MARKET REACTION TO STOCK SPLIT EVENT (AN EMPIRICAL STUDY OF COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE IN 2015-2019)

REAKSI PASAR TERHADAP PERISTIWA STOCK SPLIT *(STUDI EMPIRIS PADA PERUSAHAAN YANG TERDAFTAR DI BURSA EFEK INDONESIA PADA TAHUN 2015-2019)*

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Abstrac: Market Reaction to Stock Split Event (An Empirical Study of Companies Listed on The Indonesia Stock Exchange in 2015-2019). This study aims to obtain empirical evidence about the differences in abnormal returns and stock trading volume activity stock splits. This study uses an event study with a window period for 11 days. This type of research is a quantitative study using secondary data from the Indonesia Stock Exchange and other data provider websites such as Investing and Yahoo Finance. The sampling technique used was purposive sampling and as many as 54 companies that met the data completeness criteria. The data analysis technique used is the non-parametric t-test using the Wilcoxon Signed-Rank Test. The results of this study indicate that there are differences in trading volume activity with asymptotic significance 0.045. Abnormal Returns show significant changes with asymptotic significance 0.007. However, this significant difference shows a negative reaction from the market, indicated by a decrease in the average TVA and Abnormal Return after the stock split.

Keywords: stock split, stock returns, stock liquidity, abnormal returns, trading volume activities

Abstrak: Reaksi Pasar Terhadap Peristiwa Stock Split (Studi Empiris Pada Perusahaan Yang Terdaftar Di Bursa Efek Indonesia Pada Tahun 2015-2019). *Penelitian ini bertujuan untuk mendapatkan bukti empiris* abnormal return *dan* trading volume activity *saham pada periode disekitar peristiwa* stock split*. Penelitian ini menggunakan* event study *dengan* windows period *selama 11 hari. Jenis penelitian ini merupakan penelitian kuantitatif dengan menggunakan data sekunder berupa data harian saham yang didapat dari Bursa Efek Indonesia dan website penyedia data lainnya seperti* Investing *dan* YahooFinance*. Teknik pengambilan sampel yang digunakan adalah* purposive sampling *dan sebanyak 54 perusahaan yang memenuhi kriteria kelengkapan data. Teknik analisis data yang digunakan adalah uji* non-parametic t-test *dengan menggunakan uji* Wilcoxon Signed-Rank Test*. Hasil penelitian ini menunjukkan bahwa terdapat perbedaan* trading volume activity *dengan* asymptotic significance *0.045.* Abnormal Return *menunjukan perubahan yang signifikan denagn* asymptotic significance *0.007. Namun perbedaan yang signifikan tersebut menunjukkan reaksi negatif dari pasar, ditunjukkan dengan menurunnya rata-rata* TVA *dan* Abnormal Return *setelah peristiwa* stock split*.*

Kata kunci: stock split*,* return *saham, likuiditas saham*, abnormal return, trading volume activity

INTRODUCTION

A stock split is the activities undertaken by the company to increase the number of shares outstanding. This activity is usually performed when stock prices were overvalued by the market, thereby reducing the ability of investors to buy them. A stock split event is considered to be significant information for an investor to make a decision to buy, sell, or hold the stock (Yustisia, 2018).

In the Indonesian capital market, many companies do stock split. Based on data from the *Kustodian Sentral Efek Indonesia* (KSEI), in 2019 there were 11 companies doing a stock split. For example, PT Sat Nusapersada Tbk (PTSN) formally stock split on Thursday, July 4, 2019. After the stock split, the stock price change PTSN of Rp. 1.500/share to Rp. 500/share. At the time of the stock split, PTSN rose 125 points or 25% at the level of Rp. 625. Unlike the stock PTSN, PT Temas Tbk (TMAS) decreased in price when the stock split on July 18, 2019. The TMAS shares fell as much as 36 points or 17%. This decline occurred because TMAS stock has been hunted before the stock split, and stock prices continue to rise TMAS before the stock split.

One that affects the demand and supply of shares to obtain a market price is the stock price level. If the share price is considered too high, the amount of market demand will be reduced because of high stock prices will reduce the ability of investors to buy the stock, especially for retail investors. Vice versa, if a stock is considered fairly low, the amount of demand will increase because many investors can buy the shares. The law of supply and demand will come back into effect, and as a consequence, the high share price will decrease to create a new equilibrium position. How that is done by the issuer to keep the shares remain in a trading range that is optimal (Susanti, 2009).

The market reaction to stock split event can be seen through the trading volume and share price movements. If trading volume increased due to increased demand, it could be mean that a stock split is a positive event (good news). Conversely, if an increase in trading volume caused by the increase in sales can be concluded that investors consider the stock split event as bad news. The market will also react to the movement of the stock price. If the stock price tends to go down, then it reflects that a stock split is a negative event (bad news), and vice versa, if the stock price tends to rise then it reflects that a stock split is a positive event (good news) (Susanti, 2009).

Jogiyanto (2016: 652) states that the stock split is regarded as a positive signal for the company's managers will deliver the prospect of a better future. This is in line with the

signalling theory, which states that the stock split to provide information about prospects for increased returns. Analysts will catch the signal and then use it to predict an increase in long-term returns.

Stock split event is a phenomenon that is still confusing and puzzling in economics — this phenomenon indicated by the mismatch between theory and practice. In theory, a stock split only increases the number of shares outstanding, does not add to the welfare of investors, and does not provide additional economic value for the company or not directly affect the company's cash flow. But some empirical evidence suggests that the market reacted to the stock split, even some of the research conducted showed a controversy regarding the effect of the stock split. Research on market reaction to the events of the stock split done by Susanti (2009) suggests that there is a reaction to the event market stock split. While research Widasari (2018) shows that there is no change in returns and trading volumes in the period surrounding the events of a stock split. Amalia (2018) shows that there is a significant difference between the stock returns before and after the stock split, and there are significant differences between the trading volume before and after the stock split.

This research is the development of research that has been by Susanti (2009) and Amalia (2018) with the difference in company stock split that is 2003 to 2007 and from 2013 to 2017. Widasari (2018) using windows period ten days before and ten days after stock split. This study used a sample of whole firms listed in the Indonesia Stock Exchange in 2015 until 2019 to obtain a more representative number of samples in the study. From the difference in the results of research on market reaction to the events of the stock split, "MARKET REACTION TO EVENTS STOCK SPLIT (An Empirical Study of Company Listed on Indonesia Stock Exchange in 2015-2019)".

LITERATUR REVIEW

Capital Market

According to Brigham and Joel (2014), the capital market is a market to obtain long-term financing. In general, the stock market offers long-term securities as well as the medium-term, such as stocks, bonds issued by the company, and debentures issued by the government (Namrata, 2017).

Efficient capital market is a form of market consisting of many sellers and buyers interact in it and have the character which is free (free market), which is easy enough for new investors to enter and conduct transactions, and vice versa, it is also quite easy for others to leave the market at any time.

So, the capital market is part of the financial market activities offering and trading of securities such as stocks, bonds, mutual funds, as well as products of other capital markets, allowing investors to place their funds in securities that have been due to consider the level of benefits and risks which will be received in the future.

Stock

Stock is one of the instruments traded in the capital market. Shares can be defined as a sign of capital participation by one or one party (business entity) in a company or limited liability company. By including this capital, the party has a claim on company income, a claim on company assets, and is entitled to attend the general meeting of shareholders (GMS).

Market Reaction

The market reaction is a response to investors of an event that is considered to have good or bad news (Jogiyanto, 2016). The market reaction could be seen from the change in the sale of shares or not and the stock price. The change in the stock price will also affect the returns to be received by the investors through changes in capital gains, which will also lead to the difference between the actual return expected return, it is commonly referred to as the abnormal return. Abnormal return commonly used to measure whether the existence of a market will react or not. Stock split can be said to have the information when the announcement gives the market reaction. The market reacted because the event is considered to have good prospects (Jogiyanto, 2016).

Event Study

According to Jogiyanto (2016: 643) study of events is a study of the market reaction to an event that information is published as an announcement. Good news will be responded positively by the market, as reflected by positive abnormal return. So rather than with a negative abnormal return (Tandelilin, 2010: 565).

Stock Split

A stock split is a stock that is split into n shares for new shares of 1/n of the previous share price, which is done by corporate managers to reorganize the stock market price by increasing the number of shares outstanding (Jogiyanto, 2016: 649-650). According to Brigham and Ehrhardt (2011: 587), a stock split is the activities carried out by companies that have gone public to increase the number of shares outstanding.

The signalling theory states that the stock split to provide information to investors about the prospects for future improvement substantial returns. The stock split announcement is considered as a signal given by the management to the public that the company has good prospects in the future. This signalling theory concerning the efficient market hypothesis, it can be concluded that the stock split is good news (good news) for investors, and these events should be reacted positively (Jogiyanto, 2016: 652). Stock split requires the cost to be borne so that only companies that have good prospects who can carry out a stock split. Conversely, companies that do not have good prospects who try to give an invalid signal through a stock split would not be able to bear the costs Jogiyanto, 2016: 653).

The trading range theory states that the high level of stock prices is the motivation manager of the stock-split. The stock price is too high, resulting in less active trading activity that encourages companies to conduct a stock split (Khomsiyah and Sulistyo, 2001). Trading range theory also states that the stock split will increase the liquidity of stock trading. Fatmawati (1999) stated that the motivation of the manager to do the stock split is to increase the liquidity of shares so that the distribution of shares is becoming more widespread. The manager did a stock split so that the level of trade to be in better condition so that it can add to the attraction of investors and increase trading liquidity. These conditions led to the increasing number of shares traded and the number of holders of such shares.

Trading Volume Activity

The trading volume is a function of the increase (increasing function) of absolute price changes, where prices reflect the level of information. Stock trading can occur if the investor has a different accuracy of the information they receive (Susanti, 2009). Share trading activity was measured by the relative trading volume activity (TVA). Widayanto and Sunarjanto (2005) states that trading volume activity (TVA) is an indicator that can be used to see the reaction of capital markets on the movement parameter information through the stock trading volume activity in the stock market. Changes in stock trading volume in the stock market show trading activity on the exchange and reflect the investment decisions of investors.

Small trading volumes show investors are less interested in investing in the secondary market and vice versa. The high volume of trading can be seen from the increase in the number of share transactions and also an indication of the number of shareholders. The

trading volume is expected to increase with a stock split (Susanti, 2009). The trading volume (TVA) can be calculated with the following formula.

$$TVA_{i,t} = \frac{Company\ i\ shares\ traded\ at\ time\ t}{Company\ i\ shares\ outstanding\ at\ time\ t}$$

(Husnan, 2001)

Information:

TVAi,t = Trading Volume Activity I at time t

i = Name of company

t = Specific time

Stock Return

Stock returns are earnings per share enjoyed by investors on an investment made. Return is one of the most important aspects of investment analysis. When investors to invest, they expect a certain profit level. Return the result from investments. Return is one of the factors that motivate investors to invest and also a reward for the courage of investors to bear the investment risk undertaken (Susanti, 2009).

To determine whether the presence of the stock split has a signalling function or can be measured by abnormal return. Abnormal return is the excess of the actual return with the expected return (Amalia, 2018). When the company announces a stock split policy, it will make the market react. If investors assume that a stock split is good news, then an abnormal return will be positive. But on the contrary, if investors consider the stock split as bad news, then negative abnormal returns (Jogiyanto, 2016). The formula for calculating abnormal returns is as follows:

$$AR_{it} = R_{it} - E(R_{it})$$

(Jogiyanto, 2015: 648)

Information:

ARit = Abnormal return i share the event period to t

Rit = Return the exactly happenen to the stock i in the period to events all t

E(Rit) = Return i share expectations for the period of events to t

Research Paradigm

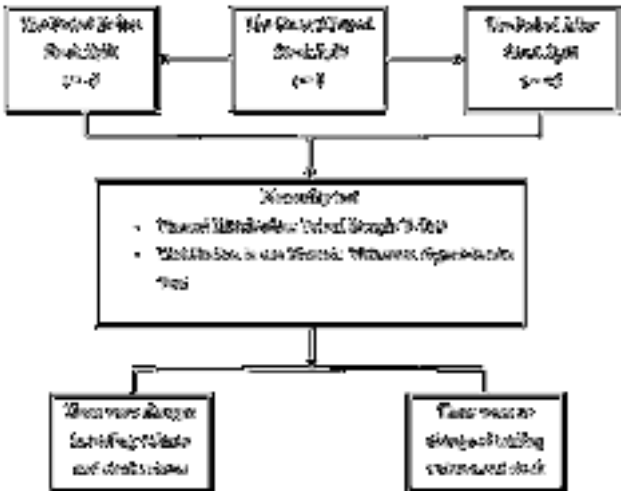

Figure 1. Research Paradigm

Research Hypothesis

H_1: There are differences in the trading volume activity of stock trading in the period before and after the stock split.

H_2: There is a difference of abnormal return in the period before and after the stock split.

RESEARCH METHOD

Type of Research

This research is an event study research, a study that studies the market reaction to an event whose information is published as an announcement (Jogiyanto, 2016). Event study can be used to test the information content (information content) of an event. The testing information content is meant to see the reaction of an event. If there is information contained in the event, it is expected that the market will react when the event occurred. The reaction by the market in the form of an increase or decrease in the stock price significantly before the event occurs, or an increase or decrease after the event occurred. In other words, event study is primarily related to how fast a market entry information may be reflected in stock prices.

Population, Sample, and Windows Period

In quantitative research, the population is the generalization region consisting of the object/subject that has certain qualities, and characteristics are set to learn and then drawn a conclusion (Sugiyono, 2016: 2015). The population in this study are all companies listed in Indonesia Stock Exchange and the stock split during 2015 up to 2019. During the period of observation obtained a total population of 74 companies.

In this study, the criteria for the purposive sampling method are:

1. The publicly-traded company listed on the Indonesia Stock Exchange and the stock split during the years 2015 through to 2019.
2. The publicly-traded was having the data required to complete the study.
3. The publicly-traded not doing other corporate action during the observation period (event window), such as rights issues, warrants, additional shares, the announcement of dividends, bonus shares, merger, and others.

Based on the above criteria, obtained 54 companies.

In the present study, researchers used a windows period five days before and five days after the stock split. For determining the expected return, the researcher using a market-adjusted return where the return expectations of the market return data when the event occurred. Here is an example of the picture windows and the estimation period:

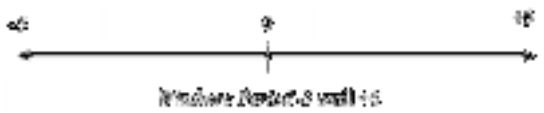

Figure 2. Windows Period

Place and Time Research

This study was performed on companies listed on the Indonesian Stock Exchange (BEI) in 2015-2019 with the consideration that there are sufficient data about the problems studied, namely the financial statements. Data obtained through the official website of the Indonesia Stock Exchange as well as several websites supporting such www.yahoofinance.com, www.id.investing.com, www.ksei.co.id, and www.sahamOK.com. When the study began in September 2019.

Data Collection Technique

Data collection techniques used in this study are documentation, which is done by copying the data the company's financial statements following the criteria of the study sample through the official website of the Indonesia Stock Exchange as well as several websites supporting.

The data collected in the study are as follows:

1. Data names of companies that announced the stock split in the period 2015 until 2019 of www.ksei.co.id and SahamOK.com.
2. The data for each company's stock split sampled.
3. Daily stock prices in 2015 until 2019. The stock price data used is the closing price since the price is the price that has been determined by the market. Daily data was used because it has a high level of sensitivity in response to the market reaction.
4. IHSG data daily, both for the period of observation or estimation period.
5. The daily data volume of trading during the observation period.
6. Data on the number of outstanding shares companies sampled in a given period.

RESEARCH RESULT

Descriptive Statistic

Descriptive statistical analysis is performed to determine an overall picture of the fundamental samples, such as the magnitude of the average value of each sample before and after the stock split, the maximum value, and minimum value. Descriptive statistics include the following table that can explain the research data of Stock Trading Volume (TVA) and the abnormal return during the observation period in this study.

Table 1. Descriptive Statistic TVA

TVA	Before	After	Information
Minimum Value	0,00000	0,00001	Rise
Maximum Value	0,01706	0,02235	Rise
Average	0,00204	0,00201	Down

Source: Data processing results, 2019

From the table of descriptive statistics, TVA results exceeded the amount of data analyzed by 54 companies with a minimum TVA value before the stock split was 0.00000 and followed by a stock split of 0.00001. The maximum TVA value before the stock split is 0.01706 and after the stock split is 0.02235. On average, TVA reduced the decrease from 0.00204 to 0.00201. A total of 17 companies increased TVA, and 37 companies experienced a decrease in TVA. The decline in the average TVA shows that stock trading activity is reduced after a stock split. This can occur because the information requested by the market does not match the needs of investors. Investors have not yet agreed that a company that conducts stock splits will provide good prospects.

Table 2. Descriptive Statistic AR

AR	Before	After	Information
Minimum Value	-0,03271	-0,03743	Down
Maximum Value	0,15611	0,09604	Down
Average	0,01154	-0,00178	Down

Source: Data processing results, 2019

From the descriptive statistical results table above, abnormal returns show the amount of data analyzed as many as 54 companies with a minimum value of abnormal returns before the stock split is -0.03271 and after the stock split -0.03743. The maximum abnormal return value before the stock split is 0.15611 and after the stock split is 0.09604. The average of abnormal returns before the stock split is 0.01154, and after the stock split is -0.00178. The average abnormal return shows that the abnormal return has decreased after the stock split from 0.01154 to -0.00178. A total of 35 companies decrease in abnormal returns, and 19 companies increase in abnormal returns. The decrease in abnormal returns after a stock split indicates that the market reacts with a stock split, but it still needs to be seen on what day the market reaction occurs.

Normality Test

Based on the TVA normality test results, the TVA before and after the stock split event is not normally distributed, this is indicated by all asymptotic significance values below 0.05. The data that has a normal distribution, further testing using parametric statistical tests can be continued. As for the data that is not normally distributed, the next test uses non-parametric statistical tests.

Based on the abnormal return test results, the abnormal return before the stock split in t-5 and after the stock split in t + 2 is normally distributed as indicated by the asymptotic significance value of more than 0.05. However, for other periods before and after having data that are not normally distributed, this is indicated by the value of asymptotic significance, which is below 0.05 because some of the abnormal return data is not normally distributed, then for subsequent tests using non-parametric statistical tests.

Hypothesis Test

Testing of the H_1 hypothesis aims to determine the differences in Stock Trading Volume (TVA) before and after the stock split. While testing, the H_2 hypothesis aims to determine the differences in abnormal returns both before and after the stock split.

Table 3. Hypothesis Test TVA

Period	z-count	Asymp. Sig. (2-tailed)
TVA t+5 - TVA t-5	-0,400	0,689
TVA t+4 - TVA t-4	-2,002	0,045*
TVA t+3 - TVA t-3	-0,495	0,621
TVA t+2 - TVA t-2	-1,106	0,269
TVA t+1 - TVA t-1	-1,132	0,258

Source: Data processing results, 2019

Testing of the H_1 hypothesis aims to determine the differences in TVA before and after the stock split event. Based on the test results in table 3 above, there is no difference in the average TVA in five days before and five days after the stock split. Meanwhile, for four days before and four days after the stock split there is a difference in the average TVA at the 5% significance level, namely by showing an asymptotic significance of 0.045. For three days before and three days after the stock split there is also no difference in the average TVA. Wilcoxon Signed-Rank Test results showed that two days before and two days after the stock split, there was no difference in the average TVA. Meanwhile, one day before and one day after the stock split, there was no difference in the average TVA.

Table 4. Hypothesis Test AR

Period	z-count	Asymp. Sig. (2-tailed)
AR t+5 - AR t-5	-1,038	0,299
AR t+4 - AR t-4	-2,682	0,007*
AR t+3 - AR t-3	-1,735	0,083
AR t+2 - AR t-2	-1,537	0,124
AR t+1 - AR t-1	-1,485	0,1,37

Source: Data processing results, 2019

Testing of the H_2 hypothesis aims to determine the differences in abnormal returns before and after the stock split event. Based on the test results in table 4 above, it can be seen that there is no difference in the average abnormal return in five days before and five days after the stock split. Meanwhile, for four days before and four days after the stock split,

there is a difference in the average abnormal return at the significance level (α) of 5%, namely by showing an asymptotic significance of 0.007. For three days before and three days after the stock split there is also no difference in the average abnormal return. Wilcoxon Signed-Rank Test results show that in two days before and two days after the stock split there was no difference in the average abnormal. One day before and one day after the stock split there is also no difference in the average abnormal return.

CONCLUSIONS AND SUGGESTION

Conclusions

This research was conducted to prove whether the company doing a stock split will cause a market reaction that is following the signalling theory and trading range theory, there are significant differences in stock returns and differences in trading volume before and after the stock split.

Based on the discussion that has been stated, some conclusions can be drawn as follows.

1. Stock liquidity projected by Trading Volume Activity (TVA) shows significant differences in TVA in four days before and four days after stock split, namely by showing an asymptotic significance of 0.045. Significant differences TVA shows that the information is getting a response by the public, but the response is negative. The negative response is due to investors being pessimistic about the performance of listed companies because investors consider that the stock split event has no added value for existing shareholders, so the stock split will not have an impact on shareholder earnings.
2. There is a significant difference in abnormal returns in four days before and four days after the stock split at a significance level of 5%, namely by showing an asymptotic significance of 0.007. However, the response given is the same as TVA, which is a negative response. That was caused by investors who still did not believe in the positive signals given by the company so that the response given to the stock split was negative.

Suggestions

The results of the study underlie the authors in submitting suggestions or recommendations, which can be stated as follows.

1. Increase or extend the study period so that a greater number of samples can be obtained, and the results of the study are deeper and statistically better.

2. Adding other variables such as bid-ask spread and security return variability that are thought to have the possibility to influence market reaction so that the results of the study can provide a better depiction.
3. Detailing the research sample based on industry and company size so that the effect of stock split on investor views (market reaction) can be clearly obtained information on several different industries and company sizes.

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