Effect of Dividend Announcement on Changes in Stock Price (Return) (Study of Non-Financial Companies Listed on the Indonesian Stock Exchange

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Abstract
Dividend announcement is one of the published information issued by the company that can be used by investors to react to changes in shares. In emerging markets like Indonesia, all types of information can be utilized even if they have no economic value. Based on that, this information as a dividend announcement can be valuable when the investor's reaction is correct. Some researchers say that dividend announcements must be made periodically due to irregular economic conditions. This study aims to determine how the influence of information on dividend announcements regarding changes in stock prices (returns) of non-financial companies on the Indonesia Stock Exchange. Period taken 15 days before and after the date of the Ex dividend. This study uses regression analysis on panel data and for testing is the value of abnormal stock returns with a total of observations of 49 samples. The number of samples is divided into groups of increasing dividends and reducing dividends. The results of this study indicate that as a whole investors do not only use dividend announcement information in stock transactions, so that the effect is not too impactful. In addition, seeing the reaction of investors to the announcement of an increase in dividends is also not used properly. dividend announcements are bad news for investors. While investors can optimize information about reducing dividend announcements, so that investors can make a profit even in a situation where dividends have decreased.

1. . Introduction

Differences in the level of development of a country's economy can be reflected in the level of development of its capital market conditions. This is in line with the function of the capital market itself, namely one of which can encourage the emergence of new industries that directly help create new jobs. In addition, the value of transactions in the capital market can also reflect the state of a country's economy. The phenomenon of investment behavior in the capital market has increased both from investors and its supporting infrastructure. According to Sunaryah (2006) an explanation of the meaning of more investment in an investment activity in one or many assets owned, usually for a long time with the hope of getting profits in the future (Budiantara, 2012).

The stock market experienced an increase in interest in investment, both investment by domestic investors and foreign investors. This has also resulted in an improvement in the existing investment climate. In fact, especially the interest of domestic investors is no longer in a certain age group or only in professional parties. Procurement of training and training on investment is also increasing and frequent. In addition, mentoring or *self-training* is also carried out for potential investors by financial institutions such as banks that have a special securities sub-work. In addition, there are also professional securities companies that act as mediators between investors and the capital market. This is done in an effort to improve the investment climate in Indonesia. Knowledge of stock or investment instruments itself has been provided to the current generation by academic institutions and professional institutions on an ongoing basis. The goal is that understanding and knowledge about stocks can already be understood by the early age group or in this case, young people. It is also hoped that young people's interest in the world of stocks or investment will increase. Efforts made by the government through related institutions have also been made in an effort to increase interest in investment, such as those carried out by the Indonesian Stock Exchange (abbreviated, IDX) which in this case acts as the organizer and provider of means to bring together parties transacting in the stock market. . PT Bursa Efek Indonesia in an effort to improve the investment climate by opening a program known as the Capital Market School. Apart from that, PT Bursa Efek Indonesia in its campaign, *Yuk Save Shares* , is also carried out in an effort to improve the investment climate in Indonesia.

Programs and campaigns carried out by the Indonesia Stock Exchange are one of the efforts to increase interest in investment among all groups. In order to create a good investment climate, the availability of infrastructure and stock exchange conditions

must be maintained to support the implementation of stock transactions and other securities products to be effective and efficient. Factors that influence the investment climate come from internal (transaction sellers and buyers) and also external (market conditions or economic conditions).

Internal factors relate to both sellers and buyers who transact in the stock market. This factor affects the state of the investment climate because it can be an illustration of how the pattern of transactions that occur. External factors in this case are company external factors such as company external information and macroeconomic factors as a whole can affect the state of the stock market. Economic growth both nationally and globally can also affect the condition of the stock market. This factor can have a significant direct impact or not based on the type of shares held by shareholders. Strong and tending to fast economic growth certainly raises optimistic assumptions for shareholders on the stock market as well as slow or weak economic growth which makes investors insecure about the state of the stock market in a country. Of course, the state of the economy is directly proportional to the company and there is also inversely proportional to the state of the company. This situation can affect directly or indirectly affect the level of profit *(capital gain)* significantly. Due to many factors and or

other information that can be used by investors.

The condition of the capital market in each country is different. The difference is seen from the country's position in the world market. For example, in Indonesia, which is an *emerging market* , the volatility of the capital market is very high. This is because in developing country markets, the functions of each *stakeholder* are not yet able to stand alone or still have an impact on one another. Like the use of capital market information, information that has no economic value is still possible to be used as information that has economic value. The information in question is information related either directly or indirectly to the company or issuer.

The use of external and internal company information if used properly will produce very useful information (known as *good news*) and vice versa. There are many examples of information provided either by companies or other parties that can be used in determining the attitude of information users towards their position towards a value, position, and so on. For example, information about the announcement of dividend distribution is an example of information provided by a company or issuer that can be used by investors in determining investor attitudes toward shares in that company or issuer. Several studies have shown that information on dividend distribution

announcements has an influence on changes in the stock price (Siaputra and Atmadja, 2007). Although theoretically the irrelevance of dividends (which was stated by Merton Miller and Franco Modigliani or commonly known as MM), shows that it does not significantly influence dividend policy or it can be said that the value of the company will depend only on the profits produced by its assets, not on how the profit will be divided into dividends and retained earnings (Brigham and Houston, 2006)

The theory above confirms that each shareholder can determine the desired amount of dividend value. by bearing the taxes and/or risks attached to each dividend distributed. From the explanation of the theory above, it explains that dividend policy still has relevance to changes in the value or price of shares. The retained earnings policy also indirectly influences the general financial position of the company. Some shareholders prefer paying dividends directly (cash dividend) *and some expect* capital gains *. The maximum profit level is of course the goal of the shareholders in the shares owned in each share transaction. The purpose of this study itself is to see whether significant changes in stock prices* (returns) *are affected by dividend announcement information on non-financial companies that announce dividend distribution in the period 2015 – 2019".*

2. Theoritical Basis
Share Price (Return)

As stated by Ewijaya and Indriantoro (1999) that changes in stock prices in the capital market (secondary market) occur at any time, so that investors or potential investors must be observant in stock selection. Information that is fully reflected in stock prices will be very valuable for capital market players and related institutions. Capital market participants, especially investors, are greatly influenced by the movement of a company's stock price and the information that causes changes in the stock price (Nor, 2011.

Securities issued by a company in the form of a limited liability company or commonly referred to as shares, which state the owner of the shares thus if someone buys shares, they will become the owner of the company (Budiantara, 2012). The determination of the share price itself is determined by the share players in the stock market and is also determined by the demand and supply of shares on the stock market. Changes in stock prices are caused by many factors, both internal and external to the

issuer. Technically there is the term index number which shows the level of change in stock prices. As stated by Budiantara (2012), that the development of the Stock Price Index or IHS increases are indicated by numbers marked positive, increases at zero or remain indicate IHS is stable, and decreases are marked by negative numbers. The stock price index also shows the state of the market, an increase means the market is in an excited state, stable means the stock price index has not changed and a sluggish market means the stock price index has decreased.

Company fundamentals, industrial sector, valuation, sentiment affect changes or movements in stock prices on the stock exchange. With so many factors influencing changes in stock prices, there are factors that are directly related to price changes and influence the attitude that investors will take. This factor is related to the return on shares given by companies or issuers to investors for their investment. Many investors want dividends directly because of the low level of risk (less risk). This is also in accordance with the Bird

on The Hand theory expressed by Myron Gordon and John Lintner. According to Myron Gordon and John Lintner that the required rate of return on equity or ks decreases with an increase in dividend payments because investors are less sure of receiving capital gains that should come from retained earnings compared to receiving dividends. (Brigham & Houston, 2006:71). This situation can result in an increase in investors who expect dividends directly even at high investment level.

Determination of Dividend Announcement

Financial management activities in an organization or company vary, one of which is determining dividend policy. Dividends are made through the distribution of profits derived from the performance of the company's activities and given to the company's shareholders (*stockholders*). The dividend policy is carried out by mutual agreement with the shareholders at the General Meeting of Shareholders (GMS), but not all owners can receive dividends on these shares, of course an investor or shareholder must gradually and require a relatively long time and be recognized until he is entitled to receive it.

dividends that have been determined by the company and shareholders (*stockholders*).

Dividend distribution by the company is in the form of cash dividends and stock dividends. Dividend distribution to each shareholder in the form of cash in a certain amount for each share owned by a shareholder can be categorized as a form of cash dividend. While stock dividends are more about the distribution of dividends to each shareholder in the form of the company's share value, so that the number of shareholder shares increases in the company.

Explanation of the dividend signal hypothesis theory put forward by Bhattacharya (1979), that the announcement of dividend payments by company management is a form of signal for investors. Management seems to want to show that the company can generate the desired profit. Management also wants to show that they are capable of fulfilling dividend payments to shareholders. With this, management seems to be giving a signal that the company's financial condition is very strong so that it is able to distribute dividends.

Shareholder enthusiasm for dividends is high. Dividend distribution has its own pattern of distribution, and the company has the right to determine this. As stated by Weston and Brigham (1998), the actual dividend distribution procedure starts from the announcement date, the date of recording of shareholders, the *ex-dividend* date and the date of dividend payment (Sularso, 2004).

Previous Research

Previous research raised the theme of stock price reactions to dividend announcements and also the phenomenon of utilizing information in developing markets which can still be put to good use again attracting enthusiasm to review and analyze how influential stock prices (returns) are in the dividend announcement period. So that in a study entitled " *Stock price reactions to stock dividend announcements: A case from a sluggish economic period* " Khanal and Mishra (2017) showed a significant increase in stock prices (*returns*) caused by information on stock dividend announcements. Research conducted by Siaputra and Atmadja (2007) "The Effect of Dividend Announcements on Changes in Stock Prices Before and After the Ex-Dividend Date on the Jakarta Stock

Exchange (BEJ))" and also Sularso (2004) "The Effects of Dividend Announcements on Changes in Stock Prices (*Return*) Before and After *the Ex-Dividend Date* at the Jakarta Stock Exchange (BEJ))" jointly discussed the effect of dividend announcements on changes in stock prices.

Hypothesis Development

In determining the dividend policy, each company has its own policy. This is because the dividend policy is related to the determination of the capital structure of the company. Dividend policy is used by each management to attract investors to invest in the company. Each investor has a different type or type of response to the dividend policy applied by the company.

Bird on Hand theory , every investor wants to benefit directly from what he invests. This shows that investors also consider dividend announcements or policies in determining their investment decisions in the capital market or stock market. Departing from the explanation above, the hypothesis is:

H $_1$: There is a Change in the Price (Return) of the Shares during the Dividend Announcement Period

Announcements made by companies regarding dividends either increasing or even decreasing the amount of dividends distributed will also get responses from different investors. As stated by Hartono (2009), reactions arising from the announcement of dividends can cause positive reactions or negative reactions due to information asymmetry, namely a condition where one party has more information than another party and is more prepared to face future problems (Jayanti , 2019). Departing from the explanation above, the hypothesis is:

H $_2$: There is a Change in the Price (Return) of the Shares during the Increase in Dividend Announcement Period

H $_3$: There is a Change in the Price (Return) of the Shares during the Decreasing Dividend Announcement Period

3. Research Methods
Research Deisgn

The main objective is to find out, investigate, and prove how the influence of dividend announcement information on significant changes in stock prices (*returns*) in non-financial companies that announce dividend distributions in the period 2015 – 2019. In this study, a quantitative approach

was used to analyzing secondary data, namely the data contained in the data sources used in this study. The research design uses *an event study* by studying market or investor reactions to dividend announcement events where the information is published on the Indonesia Stock Exchange.

Variable Definition and Measurement

The dependent variable uses the variable change (*return*) in stock prices as measured using *Abnormal Return* (AR). Meanwhile, the independent variable, namely the announcement of dividends, was measured using data on the *closing price* of each stock for 15 days before and after *the ex-dividend date* .

Data Source and Collection

The data sources in this study are related to dividend announcement data, share values or prices, and other complementary data obtained from documented sources on the Indonesia Stock Exchange (IDX) or other documented sources.

The method of data collection in this study is to use the documentation method obtained from non-financial company data from the IDX High Dividend 20 index

(IDXHIDIV20), IDX BUMN20 (IDXBUMN20) and the Jakarta Islamic Index 70 (JII70), accompanied by dividend announcement data and historical data. share price in the specified period.

Technical Analysis

The type of sample data studied is classified as panel data. Panel data is used to determine the relationship between the dependent variable, in this case, the change in stock price (*return*) as measured by *Abnormal Return* (AR) and the independent variable, in this case, the dividend announcement as measured by the *stock closing price* (*Log Natural Closing Price*). . From the existing data, the simple regression equation model:

$$AR_{it}=a+\beta_1 LNP0+e_{it}$$

Descriptive statistics

Descriptive statistics in this study include the mean, median, standard deviation, minimum value and maximum value.

Classic assumption test

As explained by Alim et al. (2007), to be able to carry out Regression Analysis it is necessary to test the assumptions of analysis requirements so that the data is

meaningful and useful (Ghozali, 2005:57-81). The classical assumption tests carried out were only the normality test, heteroscedasticity test and autocorrelation test. The multicollinearity test was not carried out because the number of dependent variables was only one, so multicollinearity testing was not necessary.

Hypothesis testing

Hypothesis testing is done by t-test, this test is to find out how much influence the independent variable has on the dependent variable and also the p-value of the independent coefficient. Meanwhile, the use of significance percentages with various significance ranging from 10% (0.1), 5% (0.05), and 1% (0.01).

Furthermore, as explained by Sularso (2004), further testing is carried out to test the hypothesis starting with calculating the *Average Abnormal Return* (AAR) value of all shares at time t

The population in this study are non-financial companies listed on the Indonesia Stock Exchange (IDX). The *purposive sampling method* was used to collect sample data in this study by first determining the criteria. The data criteria studied used a sample of companies or non-financial group

issuers on the Indonesia Stock Exchange (IDX) in the 2015-2019 period which were listed in the IDX High Dividend Stock Index 20 (IDXHIDIV20), IDX BUMN20 (IDXBUMN20) and Jakarta Islamic Index 70 (JII70). Companies or issuers included in the stock index above are stock indexes that regularly distribute cash dividends and have a *dividend yield* to their shareholders. Of course data on dividend announcement dates during the study period are also needed in addition to other complementary data.

4. Result and Discussion
Result Of Data Collection

This study uses secondary data obtained from sources that have been documented on the Indonesia Stock Exchange (IDX). In addition, the Indonesia Stock Exchange has published three indices that routinely announce dividend distribution. This index is the basis for determining the number of samples to be examined in this study.

Table IV.1 Criteria for Sample Data

Information	Amount
Companies Listed on the Index 1. High Dividend Index 20 (IDXHIDIV20) 2. BUMN Index 20 (IDXBUMN20) 3. Jakarta Islamic Index 70 (JII70)	20 20 70
Non-Financial Companies Listed on the Index 1. High Dividend Index 20 (IDXHIDIV20) 2. BUMN Index 20 (IDXBUMN20) 3. Jakarta Islamic Index 70 (JII70)	13 15 68
Non-financial companies that are listed on these indices and issue dividends at that time 1. High Dividend Index 20 (IDXHIDIV20) 2. BUMN Index 20 (IDXBUMN20) 3. Jakarta Islamic Index 70 (JII70)	10 13 26
Companies that Meet the Criteria with a Dividend Period 2015-2019 (Data up to June 2019)	49

Source: Secondary Data Sample, 2019

The table above shows that the number of companies listed in the three indexes is 110 companies. This number was reduced to 96 companies classified as non-financial companies. This number was reduced to 49 based on the criteria, namely non-financial companies that announced dividend distribution and also included in the research period, namely 2015 - 2019 (June 2019). Based on the number of companies or samples that meet the research criteria, the total observations to be studied are 49 samples from 110 total population.

Descriptive Statistical Analysis

Descriptive analysis was carried out with the aim of knowing the sample distribution in the study. The descriptive statistics used are the mean, mean, standard deviation, minimum and maximum values:

Variable	Obsv	Means	std. Dev.	Min	Max
AR	1519	0.00102	0.03434	-0.21913	0.91359
LNP0	1519	7.57399	1.30604	4.77069	11.18094

Based on table IV.2, with a total of 1519 observations the value of the AR variable has an average value of 0.00102 with the lowest value of -0.21913 and the highest value of 0.91359. Besides that, the AR variable has a standard deviation of 0.03434. Obtaining the standard deviation value means that the values in the AR variable are the same distance.

With the same total observations, the value of the LNP0 variable has an average value of 7.57399 with the lowest value of 4.77069 and the highest value of 11.18094. Besides that, the value of the LNP0 variable has a standard deviation of 1.30604. By obtaining the standard deviation value, it means that most of the data is within -1 to 1 from the average.

Based on table IV.3, with a total of 1116 observations the value of the AR variable has an average value of 0.00160 with the lowest value of -0.21913 and the

highest value of 0.91359. Besides that, the AR variable has a standard deviation of 0.03682. Obtaining the standard deviation value means that the values in the AR variable are the same distance.

With the same total observations, the value of the LNP0 variable has an average value of 7.62416 with the lowest value of 4.77069 and the highest value of 11.18094. Besides that, the standard deviation for the LNP0 variable is 1.36957. Obtaining the standard deviation value means that most of the data is -1 to 1 within the average.

Based on table IV.4, with a total of 403 observations the value of the AR variable has an average value of -0.00058 with the lowest value of -0.08001 and the highest value of 0.18275. Besides that, the AR variable has a standard deviation of 0.02624. Obtaining the standard deviation value means that the values in the AR variable are the same distance.

With the same total observations, the value of the LNP0 variable has an average value of 7.43505 with the lowest value of 5.47227 and the highest value of 9.96176. Besides that, the standard deviation for the LNP0 variable is 1.10099. Obtaining the standard deviation value

means that most of the data is -1 to 1 within the average.

Normality Test

Regression	Obs	W	V	z	Prob>z
Model	1519	0.57662	390,860	150,27	0.0000

Based on table IV.5, the results show that the data is not normally distributed, but in this study using robust regression testing.

Heteroscedasticity Test

Regression	chi2	Prob > chi ^{2}
Model	3.69	0.1584

Based on table IV.8, the results show that the model gets a Prob > Chi ^{2} value greater than 0.05 so that the regression model does not have heteroscedasticity.

Autocorrelation Test

Regression	F(1, 48)	Prob > F
Model	116,156	0.0000

Based on table IV.11, the results show that the model gets a Prob>F value of less than 0.05 so that the regression model has autocorrelation problems. but in this study using *robust regression testing.*

Regression Test

AR	Coef.	Rbst. St. Er	t	P>t	[95%	Conf. Interval]
LNP0	0.03447	0.01260	2.74	0.009	0.00914	0.05980
_cons	-0.26007	0.09542	-2.73	0.009	-0.45192	-0.06821

Based on table IV.14, it can be seen that the t value for the LNP0 variable is 2.68 which is smaller than the t value in table IV.15 which was carried out with a *robust fixed effect regression test* , namely 2.74. So that the P>t value obtained both before and after being tested is *robust* , which has a difference of 0.06. And these results are still significant (away from 0). While the *standard error value* in the regression test results in table IV.14 for the LNP0 variable is 0.01288 higher than the *standard error value in the robust* regression test results, which is 0.01260. The *standard error value* on the regression test results will be better when the value is close to 0 so that the distribution of data is closer to the regression line.

AR	Coef.	std. Err.	t	P>t	[95%	conf interval]
LNP0	0.02017	0.01527	1.32	0.187	-0.00980	0.05013
_cons	-0.15216	0.11642	-1.31	0.192	-0.38060	0.07629

Based on table IV.16, it can be seen that the t value for the LNP0 variable is 1.32 which is smaller than the t value in table IV.17 which was carried out with a robust fixed effect regression test , namely 1.57. So that the P>t value obtained both before and after being tested is robust , which has a difference of 0.25. And these results are still significant (away from 0). Meanwhile, the standard error value in the regression test results in table IV.16 for the LNP0 variable is 0.01527, which is 0.01527 higher than the standard error value in the robust regression test results, which is 0.01285. The standard error value on the regression test results will be better when the value is close to 0 so that the distribution of data is closer to the regression line

5. Conclusision

From the research conducted, it can be concluded as follows:

Based on the results of analysis and testing, it can be concluded that information on dividend announcements affects changes in stock prices (*returns).* That there is a change in stock price *(return)* during the dividend announcement period which is indicated by the *abnormal return* that occurs or hypothesis 1 (H1) is accepted. During the 31 days of stock transactions during the dividend announcement period, investors only reacted 4 days. This reflects that investors do not only pay attention to dividend announcement information in determining reactions to stocks during that period, or the role of this information is only additional information.

Based on the results of the analysis and testing, it can be concluded that the

information on the announcement of an increase in dividends does not fully affect changes in stock prices (*returns*). That there is a change in stock price *(return)* during the dividend announcement period which is indicated by the *abnormal return* that occurs or hypothesis 2 (H2) is accepted. During the 31 days of stock transactions during the dividend announcement period, only 3 days of reactions were made by investors and the *abnormal returns* that occurred were also negative *abnormal returns .* This reflects that investors pay little attention to the information on dividend announcements which results in negative *abnormal returns* occurring or errors in making decisions in buying shares.

Based on the results of the analysis and testing, it can be concluded that the information on the announcement of a decreasing dividend has an effect on changes in stock prices (*returns).* That there is a change in stock price *(return)* during the dividend announcement period as indicated by the *abnormal return* that occurs or hypothesis 3 (H3) is accepted. During the 31 days of stock transactions during the dividend announcement period, only 1 day of reactions were made by investors and what happened was a positive *abnormal return .* This illustrates that investors use dividend announcement information well so that positive *abnormal returns occur.* Investors take advantage of the dividend announcement information to fall well so that they get profits (when investors buy shares, investors hold until the ex- *dividend date* and hope to get more profits after that day.

Suggestion

It is hoped that research will be carried out in other sectors so that there will be many references that can be used by investors or potential investors in stock transactions and it is hoped that there will also be other supporting factors or variables so that the information role of dividend announcements can be maximized.

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