

Analysis of Market Reaction to Announcements Of Stock Split

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ABSTRAK : The purpose of this study is to determine market efficiency based on the acquisition of abnormal returns during the stock split event period. This study uses an event study approach, which is observed for abnormal return for three days before the announcement, during the announcement and three days after the announcement. This research uses secondary data obtained from the website www.idx.co.id, www.yahoofinance.com, www.sahamok.com and the Indonesia Capital Market Directory (ICMD) and collected using the document observation method. The population in this study are companies that conduct stock split and are listed on the Indonesia Stock Exchange in 2019. Samples were taken using the census method, as many as 11 issuers. T-test (t-test) is used to measure the significance of abnormal returns that occur. The analysis shows that the market did not react during the stock split event period (days t-3 to days t + 3) which was indicated by the insignificant abnormal return. This happens because the market is in an efficient condition in the form of half strong information that causes the market does not react, thus concluding that the efficient market is not answered.

Keyword -market efficiency, abnormal returns, stock splits

I. INTRODUCTION AND LITERATURE REVIEW

The capital market is a market for a variety of long-term financial instruments (securities) that can be traded, both in the form of debt and own capital, both issued by governments, public authorities, and private companies. The capital market is a meeting place between supply and demand for securities or securities (Nasution, 2015). The capital market as a forum for market participants, that is, individuals or business entities that have excess funds (surplus funds) make investments in securities offered by issuers who need funds. Various alternative financial instruments that can be invested in the capital market such as stocks, bonds, mutual funds and other securities (Zahroh, 2015).

The price of a security is influenced by available information about the company. Information includes the "company's current financial performance and events that will occur in the company in the future". This information is important for investors when analyzing stocks to predict future stock values (Adrianto & Wibowo, 2016). The development of capital market activities brought a big change in the demand for information quality. The existence of new information in the capital market will affect the company's stock price and will further influence the decision making by investors (Meylita & Yasa, 2015). The development of capital market activities brought a big change in the demand for information quality. The existence of new information in the capital market will affect the company's stock price and will further influence the decision making by investors. If information is able to change the confidence of investors in decision making, then the information can be considered informative. Information can be used by investors to determine the right investment steps so that the use of information as a basis for investment allocation can be optimized (Susilawati, 2019).

The concept of information content of an event discusses how the market reacts to existing information and how that information can further influence the price movements of securities (Syed & Bajwa, 2018). Corporate action or better known as "corporate action is one of the many types of information available and has the potential to get different reactions from each market participant". Corporate action is a variety of activities carried out by public companies related to issuers' shares as well as corporate activities for the purpose of improving the performance of shares in the future

Corporate action can be in the form of rights issues, warrants, stock dividends, bonus issues, reverse splits, share buybacks, convertible bonds and exchange bonds, callable bonds, mergers, and stock split. Indarti & Purba (2015) explained that "one of the available information is the announcement of a stock split. This information can have meaning or value if it causes investors to conduct transactions in the capital market, which will be reflected in changes in stock prices and other indicators or market characteristics."

All information or signals needed by investors to analyze the capital market can be obtained on the Indonesia Stock Exchange (IDX) or the Indonesian Stock Exchange (IDX). The Indonesia Stock Exchange (IDX) or the Indonesian Stock Exchange (IDX) is a capital market in Indonesia. The Indonesia Stock Exchange (IDX) has an important role as a means for people to invest, which is an alternative investment. For companies, the Indonesia Stock Exchange (IDX) helps companies to obtain additional capital by offering shares or other securities carried out by issuers (companies that go public) to the public based on the procedures regulated by the Capital Market Law and its Implementation Regulations. One of the corporate actions offered on the Indonesia Stock Exchange (IDX) is a stock split (Wan, 2018).

Stock split is a corporate action carried out by companies that have gone public (issuers) by increasing the number of shares outstanding. Meylita & Yasa (2015) explain this activity is usually done when the stock price is overvalued so that it will reduce the ability of investors to buy it. With stock splits, the share price will be lower so that it will be easier to reach by small investors. This will lead to increased stock demand and shares will become more liquid. Stock splitting is breaking stock into n shares. The price per new share after the stock split is $1/n$ of the previous share price. Thus, actually the stock split does not add value to the company or in other words the stock split does not have economic value. The value of a high share price will reduce the level of stock demand, on the contrary if the stock price is low then the demand for these shares will also increase. Basically, a stock split is a corporate action that affects the number of shares outstanding, but does not affect the company's market capitalization or the wealth of existing shareholders. Thus, with a stock split the company increases the number of shares outstanding at a certain ratio and consequently the price per share decreases with an increasing ratio of the number of shares (Fox et al., 2018)

The announcement of the stock split event is believed to signal the good prospects that the company manager has made public. Yustisia (2018) states only companies that have good financial performance can do a stock split. This is because the better the company's financial performance, the higher the share price will be. This is in accordance with signaling theory, signaling theory is an action taken by company management that gives instructions or signals to investors about how management views the company's prospects. Where companies have to improve their performance before sharing a signal to investors that the company's prospects will continue in the future. Stock split announcements provide investors with information about the prospects of an increase in returns so that stock prices will rise at the time of the announcement. Signaling theory states that every corporate action undertaken by a company has the potential for information content as a signal. Signaling theory is based on that there is information asymmetry between company management and investors, where the company has better information about the company will be encouraged to convey the information to potential investors (Harmadji et al., 2018).

Before the stock split announcement takes place, the company will make an announcement to the public and investors that there will be a stock split in the future so that the public and investors can expect new information (Ngoini, 2017). The more investors absorb important information, the greater the chance of achieving an abnormal return. Abnormal return is defined as the difference between the actual return that occurs with the expected return. Duarsa & Wirama (2018) explain if the abnormal return is positive then the actual return or actual return is greater than the return expected by the investor. This is what causes investors to be interested in trading on the stock market in the hope of getting a profit above normal, but if on the contrary the market will respond negatively. Investors withdraw funds that will be used to transact and wait for the right time to make an investment so investors need to evaluate and analyze whether a company's events have information content and generate positive abnormal returns around the event. The presence of abnormal returns before and after the stock split event can be used as an indicator of positive signals that are brought to the market

Kalay & Kronlund (2017), Ferreira et al. (2019), Rohit *et al* (2016), Paramitha (2019), Artama & Wirakusuma (2018), Putra & Suaryana (2019) states that the announcement of stock split significantly influences the acquisition of abnormal stock returns. Different results are shown by Agustin *et al* (2017), Yustisia (2018), Patel *et al* (2016), Khajar (2016), Pujaastawa & Suarjaya (2016) which states that the announcement of stock split does not have a significant effect on the acquisition of abnormal stock returns. Based on the results of previous studies where there is controversy about research findings about stock split, so it is necessary to do further research on the impact of stock split on abnormal returns. Based on the results of previous studies, there are indications of a research gap and open up opportunities for further research. This research is an event study type. Event study is a study that observes the impact of announcements and information on securities prices. This research was conducted to test the market reaction to the stock split announcement events on companies listed on the Indonesia Stock Exchange in 2019. The purpose of this study was to determine the effect announcement of stock split of the acquisition of abnormal stock returns.

II. HYPHOTHESIS DEVELOPMENT

The concept of research shows the influence between variables in research. This study examines whether there is a market response to the announcement of a stock split on the Indonesia Stock Exchange (BEI)

in 2019. Observation of abnormal returns is carried out for 7 days of the event period, which is “3 days before the announcement, the day of the announcement, and 3 days after the announcement of the stock split with use the Markel adjusted model estimation model in estimating expected returns”. Market adjusted models are used because these models are the simplest techniques in estimating expected returns. Abnormal returns that occur in the event period reflect that the market reacts to announcements. The market is said to be information efficient in the form of half strong if it reacts quickly to absorb abnormal return, on the contrary if the market reacts for a long time and is prolonged, the market is said to be inefficient in information in the form of half strong. There is no abnormal return obtained by investors concluding that market efficiency is unclear or unanswered.

The announcement of the stock split event is believed to signal a good prospect that the company manager has made public (Agustina et al., 2018). This is in accordance with the signaling theory, based on that there is information asymmetry between the company's management and investors, where the company has “better information about the company will be encouraged to convey the information to potential investors. Stock split events must contain enough information for investors to analyze” (Nadig, 2015). It is expected that investors will react around the announcement when receiving information given by the issuer through the announcement of the stock split. Market reaction can be measured using abnormal returns (El Ansary & El-Azab, 2017). So this study tries to see by proving the relationship between the announcement of stock split with abnormal return (Ferreira et al., 2019).

Several studies have been conducted to see and prove the relationship between the announcement of stock split with abnormal returns. The results of research that support that the announcement of stock split has a significant effect on abnormal returns are supported by Rohit *et al* (2016), Paramitha (2019), Artama & Wirakusuma (2018), Putra & Suaryana (2019) which states that the announcement of the stock split significantly influence the acquisition of abnormal stock returns. This proves that the announcement of stock split has a significant effect on abnormal stock returns. This means, announcements of stock split can be used by investors to obtain abnormal returns. Based on the study of literature above, it can be hypothesized that: "Announcement of stock split has a significant effect on the acquisition of abnormal stock returns."

III. METHOD

This research was conducted on companies that have a stock split policy on the Indonesia Stock Exchange in 2019 and can be accessed through the website address www.idx.co.id. The research location on the Indonesia Stock Exchange in 2019 was chosen because the company was open so that it was easier to obtain the required data, the published data was also more accurate because it was selected and monitored by the Financial Prosecutor's Authority (OJK). The object of research is also a feature of the object determined by the researcher to be studied and then reach a conclusion. The object of this research is the market reaction to the stock split event in companies listed on the Indonesia Stock Exchange in 2019. Judging from the formulation of the problem and the hypothesis that has been described, the variable to be analyzed in this study is abnormal return. This variable will be observed during the 7 day window period, which is 3 days before the announcement, the day of the announcement, and 3 days after the announcement of the stock split.

Qualitative data in this study are the names of companies that did stock split and were listed on the Indonesia Stock Exchange in 2019. Quantitative data used in this study include: (1) Date of stock split event used as event date (t0); (2) Daily closing stock price of companies conducting stock split during the observation period, which is 3 days before the stock split event, the day of the announcement and 3 days after the stock split event; (3) Composite Stock Price Index (CSPI) daily. The data source used in this study is secondary data. The data was obtained from accessing the websites www.idx.co.id, www.yahoofinance.com, www.sahamok.com and Indonesia Capital Market Directory (ICMD). The population in this study are all companies that conduct stock splits and are listed on the Indonesia Stock Exchange (IDX) in 2019. Samples are taken using the census method. The total sample of 11 companies listed on the Indonesia Stock Exchange (IDX) and stock split in 2019.

The data collection method in this study uses the document observation method. Data is collected by observing and recording, and studying the descriptions of books, scientific papers in the form of journals, theses, and taking data through the internet related to this research such as through the website www.yahoofinance.com, www.idx.co.id, www.sahamok.com and Indonesia capital market directory (ICMD) in order to obtain information and data needed about companies that conduct stock split.

IV. RESULTS AND DISCUSSION

Actual return is obtained by dividing the difference between the stock price of the I-securities in the t-event period and the price of the I-securities stock in the t-1 event period with the stock price of the I-securities in the t-1 event period in accordance with formula (1). During the event period there are actual returns that are positive, zero or negative. An increase in stock prices from day t-1 to day t will result in an actual return that is positive, the same stock price on the t-1 day and a t-day results in an actual return that is zero, while a decline in

stock prices from day t-1 to day t results in negative actual return. In the overall event period there were 77 actual returns, 29 or 37.66% of actual returns were actually positive, 16 or 20.78% of the actual returns were zero and 32 or 41.56% were negative. The recapitulation of the actual return calculation results during the event period ie t-3 to t + 3 is presented in table 1.

Table 1. Recapitulation of Actual Return Calculation Results Composition in the Event Period

T-day	Actual Return			actual return (mean)
	Positive	Zero	Negative	
-3	7	1	3	0.01778
-2	5	3	3	0.01941
-1	2	5	4	-0.00273
0	7	1	3	0.01325
1	2	1	8	-0.01994
2	3	3	5	-0.02681
3	3	2	6	-0.01917
Total	29	16	32	
	37.66%	20.78%	41.56%	

Source: processed data 2020

Table1 shows the actual return earned during the event period. Before the announcement of the stock split, the actual return value is more likely to change. Different things happen after the announcement of the stock split, the actual return obtained by investors tends to be more negative. When viewed from the average per day, during the period of the event the actual return tends to be negative. Market return is obtained by dividing the difference between the Composite Stock Price Index in the t-event period and the Composite Stock Price Index in the t-1 event period with the Composite Stock Price Index in the t-1 event period according to den formula (2). During the event period there is a positive market return value and a negative market return value. Trading in an attractive capital market will produce a positive market return, while a negative market return indicates that trading in the capital market is less attractive. In the overall event period there were 77 market return values, 39 or 50.65% positive market return and 38 or 49.35% negative market return presented in table 2.

Table 2: Recapitulation of the Result of Market Return Calculation in the Event Period

T-day	Market Return		Market return (mean)
	Positive	Negative	
-3	6	5	0.00183
-2	5	6	0.00091
-1	4	7	0.00063
0	9	2	0.00364
1	5	6	0.00009
2	3	8	-0.00108
3	7	4	0.00113
Total	39	38	
	50.65%	49.35%	

Source: processed data 2020

Table 2 shows the market return obtained during the event period. Both before and after the announcement of a stock split, market returns are more likely to be positive. Similarly, when viewed from the average per day, during the period of market return events tend to be positive. Expected return is obtained by finding the difference between actual return and market return according to formula (3). During the event period there were expected returns that were both positive and negative. Expected return has a positive value, indicating the actual return of the security is greater than the market return, on the contrary if the expected return is negative, the actual return of the security is smaller than the market return. Table 3 shows a recapitulation of the composition of the expected return calculation results during the event period. In total, there are 77 expected returns, of which 36 or 46.75% of expected returns are positive and 41 or 53.25% of expected returns are negative.

Table 3. Recapitulation of the Composition of Expected Return Calculation for the Event Period

T-day	Expected Return		expected return (mean)
	Positive	Negative	
-3	7	4	0.01595
-2	7	4	0.0185
-1	4	7	0.00071
0	6	5	0.00961
1	2	9	-0.02003
2	5	6	-0.02573
3	5	6	-0.02021
Total	36	41	
	46.75%	53.25%	

Source: processed data 2020

Table 3 shows the expected return that occurred during the event period. Both before and after the announcement of the stock split, the expected return value tends to be negative. Similarly, when viewed from the average per day, during the expected return period tends to be negative. Abnormal return is obtained by finding the difference between actual return and expected return in accordance with formula (4). Based on calculations during the event period, there are abnormal returns that are positive or negative. In total, during the event period there were 77 abnormal return values. In the event period, there are more abnormal abnormal returns than negative negative returns. The value of abnormal return with positive value is 39 or 50.65% and negative abnormal return value is 38 or equal to 49.35%. Abnormal returns are not tested for each security, but are carried out in the aggregate by testing the average abnormal return of all securities in each day by cross-section. Table 4. below shows the recapitulation of abnormal return data during the event period.

Table 4. Recapitulation of the Composition of the Abnormal Return Calculation Results for the Event Period

T-day	Abnormal Return		Abnormal Return (Mean)
	Positive	Negative	
-3	6	5	0.00183
-2	5	6	0.00091
-1	4	7	0.00063
0	9	2	0.00364
1	5	6	0.00009
2	3	8	-0.00108
3	7	4	0.00113
Jumlah	39	38	
Persentase	50.65%	49.35%	

Source: processed data, 2020

Table 4. shows the acquisition of abnormal return that occurred during the event period. Both before and after the announcement of a stock split, the value of abnormal returns is more likely to be positive. Similarly, when viewed from the average per day, during the period of abnormal return events tend to be positive. Statistical testing is done in testing the significance of the effect of announcement of stock split on the acquisition of abnormal stock returns of the company. The initial step is to calculate the estimated standard error based on the standard deviation of the abnormal return of the securities by cross-section of each day in the event period. The next step is to calculate the magnitude of the t-count that can be sought by dividing the average abnormal return with the standard error of estimation for the t-day in the event period. The significance of the abnormal return is further seen from comparing the magnitude of the t-count value with the t-table value.

Table 5. T-count and Significance of Abnormal Returns in the Event Period

T-day	Abnormal Return (Mean)	KSE	T-count	Sig.
-3	0.00183	0.04666	0.03922	Not Significant
-2	0.00091	0.04739	0.01920	Not Significant
-1	0.00063	0.04408	0.01429	Not Significant
0	0.00364	0.04554	0.07993	Not Significant
1	0.00009	0.04538	0.00198	Not Significant
2	-0.00108	0.03712	-0.02909	Not Significant
3	0.00113	0.04126	0.02739	Not Significant

Source: processed data, 2020

From the results of the above tests, the average abnormal return in the event period statistically nothing shows significance, either at the level of 10%, 5%, or 1%.

This study wants to see the significance of abnormal returns as an impact of the announcement of stock split which aims to see the condition of an efficient market in a form of information that is half strong. The acquisition of abnormal return of 11 companies that were sampled experienced ups and downs, both positive and negative values. If the abnormal return is positive, it means that the stock split event brought good news. Conversely, if the abnormal return is negative, it means that the stock split event brings bad news. Investors will catch a signal that the stock split news provides information on favorable abnormal returns. Different results were obtained in this study where the average abnormal return was not significant both in the period before and after the stock split. News of a stock split event is not able to change investors' decisions regarding their investments.

An insignificant abnormal return indicates that no investor has enjoyed an abnormal return during the stock split. It was concluded that for announcements that do not cause abnormal returns, the conclusions of the efficient market are unclear and unanswered. Situations where the absence of an abnormal return can indicate that the market is in an efficient condition with information in the form of half strong. All investors use published information including information contained in financial statements to analyze and predict stock returns. As a result, no investor can use the information to get an abnormal return that is detrimental to others. Stock splits do not provide a good profit, this is because the stock split by the company does not provide new information that causes investors to be attracted to these shares. Stock splits by listed companies are not able to increase investment because investors assume that the expected return on returns is the same as the actual return obtained.

V. CONCLUSION

Based on the discussion of data analysis research, it can be concluded that the announcement of stock split does not have a significant effect on abnormal returns on the Indonesia Stock Exchange in 2019. The test results show that the abnormal return is not significant at the levels of 10%, 5%, and 1%. This means the hypothesis is rejected. Situations where the absence of an abnormal return can indicate that the market is in an efficient condition with information in the form of half strong. All investors use published information including information contained in financial statements to analyze and predict stock returns. As a result, no investor can use the information to get an abnormal return that is detrimental to others. Thus, the absence of an abnormal return when testing market efficiency in information makes the market clearly unpredictable in other words its market efficiency is unanswered or unclear. For investors, it is expected to be a consideration in making decisions or responding to published information to be careful of existing publications and is expected to thoroughly analyze all information obtained regarding investments before deciding to invest. Because the more information obtained, the better, especially information concerning market conditions. For issuers, they should be more careful in doing corporate actions, especially stock split, and should be done at the right time by taking into account the condition of the national economy and political stability that is happening and paying attention to the company's performance. For further research, it is expected to be able to use other models in estimating expected returns, such as the mean-adjusted model or the market model to see the results of the study from various points of view.

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