ANALYSIS OF THE EFFECT OF STOCK SPLIT ON ABNORMAL STOCK RETURN AND SHARE LIQUIDITY

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ABSTRACT

Strong companies will not be too affected by news issues about stock splits, but several other companies that do stock splits actually experience a decline in demand for their shares. This study aims to analyze the effect of stock splits on abnormal stock returns and stock liquidity. In this study, the authors use quantitative research methods with a descriptive research approach, because there are variables to be examined and the relationship aims to describe the characteristics or behavior of a population in a systematic and accurate way regarding the relationship between the variables to be studied. The population in this study are companies listed on the Indonesia Stock Exchange, namely companies that carried out stock splits in 2019. Based on the results of research, the authors draw the following conclusions: Based on statistical tests on abnormal returns, it was found that market reactions occurred during the day after the stock split, the first day until the fourth day after the stock split. Based on the results of the different tests on Abnormal Returns before and after the stock split, it shows that there is a significant difference between the returns before and after the stock split. Based on the results of the different tests on the average TVA before and after the stock split, it shows that there is a significant difference between TVA before and after the stock split.

KEYWORDS

Stock Split, Abnormal Stock Return, Share Liquidity

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INTRODUCTION

In 2019, it was reported that many companies wanted to expand in order to expand their business in order to increase their economic activity (Winarto, 2021). Business
expansion is an activity to enlarge or expand a business by creating new markets, expanding facilities, adding human resources, and so on (Chelviani, Meitriana, & Haris, 2019). Expansion can also be carried out as an increase in economic activity in the business run by the company, which will later manifest in increasing business strength, increasing profits, access to technology and the emergence of new customers (AMIN, 2019). With these various advantages, of course, expansion is the goal that is expected by almost every company.

In general, companies that are starting to develop or want to expand really need a large amount of additional capital. One way that can be used to obtain additional capital or funds is by offering company shares to the public (going public) (Datu & Maredesa, 2017). By going public, the company has the advantage that it is easy to increase capital in the future.

Shares are securities that show the ownership of an individual or legal entity to the company issuing the shares (Santy & Triyono, 2017). Shares are one of the alternatives that can be chosen for investors to invest with a large rate of return or profit but also have a large level of risk (Afriyeni & Marlius, 2019). Buying shares in a company means that we have invested or invested in funds and indirectly have ownership rights in the company. By buying shares, of course, investors or investors hope to benefit from the sale of shares, dividends distributed by the company, and also capital gains. Dividends are the profits that investors get given by the company because they get the results from the profits from the business activities carried out by the company (Ulya, 2014). The capital gain itself is the difference between the purchase price of shares and the selling price of shares (Kustina & Safitri, 2019). For example, an investor buys shares of PT XYZ at a price of Rp. 4,250 per share and then sells the shares at a price of Rp. 5,350, then the investor gets a capital gain of Rp. 1,100 for each share he sells.

Many factors affect trading activities that occur in the capital market (Triani, 2013), one of which is regarding various kinds of information that enter and circulate to the capital market. Information is the key to success for investors who invest in the capital market. The more information that is absorbed by investors, the more opportunities for profit.

Investment activities that occur in the capital market have risks that must be voluntarily faced by investors, if investors want to get high profits, they must accept and face high risks as well. We need to know that the risk itself cannot be avoided but we can reduce it. Therefore, to reduce the risks that will be faced by investors, investors directly need complete, accurate, and in accordance with the conditions that occur in the capital market (Herlianto, 2013). One of the information is information about stock split (Sadikin, 2016).

One of the company’s decisions to increase the shares outstanding in the market and reduce the price per share is by splitting shares. Stock split is an activity where a company splits a share into n shares (Rusliati & Farida, 2010). That way, the stock split actually has no economic value or it can be said that the stock split does not add to the value of a company's stock. For example, the number of shares outstanding is 1 million x Rp 5,000 = Rp 5 billion. The company splits its shares from 1 share to 2 shares, so the price per new share becomes Rp 2,500 and the number of shares outstanding is 2 million shares. The company's equity value does not change directly, which is fixed at 2 million x Rp 2,500 = Rp 5 billion.

In general, stock splits are carried out by companies when the company’s share price is considered too expensive or high and it is difficult for investors to invest their capital (Sutrisno, 2021), so that it will increase the demand for the company’s shares. Information about stock splits is considered very valuable information for investors, because the information can be used as one of the major considerations for making decisions in
investing in the market capital.

The main goal of investors in investing their capital is of course to get a return (Nandani & Sudjarni, 2017). The results obtained from investment activities are called returns. The return that can be realized is called the actual return, while the return that is still only planned or expected is called the expected return. The difference between the actual return and the expected return is referred to as an abnormal return (Kusnandar & Bintari, 2020).

Many companies have done stock splits on their shares. Strong companies will not be too affected by news issues about stock splits, but several other companies that do stock splits actually experience a decline in demand for their shares. This study aims to analyze the effect of stock splits on abnormal stock returns and stock liquidity.

**RESEARCH METHODS**

This research use quantitative methods with a descriptive research approach, because there are variables to be examined and the relationship aims to describe the characteristics or behavior of a population in a systematic and accurate way regarding the relationship between the variables to be studied. The population in this study are companies listed on the Indonesia Stock Exchange, namely companies that carried out stock splits in 2019. Companies that carried out stock splits in 2019 were 14 companies based on sources obtained from www.sahamok.com. The sampling technique used in this study is based on the Non-Probability Sampling method. The data analysis method used in this research is descriptive analysis. Descriptive analysis in this study, is used to answer the formulation of the problem regarding the condition of each research variable. To answer the formulation of the problem, the analytical tool used is descriptive statistics.

**RESULTS AND DISCUSSION**

A. Descriptive Statistical Analysis

Descriptive statistical analysis was conducted to find out the overall picture of the basic sample, such as the average value in each sample before and after the stock split, the maximum value and the minimum value. The table below shows the descriptive statistical results of abnormal return.

| Emiten | AR Before | AR After |
|--------|-----------|----------|
| ZINC   | -0.105027324 | 0.057757998 |
| BDMN   | -0.019911604 | 0.01661737 |
| LPIN   | -0.103420356 | 0.072882611 |
| TOBA   | -0.101267699 | 0.059107294 |
| CARS   | -0.140431099 | 0.090229072 |
| TAMU   | -0.181094033 | 0.098693319 |
| PTSN   | -0.060481843 | 0.061862824 |
| TMAS   | -0.076461967 | 0.053592538 |
| BRPT   | -0.084782792 | 0.062583572 |
| JSKY   | -0.049916147 | 0.025206903 |
| AGRS   | -0.037327066 | -0.00143236 |
| MDKA   | -0.122278292 | 0.083660158 |
| ANDI   | -0.08988007 | 0.124504399 |
| TBIG   | -0.124934113 | 0.055398899 |
| Max Value | -0.019911604 | 0.124504399 |
From the table of abnormal returns descriptive statistics above shows the amount of data analyzed as many as 14 companies with the minimum abnormal return value before the stock split is -0.181094033 and after the stock split -0.00143236. The maximum abnormal return before the stock split is 0.019911604 and after the stock split is 0.124504399. The average of abnormal returns before stock split is -0.092658172 and after stock split is 0.061476043. Judging from the average abnormal return, it shows that the abnormal return decreased after the stock split from 0.004 to 0.003. According to the researcher, the decrease in abnormal returns after the stock split shows that the market reacts with the stock split, but it is still necessary to see on what day the market reaction occurs.

From the table of descriptive statistics of returns above, it shows that the amount of data analyzed was 14 companies with the minimum return value before the stock split was -0.221 and after the stock split -0.0248. The maximum return value before the stock split is 0.040 and after the stock split is 0.043. The average return decreased from -0.162 before the stock split to -0.003 after the stock split. According to the researcher, the decline in stock returns indicates that the return received by investors after the stock split is lower than the return received before the stock split because the stock price decreases which results in a decrease in stock returns.

| Emiten | R Sebelum | R Sesudah |
|--------|-----------|-----------|
| ZINC   | -0.1858325| -0.00799112|
| BDMN   | -0.0405227| -0.02481694|
| LPIN   | -0.1846464| -0.001772681|
| TOBA   | -0.1719267| -0.023947318|
| CARS   | -0.2075578| -0.001241056|
| TAMU   | -0.2213723| 0.013027368|
| PTSN   | -0.1147981| -0.004156404|
| TMAS   | -0.1482585| 0.00689987 |
| BRPT   | -0.2147128| 0.005987599|
| JSKY   | -0.1306933| -0.014885441|
| AGRS   | -0.0698177| -0.023202692|
| MDKA   | -0.2048945| 0.000255193|
| ANDI   | -0.1756118| 0.043392286|
| TBIG   | -0.2078228| -0.019158194|
| Max Value | -0.0405227 | 0.043392286 |
| Min Value | -0.2213723 | -0.02481694 |
| Average Value | -0.1627477 | -0.003701387 |

From the table of descriptive statistics of returns above, it shows that the amount of data analyzed was 14 companies with the minimum return value before the stock split was -0.221 and after the stock split -0.0248. The maximum return value before the stock split is 0.040 and after the stock split is 0.043. The average return decreased from -0.162 before the stock split to -0.003 after the stock split. According to the researcher, the decline in stock returns indicates that the return received by investors after the stock split is lower than the return received before the stock split because the stock price decreases which results in a decrease in stock returns.

| Emiten | TVA Before | TVA After |
|--------|------------|-----------|
| ZINC   | 0.003829337 | 0.000460755 |
| BDMN   | 0.000148943 | 0.007192988 |
| LPIN   | 0.0000575   | 0.000193471 |
| TOBA   | 9.1429E-05  | 6.98171E-05 |
| CARS   | 0.002799333 | 0.000470867 |
| TAMU   | 0.00586016  | 0.001905237 |
From the table of TVA descriptive statistics above, it shows that the amount of data analyzed was 14 companies with the minimum TVA value before the stock split was 0.013258484 and after the stock split was 0.011411547. The maximum value of TVA before the stock split is 9.1429 and after the stock split is 6.93171. The average of TVA decreased from before the stock split 0.003537063 to after the stock split 0.00278193. According to the researcher, the decrease in the average TVA indicates that stock trading activity decreases after the stock split occurs. This can happen because the absorption of information by the market has not been evenly distributed so that investors need time to make investment decisions. Investors do not fully believe that the company that does the stock split will later provide good prospects.

B. Normality Test
Before carrying out statistical tests, the first step that needs to be done is to test the normality of the data on each variable to test whether the data is normal or not. The normality test of the data used is the Kolmogorov-Smirnov Test. The next step in this test is to determine the hypothesis, as follows: (Uyanto, 2016)

\[ H_0 : \text{Data comes from a normally distributed population.} \]
\[ H_1 : \text{The data do not come from a normally distributed population.} \]

In hypothesis testing, the criteria for rejecting or not rejecting \( H_0 \) based on the P-value are as follows:
- If \( P\text{-value} < a \), then \( H_0 \) is rejected.
- If \( P\text{-value} > a \), then \( H_0 \) cannot be rejected.

1. Testing the Normality of Stock Price Variable Data
Below are the results of testing the normality of the data on the stock price variable:

**One-Sample Kolmogorov-Smirnov Test**

| Normal Parameters \( a,b \) | Mean | Std. Deviation |
|----------------------------|------|---------------|
| Unstandardized Residual    |      |               |
| N                          | 56   | 811.68774019  |
| Most Extreme Differences   |      |               |
| Absolute                   | .186 |               |
| Positive                   | .186 |               |
| Negative                   | -.078|               |
| Test Statistic             | .186 |               |
Based on the results of the normality test on the stock price variable, it can be seen that the significance value of the stock price before and after the stock split is above 0.05. These results indicate that H0 is accepted or it can be interpreted that the data is normally distributed.

**2. Normality Testing of Trading Volume Activity Variable Data**

The following below are the results of testing the normality of the data on the Trading Volume Activity variable:

*One-Sample Kolmogorov-Smirnov Test*

|                  | Unstandardized Residual |
|------------------|-------------------------|
| **N**            | 14                      |
| Normal Parameters<sup>a,b</sup> | Mean       | .0000000 |
|                  | Std. Deviation          | .00245864 |
| Most Extreme Differences | Absolute | .248    |
|                  | Positive                | .248    |
|                  | Negative                | -.115   |
| Test Statistic   | .248                    |
| Asymp. Sig. (2-tailed) | .019<sup>c</sup> |

Based on the results of the normality test on the TVA variable, it can be seen that the significance of the stock price before and after the stock split is above 0.05. These results indicate that H0 can be accepted or it can be interpreted that the data is normally distributed.

**3. Testing Normality of Variable Data Average Abnormal Return**

The following below are the results of testing the normality of the data on the Average Abnormal Return variable:
Based on the results of the normality test on the AAR variable, it can be seen that the significance value of the Average Abnormal Return Stock Split is above 0.05. These results indicate that H0 is acceptable and means that the data is normally distributed.

C. Hypothesis Testing

The first hypothesis states that there is a market reaction after the company conducts a stock split. Market reaction testing is done by calculating abnormal returns around the observation period. This test is to determine the significance of abnormal returns during the observation period as indicated by the magnitude of abnormal returns not equal to zero, which is positive for good news and negative for bad news.

| Test Statistic | Mean | Std. Deviation |
|----------------|------|----------------|
| Sesudah - Sebelum | -6.509 | .02269178 |

1. First Hypothesis

The first hypothesis in this study is that there is a significant difference in stock prices before and after the stock split. To test the first hypothesis, the data used are stock prices before and after the stock split from 14 research samples. The test is carried out using the T test: Wilcoxon

By looking at the results from the table above, it is known that Z Count is -6.509 and the significance value is 0.000. then H1 is accepted or means there is a difference in stock prices before and after the Stock Split.

| Test Statistic | Mean | Std. Deviation |
|----------------|------|----------------|
| After-Before | -1.475 | .02269178 |
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Asymp. Sig. (2-tailed) .140

a. Wilcoxon Signed Ranks Test
b. Based on positive ranks.

2. Second Hypothesis

The second hypothesis in this study is that there is a significant difference in trading volume activity before and after the stock split. To test the second hypothesis, the data used is the average trading volume activity before and after the stock split. Testing trading volume activity using the T: Wilcoxon Test

By looking at the results from the table above, it is known that Z Count is -1.475 and the significance value is 0.140. Because the significance value is greater than 0.05, which is 0.140 then H2 is rejected or means there is no difference in Trading Volume Activity before and after the Stock Split.

T Test Results : Wilcoxon AAR Before and After Stock Split

| Test Statistics | sesudah - sebelum |
|-----------------|------------------|
| Z               | -3.296           |
| Asymp. Sig. (2-tailed) | .001       |

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

3. Third Hypothesis

The second hypothesis in this study is that there are significant differences in abnormal returns before and after the stock split. To test the second hypothesis, the data used is the average abnormal return before and after the stock split. This test is carried out using the T: Wilcoxon test.

Judging from the results of the table above, it is known that the Z-count is -3.296 and the significance value is less than 0.05, which is 0.001 then H3 is accepted, which means there is a difference in Abnormal Return before and after the Stock Split.

D. Differential Test (Paired Sample t-Test)

1. Testing Abnormal Differences in Stock Returns Before and After Stock Split

Paired Samples Statistics

| Pair | Mean | N | Std. Deviation | Std. Error |
|------|------|---|----------------|------------|
| Pai m Sebelum | .00353 | 14 | .00359758 | .00096149 |
| Sesudah h | .00278 | 14 | .00319569 | .00085408 |

Paired Samples Correlations

| Pair | Sebelum & Sesudah | N | Correlation | Sig. |
|------|-------------------|---|-------------|------|
| 1    |                   | 14 | -.727       | .003 |
Paired Samples Test

Paired Differences

| Mean | St. Deviation | St. Error | Lower | Upper | Sig. (2-tailed) |
|------|---------------|-----------|-------|-------|----------------|
| 0.01 | .0035371      | .00096149 |       |       | .014           |

From the results of the statistical test above, it can be seen that the value of sig. 0.000 < 0.05. Thus, it can be said that there is a significant difference in abnormal stock returns before and after the company conducts a stock split. There is a significant difference in stock returns before and after the stock split because investors trust the company that does the stock split will provide large returns to investors. When viewed from the average abnormal return of the stock has decreased after the stock split, with the average value before the stock split of 0.0035371 to 0.0027818 the average value of abnormal returns after the stock split. According to the researcher, the occurrence of a decrease in abnormal stock returns after the stock split as a result of the stock split will make the stock price low, thus affecting the decline in stock returns after the stock split.

2. Testing the Difference of TVA Before and After Stock Split

TVA Difference Test Results Before and After Stock Split

Paired Samples Statistics

| Mean   | N    | Std. Deviation | Std. Error |
|--------|------|----------------|------------|
| .00353 | 14   | .00359758      | .00096149  |

Paired Samples Correlations

| Pair         | N  | Correlation | Sig. |
|--------------|----|-------------|------|
| Sebelum & Sesudah | 14 | .639 | .014 |
From the results of the statistical test above, it shows that the value of sig. 0.349 > 0.05. This means rejecting the hypothesis that there is a significant difference in TVA before and after the company conducts a stock split. However, judging from the calculation table above, the average TVA value before was 0.0035371 and the average TVA after was 0.0027818, it means that TVA decreased after the stock split. According to the researcher, the decline in TVA is also evidenced in the descriptive statistics of TVA. This is due to the uneven distribution of information so that there are investors who receive information on time and there are investors who receive information slowly. Investors are not interested in companies that do stock splits because investors are still unsure about the conditions promised by the company in the future.

E. Discussion

1. Differences in Abnormal Returns Before and After Stock Split

From the results of hypothesis testing, a significance value of <5%, it indicates that there are differences in abnormal stock returns before and after the stock split. So the hypothesis which states that there are differences in stock returns before and after the company conducts a stock split is accepted.

Theoretically, the trading range theory says that a stock price that is too high makes the company's shares illiquid, therefore the company conducts a stock split to attract investors to transact shares and will increase stock trading liquidity and increase stock prices.

In this study it was proven. The results of this study even show that there are significant differences in abnormal stock returns before and after the company conducts a stock split. Even the average stock return in each sample of 14 companies experienced an increase after the stock split. This abnormal increase in stock returns occurs because with a stock split it will make the stock price low so that it also has an impact on increasing stock returns.

2. Difference in Stock Trading Volume Before and After Stock Split

The results of testing the third hypothesis in this study were statistically proven that there was a significant difference in TVA before and after the company conducted a stock split. However, in this study, TVA decreased after the stock split, which means that the market responded negatively to the announcement of the stock split.

Theoretically, the liquidity theory states that with the company doing a stock split, the high stock price will be easier for investors to reach, so that more investors will make stock transactions, and the company's shares will become more active for trading. However, in this study, the market responded negatively so that TVA declined. There is a decreased
Due to information that is spread unevenly. Investors also still have doubts in making investment decisions with the conditions promised by the company in the future.

**CONCLUSION**

Based on the results of research on the effect of stock splits on market reactions, stock returns and stock trading volumes in companies listed on the IDX in 2013-2017, the authors draw the following conclusions: Based on statistical tests on abnormal returns, it was found that market reactions occurred during the day after the stock split, the first day until the fourth day after the stock split. On the day of the announcement of the stock split, the market reacted positively as evidenced by a positive abnormal return. A positive abnormal return indicates that a stock split is good news for investors, but a negative abnormal return indicates a stock split is bad news so that it will affect investor confidence to invest. According to the researcher, the decrease in abnormal returns after the stock split shows that the market reacts with the stock split, but it is still necessary to see on what day the market reaction occurs.

Based on the results of the different test on Abnormal Returns before and after the stock split, it shows that there is a significant difference between the returns before and after the stock split. This means that there is a stock split which makes the stock price decrease and ultimately the return also increases and increases the abnormal value of stock returns in the company. According to the researcher, the occurrence of a decrease in abnormal stock returns after the stock split as a result of the stock split will make the stock price low, thus affecting the decline in stock returns after the stock split.

Based on the results of the different test on the average TVA before and after the stock split, it shows that there is a significant difference between TVA before and after the stock split. However, this difference shows that the average TVA decreases after the stock split. This result is contrary to the liquidity theory which states that doing a stock split will increase stock trading volume or increase liquidity as a result of lower stock prices and attract investors. According to the researcher, a decrease in TVA is also evidenced in the descriptive statistics of TVA. This is because the distribution of information is not evenly distributed so that there are investors who receive information on time and there are investors who receive information slowly. Investors are not interested in companies that do stock splits because investors are still unsure about the conditions promised by the company in the future.

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