84%	-2,23%	0,87%	-1,42%	0,13%
-1	0,11%	-3,83%	0,38%	0,19%	-2,78%	-0,53%	1,79%	-0,92%	-1,89%	-2,09%	-10,10%	-3,72%	-0,21%	-3,91%	-3,30%	-0,44%	-2,29%	-0,74%
-2	0,11%	-3,95%	0,27%	0,75%	-2,97%	-0,71%	-0,69%	-2,71%	-3,69%	-2,28%	-8,01%	-1,63%	-0,44%	-3,71%	-3,10%	2,37%	-1,85%	-0,30%
-3	-0,30%	-4,06%	0,16%	-1,54%	-3,72%	-1,46%	-2,19%	-2,02%	-3,00%	1,74%	-5,74%	0,65%	0,16%	-3,27%	-2,66%	-1,54%	-4,22%	-2,67%
-4	0,08%	-3,76%	0,46%	0,11%	-2,18%	0,07%	-0,27%	0,17%	-0,81%	-2,65%	-7,47%	-1,09%	-1,53%	-3,44%	-2,82%	-0,20%	-2,68%	-1,13%
-5	0,38%	-3,84%	0,38%	-0,03%	-2,29%	-0,03%	-0,54%	0,44%	-0,54%	1,56%	-4,82%	1,56%	-1,29%	-1,90%	-1,29%	-0,93%	-2,48%	-0,93%
-6	-2,38%	-4,22%		-1,36%	-2,25%		0,06%	0,97%		-2,29%	-6,38%		1,12%	-0,61%		-0,16%	-1,55%	
-7	1,16%	-1,84%		0,68%	-0,90%		-1,03%	0,91%		1,12%	-4,09%		0,53%	-1,73%		-1,51%	-1,40%	
-8	-1,64%	-3,00%		-1,22%	-1,58%		-1,07%	1,95%		-5,67%	-5,21%		-2,03%	-2,26%		1,66%	0,11%	
-9	1,06%	-1,36%		-1,42%	-0,36%		0,65%	3,01%		-0,21%	0,46%		0,19%	-0,24%		-1,06%	-1,55%	
-10	-2,42%	-2,42%		1,05%	1,05%		2,36%	2,36%		0,67%	0,67%		-0,42%	-0,42%		-0,49%	-0,49%	

T	ENKAI (3)			ENKAI (4)			ENKAI (5)			ENKAI (6)			ENKAI (7)			ENKAI (8)		
	2.05.2012			18.04.2013			4.04.2014			1.04.2015			31.03.2016			31.03.2017		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	-3,28%	-10,45%		0,62%	-4,26%		0,80%	-6,91%		1,80%	9,49%		-0,47%	0,61%		0,95%	-0,97%	
9	-4,32%	-7,17%		-0,30%	-4,87%		1,52%	-7,71%		-1,68%	7,69%		0,22%	1,09%		-2,62%	-1,92%	
8	0,21%	-2,85%		-2,26%	-4,57%		1,13%	-9,24%		1,59%	9,37%		-1,09%	0,86%		0,20%	0,70%	
7	0,63%	-3,06%		0,36%	-2,32%		-2,63%	-10,37%		0,24%	7,79%		-0,33%	1,95%		-0,36%	0,50%	
6	-0,66%	-3,69%		0,39%	-2,68%		-0,57%	-7,74%		1,55%	7,55%		0,62%	2,28%		0,02%	0,86%	
5	-1,70%	-3,03%	-4,48%	-0,45%	-3,07%	-5,28%	2,67%	-7,17%	-0,99%	0,94%	5,99%	5,44%	-0,62%	1,66%	-4,03%	-3,17%	0,83%	-2,04%
4	-2,44%	-1,32%	-2,78%	-1,17%	-2,62%	-4,83%	-0,46%	-9,84%	-3,66%	1,39%	5,05%	4,50%	-0,53%	2,28%	-3,41%	0,47%	4,00%	1,13%
3	-1,17%	1,11%	-0,34%	0,84%	-1,45%	-3,67%	0,88%	-9,38%	-3,20%	0,35%	3,66%	3,11%	-1,87%	2,81%	-2,89%	1,08%	3,53%	0,66%
2	1,37%	2,28%	0,82%	-2,05%	-2,30%	-4,51%	-0,10%	-10,26%	-4,08%	-1,02%	3,31%	2,76%	0,47%	4,68%	-1,02%	0,11%	2,45%	-0,43%
1	3,15%	0,91%	-0,55%	1,30%	-0,24%	-2,45%	-1,37%	-10,16%	-3,98%	-0,12%	4,33%	3,77%	-0,84%	4,21%	-1,48%	0,59%	2,34%	-0,53%
0	0,99%	-2,24%	-3,69%	-0,86%	-1,55%	-3,76%	-1,52%	-8,78%	-2,60%	0,16%	4,44%	3,89%	0,81%	5,06%	-0,64%	-0,36%	1,76%	-1,12%
-1	1,08%	-3,22%	-4,68%	1,06%	-0,69%	-2,90%	-1,10%	-7,26%	-1,09%	1,19%	4,28%	3,73%	-2,00%	4,25%	-1,45%	0,72%	2,11%	-0,76%
-2	-1,38%	-4,31%	-5,76%	-0,29%	-1,75%	-3,96%	-1,25%	-6,17%	0,01%	0,17%	3,09%	2,54%	-0,25%	6,25%	0,55%	-1,42%	1,39%	-1,48%
-3	-2,08%	-2,93%	-4,38%	-2,17%	-1,46%	-3,67%	-0,20%	-4,92%	1,26%	0,96%	2,93%	2,37%	0,63%	6,51%	0,81%	-1,22%	2,81%	-0,07%
-4	-1,41%	-0,84%	-2,30%	-1,76%	0,71%	-1,50%	0,71%	-4,71%	1,46%	2,43%	1,96%	1,41%	0,21%	5,88%	0,18%	0,21%	4,03%	1,16%
-5	-0,89%	0,57%	-0,89%	0,26%	2,47%	0,26%	0,75%	-5,42%	0,75%	-1,02%	-0,47%	-1,02%	-0,03%	5,67%	-0,03%	0,95%	3,83%	0,95%
-6	0,65%	1,46%		0,40%	2,21%		-0,40%	-6,18%		-0,65%	0,55%		0,91%	5,70%		-1,34%	2,88%	
-7	-2,07%	0,81%		1,30%	1,81%		-2,49%	-5,78%		2,04%	1,21%		0,24%	4,78%		2,90%	4,22%	
-8	1,32%	2,88%		0,69%	0,51%		1,39%	-3,30%		0,00%	-0,84%		-1,92%	4,55%		0,76%	1,32%	
-9	0,77%	1,56%		0,06%	-0,19%		-2,61%	-4,69%		-2,40%	-0,83%		3,19%	6,46%		0,97%	0,56%	
-10	0,79%	0,79%		-0,25%	-0,25%		-2,08%	-2,08%		1,56%	1,56%		3,28%	3,28%		-0,41%	-0,41%	

T	ENKAI (9)			ENKAI (10)			EREGL (1)			EREGL (2)			EREGL (3)			ISCTR		
	12.04.2018			6.04.2020			26.01.2011			16.02.2012			20.02.2013			25.02.2022		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	-0,01%	-5,74%		-0,04%	6,83%		-1,54%	3,94%		-0,11%	-4,98%		0,50%	-8,02%		-0,38%	-8,75%	
9	-0,85%	-5,73%		5,01%	6,88%		1,99%	5,48%		-1,18%	-4,87%		-0,32%	-8,52%		-0,90%	-8,37%	
8	-0,35%	-4,88%		-1,63%	1,87%		0,39%	3,49%		0,18%	-3,69%		-2,04%	-8,19%		2,26%	-7,47%	
7	-1,82%	-4,53%		-3,61%	3,50%		-0,69%	3,09%		2,73%	-3,87%		-0,42%	-6,15%		-0,62%	-9,74%	
6	-0,89%	-2,71%		-4,95%	7,11%		-0,60%	3,78%		2,65%	-6,61%		0,42%	-5,74%		-2,13%	-9,12%	
5	-0,18%	-1,83%	-3,14%	6,25%	12,07%	13,59%	-1,77%	4,39%	1,72%	0,30%	-9,25%	-2,74%	0,93%	-6,16%	-1,88%	-0,38%	-6,99%	-6,16%
4	0,69%	-1,65%	-2,96%	2,58%	5,81%	7,34%	-0,49%	6,16%	3,49%	-0,81%	-9,55%	-3,04%	0,76%	-7,08%	-2,81%	-1,48%	-6,60%	-5,78%
3	-1,55%	-2,34%	-3,66%	-0,36%	3,24%	4,76%	0,36%	6,65%	3,98%	-1,08%	-8,74%	-2,22%	2,40%	-7,84%	-3,57%	-0,11%	-5,12%	-4,29%
2	1,54%	-0,79%	-2,10%	2,42%	3,60%	5,12%	0,55%	6,29%	3,62%	-0,08%	-7,66%	-1,14%	-1,58%	-10,24%	-5,97%	-0,10%	-5,01%	-4,18%
1	-2,18%	-2,33%	-3,64%	-3,20%	1,18%	2,71%	0,12%	5,73%	3,07%	1,18%	-7,57%	-1,06%	0,14%	-8,66%	-4,39%	0,74%	-4,91%	-4,09%
0	-0,92%	-0,15%	-1,46%	2,35%	4,38%	5,90%	-3,29%	5,62%	2,95%	-1,90%	-8,75%	-2,24%	-3,36%	-8,80%	-4,53%	-1,19%	-5,65%	-4,82%
-1	-0,89%	0,78%	-0,54%	1,21%	2,03%	3,55%	2,83%	8,91%	6,25%	-0,63%	-6,86%	-0,34%	-0,27%	-5,44%	-1,17%	-2,24%	-4,46%	-3,63%
-2	-0,32%	1,66%	0,35%	-3,01%	0,82%	2,35%	2,59%	6,08%	3,41%	-0,08%	-6,23%	0,29%	-1,16%	-5,17%	-0,90%	-0,94%	-2,22%	-1,39%
-3	-2,91%	1,99%	0,68%	0,34%	3,83%	5,35%	0,39%	3,49%	0,82%	1,48%	-6,14%	0,37%	-0,40%	-4,01%	0,26%	0,66%	-1,28%	-0,46%
-4	2,82%	4,90%	3,58%	4,40%	3,49%	5,01%	0,03%	3,09%	0,43%	0,57%	-7,62%	-1,10%	-0,96%	-3,61%	0,66%	-0,80%	-1,94%	-1,11%
-5	0,76%	2,07%	0,76%	0,61%	-0,91%	0,61%	0,40%	3,07%	0,40%	-1,67%	-8,19%	-1,67%	1,62%	-2,65%	1,62%	-0,31%	-1,14%	-0,31%
-6	0,63%	1,31%		-2,53%	-1,52%		0,19%	2,66%		-1,26%	-6,52%		-2,10%	-4,27%		-0,11%	-0,83%	
-7	0,15%	0,69%		-0,29%	1,00%		1,40%	2,47%		-0,91%	-5,26%		0,06%	-2,17%		-1,36%	-0,72%	
-8	-0,88%	0,53%		-2,50%	1,29%		0,55%	1,07%		-1,11%	-4,35%		-1,78%	-2,24%		0,18%	0,64%	
-9	1,29%	1,41%		-0,49%	3,79%		-0,39%	0,52%		-3,12%	-3,23%		-0,78%	-0,46%		-0,62%	0,46%	
-10	0,13%	0,13%		4,28%	4,28%		0,92%	0,92%		-0,12%	-0,12%		0,32%	0,32%		1,08%	1,08%	

T	KCHOL			KRDMD (1)			KRDMD (2)			PETKM (1)			PETKM (2)			PETKM (3)		
	7.05.2012			13.05.2013			4.07.2014			28.04.2010			9.12.2015			16.05.2018		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	0,42%	-3,68%		-2,22%	-22,98%		-0,54%	12,18%		-0,57%	21,83%		-0,56%	8,60%		-0,82%	-38,87%	
9	-0,24%	-4,10%		-0,60%	-20,76%		-1,15%	12,72%		0,62%	22,40%		-1,55%	9,15%		-1,05%	-38,06%	
8	1,11%	-3,86%		0,95%	-20,16%		3,70%	13,87%		3,76%	21,78%		0,15%	10,70%		-0,75%	-37,01%	
7	-2,83%	-4,97%		1,93%	-21,11%		-1,59%	10,16%		-0,36%	18,02%		-0,12%	10,55%		0,72%	-36,26%	
6	0,43%	-2,14%		0,84%	-23,04%		2,09%	11,75%		1,21%	18,38%		2,59%	10,67%		-1,49%	-36,98%	
5	-0,01%	-2,57%	-0,77%	-4,19%	-23,88%	-16,18%	-0,03%	9,66%	5,21%	-0,37%	17,17%	12,02%	0,15%	8,08%	5,38%	-2,41%	-35,49%	-17,40%
4	-1,03%	-2,55%	-0,76%	-8,09%	-19,69%	-11,99%	3,22%	9,69%	5,25%	1,48%	17,54%	12,39%	-0,04%	7,93%	5,23%	-1,34%	-33,08%	-14,98%
3	-1,67%	-1,52%	0,28%	0,38%	-11,60%	-3,89%	2,07%	6,47%	2,03%	-1,51%	16,06%	10,91%	-1,53%	7,97%	5,28%	-2,15%	-31,74%	-13,65%
2	0,59%	0,15%	1,95%	-3,87%	-11,98%	-4,28%	-2,67%	4,41%	-0,04%	2,26%	17,57%	12,42%	-1,66%	9,50%	6,80%	0,40%	-29,59%	-11,49%
1	1,04%	-0,44%	1,35%	-2,31%	-8,10%	-0,40%	-4,38%	7,07%	2,63%	11,09%	15,31%	10,16%	3,17%	11,16%	8,46%	-4,46%	-29,99%	-11,89%
0	0,38%	-1,49%	0,31%	0,12%	-5,79%	1,91%	1,78%	11,46%	7,01%	-1,93%	4,23%	-0,92%	1,85%	7,98%	5,29%	4,61%	-25,53%	-7,43%
-1	0,80%	-1,86%	-0,07%	-2,00%	-5,91%	1,79%	-0,32%	9,67%	5,23%	-0,54%	6,16%	1,00%	1,40%	6,14%	3,44%	-2,99%	-30,14%	-12,05%
-2	-0,94%	-2,67%	-0,87%	2,92%	-3,91%	3,79%	4,95%	9,99%	5,54%	2,74%	6,70%	1,55%	-1,28%	4,73%	2,04%	0,82%	-27,15%	-9,06%
-3	0,39%	-1,73%	0,07%	-2,23%	-6,83%	0,87%	0,52%	5,04%	0,59%	1,40%	3,96%	-1,19%	0,85%	6,01%	3,32%	-5,39%	-27,97%	-9,87%
-4	-0,46%	-2,12%	-0,32%	-3,02%	-4,60%	3,10%	0,84%	4,53%	0,08%	1,15%	2,56%	-2,59%	1,27%	5,17%	2,47%	-2,23%	-22,58%	-4,48%
-5	0,14%	-1,65%	0,14%	6,12%	-1,58%	6,12%	-0,76%	3,69%	-0,76%	-3,74%	1,42%	-3,74%	1,20%	3,90%	1,20%	-2,25%	-20,35%	-2,25%
-6	-1,03%	-1,80%		-3,10%	-7,70%		3,36%	4,45%		-1,13%	5,15%		-1,77%	2,70%		-5,66%	-18,09%	
-7	-1,03%	-0,76%		-5,11%	-4,60%		-0,71%	1,09%		2,42%	6,28%		3,81%	4,47%		-1,73%	-12,44%	
-8	0,75%	0,27%		-2,37%	0,51%		3,62%	1,80%		3,10%	3,86%		-1,14%	0,66%		-10,35%	-10,71%	
-9	-0,70%	-0,48%		-0,29%	2,87%		-3,77%	-1,82%		0,40%	0,77%		-0,61%	1,80%		-0,40%	-0,35%	
-10	0,22%	0,22%		3,16%	3,16%		1,95%	1,95%		0,36%	0,36%		2,41%	2,41%		0,05%	0,05%	

T	PETKM (4)			PETKM (5)			SISE (1)			SISE (2)			SISE (3)			SISE (4)		
	30.04.2019			9.10.2020			10.05.2010			26.05.2011			11.06.2012			16.05.2013		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	-2,14%	14,96%		-2,65%	-2,35%		-0,47%	0,72%		-1,74%	2,79%		-0,10%	5,05%		-0,20%	6,54%	
9	2,53%	17,10%		-2,34%	0,30%		-0,15%	1,20%		-0,31%	4,54%		0,03%	5,15%		-0,58%	6,74%	
8	0,06%	14,56%		-1,49%	2,63%		-1,13%	1,34%		-0,96%	4,84%		-0,62%	5,12%		1,49%	7,32%	
7	4,81%	14,50%		0,05%	4,12%		0,86%	2,48%		2,82%	5,81%		-0,80%	5,74%		3,45%	5,82%	
6	2,98%	9,69%		-4,28%	4,07%		-0,79%	1,62%		-1,64%	2,98%		-2,25%	6,54%		0,52%	2,37%	
5	2,16%	6,71%	4,51%	-0,64%	8,34%	9,66%	-0,49%	2,41%	-0,62%	-3,02%	4,63%	-5,41%	-0,72%	8,79%	5,91%	0,24%	1,85%	3,02%
4	2,88%	4,55%	2,35%	-3,40%	8,98%	10,30%	2,39%	2,90%	-0,12%	-6,35%	7,65%	-2,39%	2,63%	9,51%	6,64%	0,08%	1,61%	2,79%
3	-0,34%	1,67%	-0,53%	6,61%	12,38%	13,69%	-0,99%	0,51%	-2,51%	1,48%	14,00%	3,96%	0,20%	6,88%	4,00%	-1,80%	1,53%	2,71%
2	1,42%	2,02%	-0,18%	-2,07%	5,77%	7,09%	-3,14%	1,51%	-1,52%	4,90%	12,52%	2,48%	2,45%	6,68%	3,80%	2,90%	3,34%	4,51%
1	0,34%	0,59%	-1,61%	0,22%	7,84%	9,16%	-1,54%	4,65%	1,62%	-5,18%	7,61%	-2,43%	1,42%	4,23%	1,36%	-0,18%	0,44%	1,61%
0	-0,99%	0,25%	-1,95%	3,60%	7,62%	8,94%	1,84%	6,19%	3,17%	2,05%	12,79%	2,75%	0,43%	2,81%	-0,06%	-0,30%	0,61%	1,79%
-1	-0,36%	1,24%	-0,96%	0,77%	4,02%	5,33%	0,68%	4,35%	1,33%	1,99%	10,74%	0,70%	0,50%	2,38%	-0,49%	1,57%	0,91%	2,09%
-2	-0,42%	1,59%	-0,61%	1,95%	3,25%	4,56%	0,39%	3,68%	0,65%	-3,54%	8,74%	-1,29%	-1,83%	1,88%	-1,00%	0,08%	-0,66%	0,51%
-3	0,52%	2,01%	-0,19%	-0,80%	1,30%	2,61%	-0,82%	3,29%	0,27%	-1,99%	12,29%	2,25%	-1,46%	3,71%	0,83%	-2,02%	-0,74%	0,43%
-4	-0,97%	1,50%	-0,70%	1,89%	2,09%	3,41%	0,38%	4,11%	1,08%	4,44%	14,28%	4,24%	1,43%	5,17%	2,29%	0,25%	1,28%	2,45%
-5	0,27%	2,47%	0,27%	1,52%	0,21%	1,52%	0,70%	3,72%	0,70%	-0,20%	9,84%	-0,20%	0,86%	3,74%	0,86%	2,20%	1,03%	2,20%
-6	-1,60%	2,20%		-0,37%	-1,31%		0,62%	3,02%		5,58%	10,04%		3,93%	2,88%		0,91%	-1,17%	
-7	1,49%	3,80%		0,70%	-0,94%		0,45%	2,40%		2,50%	4,46%		-1,83%	-1,05%		-0,21%	-2,08%	
-8	1,62%	2,31%		-1,11%	-1,64%		-0,16%	1,96%		-0,75%	1,96%		-1,61%	0,78%		-0,37%	-1,87%	
-9	0,32%	0,69%		-1,31%	-0,53%		1,56%	2,12%		0,92%	2,72%		1,64%	2,39%		-0,76%	-1,50%	
-10	0,37%	0,37%		0,78%	0,78%		0,56%	0,56%		1,80%	1,80%		0,75%	0,75%		-0,74%	-0,74%	

	SISE (5)			SISE (6)			SISE (7)			SISE (8)			SKBNK (1)			SKBNK (2)		
	15.05.2014			14.05.2015			30.05.2016			26.05.2017			17.02.2010			28.01.2011		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
T																		
10	2,64%	5,41%		2,01%	0,94%		2,57%	5,78%		-0,32%	4,80%		-1,00%	-14,67%		-0,99%	-2,61%	
9	0,91%	2,77%		-1,56%	-1,06%		1,20%	3,21%		0,02%	5,13%		-0,23%	-13,67%		1,08%	-1,62%	
8	-0,58%	1,86%		-0,54%	0,50%		0,17%	2,01%		-0,05%	5,11%		1,92%	-13,44%		-0,39%	-2,70%	
7	1,96%	2,44%		0,29%	1,04%		-0,36%	1,84%		-0,20%	5,15%		0,78%	-15,36%		0,17%	-2,31%	
6	0,78%	0,48%		-0,46%	0,75%		3,28%	2,20%		-0,90%	5,35%		0,80%	-16,14%		-0,57%	-2,47%	
5	-1,13%	-0,30%	-0,29%	0,93%	1,20%	4,66%	-1,21%	-1,08%	-3,08%	1,96%	6,25%	1,96%	-0,93%	-16,94%	-6,34%	0,22%	-1,91%	0,72%
4	0,62%	0,83%	0,84%	0,32%	0,28%	3,73%	0,79%	0,13%	-1,88%	-0,33%	4,29%	-0,54%	-4,43%	-16,01%	-5,41%	-0,68%	-2,12%	0,51%
3	-0,39%	0,21%	0,21%	2,10%	-0,04%	3,41%	-1,70%	-0,66%	-2,67%	-0,21%	4,62%	-0,21%	-1,15%	-11,58%	-0,98%	-2,39%	-1,44%	1,19%
2	-0,33%	0,60%	0,60%	-0,10%	-2,13%	1,32%	0,85%	1,04%	-0,96%	-0,34%	4,83%	-0,17%	-1,72%	-10,43%	0,17%	1,44%	0,95%	3,58%
1	1,00%	0,93%	0,94%	1,75%	-2,03%	1,42%	1,42%	0,19%	-1,82%	0,17%	5,17%	0,17%	1,44%	-8,71%	1,89%	3,08%	-0,49%	2,14%
0	-0,87%	-0,07%	-0,06%	-0,99%	-3,78%	-0,33%	-0,43%	-1,23%	-3,23%	1,14%	5,00%	0,79%	-0,82%	-10,15%	0,45%	0,22%	-3,57%	-0,94%
-1	-1,09%	0,80%	0,81%	-0,67%	-2,79%	0,66%	0,20%	-0,80%	-2,80%	-0,35%	3,87%	-0,35%	-0,80%	-9,33%	1,27%	0,75%	-3,79%	-1,16%
-2	0,17%	1,89%	1,90%	-1,89%	-2,12%	1,33%	-0,76%	-0,99%	-3,00%	2,37%	4,22%	0,86%	2,85%	-8,53%	2,07%	-0,48%	-4,54%	-1,91%
-3	1,38%	1,72%	1,73%	0,84%	-0,23%	3,23%	0,09%	-0,24%	-2,24%	-1,51%	1,85%	-1,51%	1,38%	-11,38%	-0,78%	-1,08%	-4,06%	-1,43%
-4	-0,50%	0,34%	0,35%	1,18%	-1,06%	2,39%	-1,18%	-0,33%	-2,33%	0,70%	3,35%	0,74%	-0,84%	-12,76%	-2,16%	-0,70%	-2,98%	-0,35%
-5	0,85%	0,84%	0,85%	1,21%	-2,24%	1,21%	-1,15%	0,86%	-1,15%	0,04%	2,65%	0,04%	-1,32%	-11,92%	-1,32%	0,35%	-2,28%	0,35%
-6	0,25%	-0,01%		1,18%	-3,45%		2,97%	2,01%		-1,36%	2,61%		-2,68%	-10,60%		-0,65%	-2,63%	
-7	-0,18%	-0,26%		-0,63%	-4,63%		-1,98%	-0,96%		-1,24%	3,97%		-3,46%	-7,92%		-1,15%	-1,98%	
-8	-0,66%	-0,07%		-0,79%	-4,00%		-0,71%	1,01%		2,64%	5,21%		-4,93%	-4,46%		-1,64%	-0,83%	
-9	-0,51%	0,58%		-2,48%	-3,21%		2,58%	1,72%		-1,46%	2,57%		-0,07%	0,46%		0,92%	0,81%	
-10	1,09%	1,09%		-0,72%	-0,72%		-0,86%	-0,86%		4,03%	4,03%		0,53%	0,53%		-0,11%	-0,11%	

T	THYAO (1)			THYAO (2)			THYAO (3)			SNGYO (1)			SNGYO (2)			ASELS (1)		
	5.04.2010			22.04.2011			8.04.2013			10.05.2010			6.04.2011			31.05.2012		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	-1,91%	-18,51%		2,57%	7,02%		-0,03%	-10,67%		-0,44%	-10,69%		1,00%	-4,42%		-0,71%	1,07%	
9	1,46%	-16,59%		0,57%	4,45%		-0,89%	-10,64%		-0,76%	-10,25%		1,78%	-5,42%		2,64%	1,78%	
8	1,69%	-18,05%		3,40%	3,88%		-1,00%	-9,75%		0,10%	-9,49%		-4,24%	-7,20%		-0,48%	-0,86%	
7	-1,78%	-19,74%		-0,09%	0,48%		1,14%	-8,75%		-1,49%	-9,59%		-0,27%	-2,95%		1,07%	-0,38%	
6	0,58%	-17,96%		-0,58%	0,57%		1,82%	-9,89%		-1,23%	-8,10%		0,38%	-2,69%		-0,85%	-1,45%	
5	-2,01%	-18,54%	-10,92%	-0,49%	1,15%	-0,03%	1,41%	-11,71%	-8,39%	-4,32%	-6,88%	-2,85%	0,18%	-3,07%	-2,01%	-3,00%	-0,60%	5,66%
4	-1,25%	-16,53%	-8,91%	-0,02%	1,64%	0,46%	-3,68%	-13,12%	-9,79%	1,15%	-2,56%	1,47%	-0,18%	-3,25%	-2,19%	4,75%	2,40%	8,67%
3	-2,11%	-15,27%	-7,65%	0,02%	1,66%	0,48%	-1,71%	-9,44%	-6,11%	2,29%	-3,70%	0,32%	-1,08%	-3,08%	-2,02%	2,13%	-2,34%	3,92%
2	-2,58%	-13,16%	-5,54%	-0,11%	1,64%	0,47%	-1,57%	-7,73%	-4,40%	4,36%	-5,99%	-1,97%	-0,19%	-2,00%	-0,94%	-0,13%	-4,48%	1,79%
1	-2,03%	-10,58%	-2,96%	1,13%	1,75%	0,58%	0,61%	-6,15%	-2,83%	-1,16%	-10,36%	-6,33%	-0,34%	-1,81%	-0,75%	2,21%	-4,34%	1,92%
0	-0,11%	-8,55%	-0,93%	0,08%	0,62%	-0,55%	-1,52%	-6,76%	-3,44%	2,07%	-9,19%	-5,16%	-1,46%	-1,47%	-0,41%	0,52%	-6,55%	-0,29%
-1	1,12%	-8,43%	-0,81%	-0,49%	0,54%	-0,63%	-2,24%	-5,25%	-1,92%	-3,99%	-11,26%	-7,24%	-0,61%	-0,01%	1,05%	-0,12%	-7,07%	-0,80%
-2	-1,72%	-9,55%	-1,93%	-0,42%	1,04%	-0,14%	0,94%	-3,01%	0,32%	-1,27%	-7,28%	-3,25%	-0,10%	0,60%	1,66%	0,78%	-6,95%	-0,68%
-3	-0,18%	-7,83%	-0,21%	1,57%	1,46%	0,28%	0,96%	-3,95%	-0,63%	-1,85%	-6,00%	-1,97%	0,87%	0,71%	1,77%	0,05%	-7,73%	-1,46%
-4	-0,52%	-7,65%	-0,03%	-0,38%	-0,12%	-1,29%	-0,76%	-4,92%	-1,59%	-1,24%	-4,15%	-0,12%	1,70%	-0,16%	0,90%	0,23%	-7,77%	-1,51%
-5	0,49%	-7,13%	0,49%	-0,92%	0,26%	-0,92%	-0,83%	-4,15%	-0,83%	1,12%	-2,91%	1,12%	-0,80%	-1,86%	-0,80%	-1,74%	-8,00%	-1,74%
-6	-2,77%	-7,62%		-0,26%	1,18%		0,04%	-3,33%		-1,35%	-4,03%		-0,17%	-1,06%		-0,86%	-6,26%	
-7	0,31%	-4,85%		-0,69%	1,44%		-0,97%	-3,37%		-1,47%	-2,68%		-1,94%	-0,89%		-1,76%	-5,40%	
-8	-1,33%	-5,16%		1,91%	2,13%		-0,85%	-2,39%		-0,39%	-1,21%		1,16%	1,04%		0,86%	-3,64%	
-9	-1,92%	-3,83%		0,58%	0,22%		-2,78%	-1,55%		-0,25%	-0,83%		-0,04%	-0,11%		-2,04%	-4,50%	
-10	-1,91%	-1,91%		-0,35%	-0,35%		1,23%	1,23%		-0,58%	-0,58%		-0,07%	-0,07%		-2,46%	-2,46%	

T	ASELS (2)			ASELS (3)			SASA (1)			SASA (2)			SASA (3)			SASA (4)		
	24.03.2016			29.06.2020			18.04.2018			10.04.2019			5.04.2021			1.04.2022		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	0,43%	3,72%		-2,06%	-12,58%		-3,23%	-8,22%		0,30%	1,35%		-3,01%	-13,70%		-0,81%	1,98%	
9	1,68%	3,29%		0,11%	-10,52%		-0,76%	-4,99%		-0,77%	1,05%		-1,63%	-10,70%		0,01%	2,79%	
8	1,05%	1,61%		1,40%	-10,63%		-2,87%	-4,23%		-0,69%	1,83%		-3,42%	-9,06%		0,18%	2,78%	
7	0,38%	0,55%		-0,13%	-12,03%		1,54%	-1,36%		2,14%	2,52%		9,16%	-5,64%		-1,96%	2,60%	
6	0,58%	0,18%		-0,81%	-11,90%		-0,94%	-2,90%		0,66%	0,38%		-1,45%	-14,81%		-1,70%	4,56%	
5	0,00%	-0,40%	0,75%	-2,37%	-11,09%	-7,42%	1,87%	-1,96%	7,93%	-1,42%	-0,29%	-6,65%	-4,41%	-13,35%	-14,75%	1,75%	6,26%	-1,33%
4	-0,68%	-0,40%	0,75%	-0,80%	-8,72%	-5,05%	-3,68%	-3,82%	6,06%	-0,82%	1,14%	-5,22%	-3,13%	-8,94%	-10,34%	0,15%	4,52%	-3,08%
3	-0,53%	0,28%	1,43%	-1,40%	-7,93%	-4,25%	-0,60%	-0,14%	9,74%	1,24%	1,96%	-4,40%	-0,80%	-5,82%	-7,21%	0,63%	4,36%	-3,23%
2	0,13%	0,81%	1,96%	1,76%	-6,52%	-2,85%	-1,20%	0,46%	10,35%	-1,57%	0,72%	-5,64%	-2,57%	-5,02%	-6,41%	-1,13%	3,74%	-3,86%
1	0,79%	0,69%	1,84%	0,29%	-8,28%	-4,61%	3,79%	1,66%	11,55%	-0,78%	2,29%	-4,07%	-2,74%	-2,45%	-3,84%	0,46%	4,87%	-2,73%
0	1,95%	-0,10%	1,05%	0,62%	-8,57%	-4,90%	5,24%	-2,13%	7,75%	4,15%	3,07%	-3,29%	-1,44%	0,30%	-1,10%	-1,70%	4,40%	-3,19%
-1	-2,03%	-2,05%	-0,90%	-0,49%	-9,19%	-5,52%	3,96%	-7,37%	2,51%	-1,29%	-1,08%	-7,44%	4,02%	1,74%	0,34%	-1,08%	6,11%	-1,49%
-2	0,64%	-0,02%	1,13%	-0,20%	-8,70%	-5,03%	9,51%	-11,33%	-1,44%	-0,29%	0,21%	-6,15%	0,69%	-2,28%	-3,68%	-0,17%	7,19%	-0,41%
-3	1,38%	-0,67%	0,49%	-1,53%	-8,50%	-4,83%	-2,85%	-20,84%	-10,95%	0,18%	0,50%	-5,86%	-0,57%	-2,97%	-4,37%	-3,87%	7,36%	-0,24%
-4	0,30%	-2,05%	-0,90%	-0,85%	-6,98%	-3,30%	-3,94%	-17,98%	-8,10%	-3,28%	0,32%	-6,04%	-0,76%	-2,40%	-3,80%	1,10%	11,22%	3,63%
-5	-1,20%	-2,35%	-1,20%	-2,45%	-6,13%	-2,45%	-4,16%	-14,05%	-4,16%	-2,76%	3,60%	-2,76%	-3,04%	-1,64%	-3,04%	2,53%	10,12%	2,53%
-6	-0,20%	-1,15%		-1,43%	-3,67%		-5,77%	-9,89%		2,87%	6,36%		-4,89%	1,39%		4,96%	7,60%	
-7	0,65%	-0,95%		0,28%	-2,24%		-13,06%	-4,12%		2,11%	3,49%		7,57%	6,28%		-0,11%	2,63%	
-8	-0,99%	-1,60%		-1,99%	-2,51%		8,80%	8,94%		-0,37%	1,38%		9,18%	-1,29%		2,80%	2,74%	
-9	-0,05%	-0,61%		-0,13%	-0,53%		2,02%	0,14%		1,06%	1,75%		-9,14%	-10,47%		-2,07%	-0,06%	
-10	-0,56%	-0,56%		-0,40%	-0,40%		-1,88%	-1,88%		0,69%	0,69%		-1,34%	-1,34%		2,01%	2,01%	

T	ANSGR			ECILC			GUBRF			ISGYO (1)			ISGYO (2)			SELEC		
	10.03.2010			23.06.2016			25.07.2013			11.04.2011			4.04.2016			28.04.2010		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	0,53%	-0,41%		-2,59%	7,54%		-3,38%	16,57%		0,83%	0,52%		-0,81%	3,22%		-0,04%	-5,66%	
9	-1,99%	-0,94%		-0,66%	10,13%		3,91%	19,95%		0,37%	-0,31%		0,11%	4,03%		-1,54%	-5,62%	
8	0,88%	1,06%		0,91%	10,79%		1,03%	16,05%		-0,20%	-0,68%		-0,69%	3,91%		1,47%	-4,09%	
7	0,06%	0,17%		-2,90%	9,88%		2,46%	15,01%		0,10%	-0,49%		-1,97%	4,60%		-1,58%	-5,55%	
6	-2,70%	0,12%		3,33%	12,78%		-2,01%	12,56%		-0,03%	-0,58%		1,23%	6,58%		0,51%	-3,98%	
5	3,12%	2,82%	3,70%	-1,12%	9,44%	9,88%	-1,27%	14,57%	12,45%	0,03%	-0,55%	-0,64%	0,09%	5,35%	4,21%	-1,40%	-4,48%	-3,84%
4	1,50%	-0,30%	0,58%	2,27%	10,56%	11,00%	0,33%	15,84%	13,72%	-0,17%	-0,58%	-0,66%	-0,86%	5,26%	4,12%	0,12%	-3,08%	-2,44%
3	-1,23%	-1,80%	-0,92%	4,20%	8,29%	8,72%	-1,39%	15,51%	13,40%	-0,17%	-0,41%	-0,49%	0,80%	6,12%	4,98%	1,08%	-3,20%	-2,56%
2	-0,62%	-0,57%	0,31%	3,13%	4,09%	4,53%	-4,46%	16,90%	14,79%	-0,28%	-0,24%	-0,33%	2,41%	5,33%	4,18%	-1,03%	-4,28%	-3,63%
1	-1,78%	0,06%	0,94%	1,34%	0,96%	1,39%	14,69%	21,36%	19,24%	3,09%	0,04%	-0,05%	0,78%	2,91%	1,77%	-2,16%	-3,25%	-2,61%
0	0,18%	1,84%	2,72%	-1,93%	-0,38%	0,05%	0,62%	6,67%	4,56%	0,43%	-3,05%	-3,14%	-0,44%	2,13%	0,99%	0,14%	-1,10%	-0,45%
-1	-1,09%	1,66%	2,54%	4,95%	1,55%	1,98%	2,36%	6,05%	3,94%	0,40%	-3,48%	-3,57%	-0,31%	2,57%	1,43%	-0,75%	-1,24%	-0,59%
-2	-0,10%	2,76%	3,64%	-0,45%	-3,40%	-2,97%	-0,82%	3,69%	1,57%	-2,32%	-3,88%	-3,96%	-0,42%	2,89%	1,74%	-0,73%	-0,49%	0,15%
-3	0,01%	2,86%	3,74%	-0,22%	-2,95%	-2,52%	2,30%	4,51%	2,39%	-0,87%	-1,56%	-1,64%	0,43%	3,31%	2,17%	-0,01%	0,23%	0,88%
-4	-0,47%	2,84%	3,72%	-1,72%	-2,73%	-2,30%	-0,39%	2,21%	0,10%	0,41%	-0,69%	-0,77%	1,24%	2,88%	1,73%	0,27%	0,24%	0,89%
-5	4,20%	3,32%	4,20%	-0,58%	-1,01%	-0,58%	0,48%	2,60%	0,48%	-1,18%	-1,09%	-1,18%	0,50%	1,64%	0,50%	0,62%	-0,03%	0,62%
-6	-1,14%	-0,88%		0,34%	-0,43%		-0,11%	2,12%		0,89%	0,09%		-0,08%	1,14%		-0,05%	-0,64%	
-7	3,67%	0,26%		0,15%	-0,77%		1,43%	2,23%		-0,35%	-0,81%		0,62%	1,23%		-0,07%	-0,60%	
-8	-1,24%	-3,41%		-1,01%	-0,91%		0,31%	0,80%		-2,39%	-0,45%		2,40%	0,60%		1,51%	-0,53%	
-9	1,06%	-2,17%		-0,45%	0,10%		-0,64%	0,48%		1,37%	1,94%		-1,26%	-1,79%		-1,90%	-2,04%	
-10	-3,23%	-3,23%		0,54%	0,54%		1,12%	1,12%		0,57%	0,57%		-0,53%	-0,53%		-0,14%	-0,14%	

T	TSKB (1)			TSKB (2)			TSKB (3)			TSKB (4)			TSKB (5)			TSKB (6)		
	26.02.2010			28.02.2011			27.02.2013			28.02.2014			26.02.2015			25.02.2016		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	0,99%	-6,92%		-0,88%	-12,65%		0,67%	-3,53%		-1,09%	-1,03%		0,99%	1,74%		0,89%	5,75%	
9	-1,52%	-7,91%		-2,25%	-11,77%		0,11%	-4,20%		-0,74%	0,06%		-0,86%	0,75%		0,08%	4,86%	
8	-0,84%	-6,39%		-1,59%	-9,52%		-0,49%	-4,31%		-0,89%	0,80%		0,09%	1,62%		-0,23%	4,78%	
7	-1,54%	-5,55%		-0,84%	-7,93%		-0,59%	-3,82%		-1,10%	1,70%		-0,87%	1,52%		0,28%	5,01%	
6	-0,41%	-4,01%		-2,68%	-7,09%		-0,15%	-3,22%		-0,09%	2,79%		0,43%	2,40%		-0,41%	4,72%	
5	0,65%	-3,61%	-0,80%	3,34%	-4,41%	1,27%	-0,41%	-3,07%	-0,28%	2,34%	2,88%	3,64%	2,75%	1,97%	5,58%	-0,67%	5,13%	5,16%
4	-1,22%	-4,26%	-1,45%	0,74%	-7,75%	-2,07%	1,18%	-2,66%	0,14%	-2,50%	0,54%	1,30%	0,58%	-0,78%	2,83%	0,31%	5,80%	5,82%
3	-0,61%	-3,04%	-0,23%	1,68%	-8,49%	-2,81%	-0,88%	-3,84%	-1,05%	3,32%	3,04%	3,80%	0,13%	-1,37%	2,25%	0,45%	5,48%	5,51%
2	1,71%	-2,43%	0,38%	-5,30%	-10,16%	-4,49%	-1,09%	-2,96%	-0,17%	0,74%	-0,28%	0,48%	0,15%	-1,49%	2,12%	0,90%	5,03%	5,06%
1	-0,33%	-4,14%	-1,33%	-2,03%	-4,86%	0,81%	1,75%	-1,88%	0,92%	0,18%	-1,02%	-0,26%	0,61%	-1,65%	1,97%	0,29%	4,13%	4,16%
0	1,66%	-3,80%	-1,00%	0,02%	-2,83%	2,85%	0,10%	-3,63%	-0,83%	-1,20%	-1,21%	-0,44%	-0,27%	-2,26%	1,35%	-0,65%	3,84%	3,87%
-1	1,39%	-5,46%	-2,66%	0,05%	-2,85%	2,82%	-1,47%	-3,73%	-0,93%	1,90%	-0,01%	0,75%	-0,08%	-1,99%	1,62%	-1,53%	4,49%	4,52%
-2	0,24%	-6,86%	-4,05%	3,61%	-2,90%	2,77%	-0,95%	-2,26%	0,54%	-0,32%	-1,91%	-1,15%	0,59%	-1,91%	1,70%	1,85%	6,01%	6,04%
-3	-2,16%	-7,09%	-4,29%	0,34%	-6,51%	-0,84%	0,11%	-1,31%	1,49%	0,01%	-1,58%	-0,82%	0,22%	-2,50%	1,11%	-0,87%	4,17%	4,20%
-4	-1,41%	-4,94%	-2,13%	-1,25%	-6,85%	-1,18%	0,80%	-1,42%	1,38%	0,08%	-1,60%	-0,83%	1,33%	-2,72%	0,89%	3,10%	5,03%	5,06%
-5	-0,72%	-3,53%	-0,72%	0,07%	-5,60%	0,07%	0,57%	-2,22%	0,57%	-0,92%	-1,68%	-0,92%	-0,44%	-4,05%	-0,44%	1,96%	1,93%	1,96%
-6	-3,44%	-2,81%		-0,13%	-5,68%		-0,48%	-2,79%		-0,49%	-0,76%		-1,00%	-3,61%		1,31%	-0,03%	
-7	-3,72%	0,64%		-0,67%	-5,54%		-0,77%	-2,31%		-0,13%	-0,27%		-1,50%	-2,61%		0,76%	-1,34%	
-8	-5,27%	4,35%		-0,97%	-4,87%		0,25%	-1,54%		0,32%	-0,14%		-0,75%	-1,11%		-0,10%	-2,10%	
-9	9,31%	9,62%		-1,20%	-3,90%		-0,99%	-1,79%		0,62%	-0,46%		0,22%	-0,36%		-1,40%	-2,00%	
-10	0,31%	0,31%		-2,70%	-2,70%		-0,80%	-0,80%		-1,08%	-1,08%		-0,58%	-0,58%		-0,60%	-0,60%	

T	TSKB (7)			IZMDC			NETAS			ALARAK		
	28.02.2017			15.05.2012			11.04.2012			20.06.2018		
	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)	AR	CAR (10 days)	CAR (5 days)
10	-0,34%	-3,75%		-8,05%	2,44%		-8,29%	61,87%		-0,09%	10,76%	
9	0,21%	-3,41%		-0,31%	10,49%		-10,05%	70,16%		-0,81%	10,86%	
8	0,01%	-3,62%		9,28%	10,80%		3,86%	80,21%		2,88%	11,66%	
7	-1,47%	-3,63%		0,39%	1,52%		-7,03%	76,35%		2,48%	8,78%	
6	0,15%	-2,16%		-0,33%	1,14%		12,28%	83,37%		1,18%	6,30%	
5	-0,40%	-2,31%	-0,34%	1,98%	1,47%	1,89%	7,48%	71,10%	66,35%	1,87%	5,12%	6,07%
4	-0,81%	-1,91%	0,06%	1,60%	-0,51%	-0,09%	3,94%	63,61%	58,87%	-0,74%	3,25%	4,20%
3	0,92%	-1,10%	0,87%	0,03%	-2,11%	-1,68%	12,07%	59,67%	54,93%	-0,33%	3,99%	4,94%
2	-2,01%	-2,02%	-0,05%	1,51%	-2,14%	-1,72%	21,25%	47,60%	42,86%	-1,31%	4,32%	5,28%
1	-0,08%	-0,01%	1,96%	-4,23%	-3,65%	-3,23%	17,80%	26,35%	21,61%	-3,50%	5,64%	6,59%
0	0,34%	0,07%	2,04%	0,04%	0,58%	1,00%	3,86%	8,55%	3,80%	3,82%	9,13%	10,09%
-1	-0,10%	-0,27%	1,70%	-0,25%	0,54%	0,97%	-0,25%	4,69%	-0,05%	3,44%	5,31%	6,27%
-2	2,36%	-0,17%	1,80%	-2,90%	0,79%	1,21%	0,11%	4,95%	0,20%	0,84%	1,87%	2,83%
-3	0,70%	-2,54%	-0,57%	2,19%	3,69%	4,12%	-1,18%	4,84%	0,09%	-0,47%	1,04%	1,99%
-4	-1,53%	-3,24%	-1,26%	0,61%	1,50%	1,93%	0,17%	6,02%	1,27%	0,24%	1,51%	2,47%
-5	0,26%	-1,71%	0,26%	1,32%	0,89%	1,32%	1,11%	5,85%	1,11%	2,23%	1,27%	2,23%
-6	0,97%	-1,97%		-0,89%	-0,43%		0,86%	4,74%		-1,32%	-0,95%	
-7	-1,41%	-2,94%		0,70%	0,47%		-2,25%	3,89%		0,43%	0,37%	
-8	-1,68%	-1,54%		-1,31%	-0,24%		6,00%	6,14%		-0,66%	-0,06%	
-9	-0,43%	0,15%		0,53%	1,08%		0,69%	0,14%		1,59%	0,60%	
-10	0,57%	0,57%		0,55%	0,55%		-0,55%	-0,55%		-0,98%	-0,98%	



