

Article

The Effect of Stock Split on Stock Return, Stock Trading Volume, and Systematic Risk in Companies Listed on the Indonesia Stock Exchange

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Abstract: In the Indonesian capital market, corporate action is commonly used. Public companies adopt corporate activities to improve their performance and benefit their shareholders. One of the corporate actions that companies often carry out is a stock split. The stock split is a corporate action carried out by an issuer to increase the number of shares outstanding. The stock return, stock trading volume, and systematic risk indicators are used to assess the effectiveness of the stock split event. The study was carried out to see the effect of the stock split event regarding whether there were differences in stock returns, stock trading volume, and systematic risk before and after the stock split. This study uses secondary data taken from the official website of the Indonesia Stock Exchange. The sample was selected using a purposive sampling method with certain criteria. The sample in this study amounted to 37 companies listed on the Indonesia Stock Exchange that carried out stock split actions from 2017 to 2020. The results showed a significant difference in abnormal stock returns, stock trading volume, and systematic risk before and after the stock split.

Keywords: stock split; abnormal stock return; stock trading volume activity; systematic risk.



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1. Introduction

In the Indonesian capital market, we often hear the word corporate action carried out by issuers. Corporate actions are activities carried out by public companies related to shares and company activities that aim to improve company performance, which will impact shareholders. One of the corporate actions that companies often carry out is a stock split. The stock split is a corporate action carried out by an issuer to increase the number of shares outstanding (Putra & Suarjaya, 2020). A stock split is carried out when the stock price is considered too high, affecting the ability of investors to buy shares. By doing a stock split, the stock price will be lower so those small investors can more easily reach it. It can certainly increase the demand for shares. The purpose of investors in investing in stocks is to get the maximum return. After the stock split, stock returns are expected to impact positively. Stock return is a risk-reward for investors' courage to bear the risks of their investments (Gilli & Schumann, 2011).

Investors' decisions regarding the stock split will impact the trading volume of the company's shares. Stock trading volume measures the volume of shares traded, indicating the ease of trading these shares (Anderson & Dyl, 2005). The Trading Volume Activity (TVA) shows stock trading volume. Trading Volume Activity compares the number of companies shares traded in a certain period with the number of shares outstanding in a certain period. Doing a stock split means increasing the number of shares outstanding; this also makes investors related to these activities rearrange their investment portfolios. This arrangement is inseparable from the risk of the stocks that make up the portfolio so that investors can expect a lower risk level. As investors, we will choose investments that have a small risk when faced with investments that have the same return. The efficient investment provides a small risk with a large rate of return (Schoenmaker & Schramade, 2019).

How & Tsen (2019) studied the effect of Stock Split on stock returns, and he found that Stock Split action affects stock returns in terms of abnormal returns. Therefore, there is a significant difference between stock returns in the event period and stock returns in the estimation period calculated by the abnormal return. However, it is different from the research (Damayanti, Atmadja, & Darmawan, 2014), which showed that the stock split event did not show any difference in abnormal stock returns before and after the stock split. Besides that, Dwi Rahayu (2017) focused on the effect of a Stock Split on stock trading volume and indicated a significant difference in Trading Volume Activity between before and after the Stock Split. Therefore, it is concluded that the stock split significantly affects stock liquidity. This result contradicts the research conducted by Masdupi, Megawati, & Irawan (2017), which shows no difference in stock trading volume as seen from the Trading Volume Activity (TVA) before and after the Stock Split event.

Puspita & Yuliari (2019) studied the effect of Stock Split on systematic risk, which resulted in the absence of differences in systematic risk after and before the stock split event. The strength of the company's internal factors is indicated by the absence of the influence of systematic risk (β) against shares. However, different results were obtained by Ruhama (2012), which showed that there were significant differences in systematic risk before and after the Stock Split event. The difference is because the stock price after the stock split announcement is not very liked by investors who prefer a stable stock price.

The stock split event is still a confusing phenomenon and a puzzle in the economic field. The discrepancy between theory and practice indicates this. Theoretically, a stock split only increases the number of outstanding shares, does not increase shareholders' welfare, and does not provide economic value for the company. But some empirical evidence suggests that the market reacts to stock split announcements. In line with previous elaborations, research on the effect of stock splits on stock returns, stock trading volume, and systematic risk has yielded different results. Due to differences in previous studies (research gap), the researchers are interested in further researching the stock split event. The explanation above is why the researcher raises the title "the effect of stock split on stock return, stock trading volume and systematic risk in companies listed on the Indonesia stock exchange in 2017-2020". This study aims to examine the differences in stock returns, stock trading volume, and systematic risk before and after the stock split.

2. Materials and Methods

This research was conducted on the Indonesia Stock Exchange (IDX). The variables in this study are stock returns, stock trading volume, and systematic risk from companies that do stock splits from 2017 until 2020. The data used in this study were obtained from information published on the Indonesia Stock Exchange. Companies listed on the Indonesia Stock Exchange actively conduct stock trading actions throughout 2017-2020, totaling 724. This study uses historical data obtained from www.idx.co.id and finance.yahoo.com. In addition, data on stock prices, number of shares and stock price index were collected from finance.yahoo.com, while data on companies that carried out stock splits were obtained from www.idx.co.id.

This study took samples from companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2020 period that carried out a stock split. Using the purposive sampling method, sample selection is made by selecting a sample with certain criteria where the sample is not chosen randomly so that the sample selection can represent the population that meets the research criteria. The company sample criteria include (i) the company is listed on the Indonesia Stock Exchange (IDX) during the 2017-2020 period; (ii) the company only carried out a stock split and did not carry out other corporate actions such as warrants, rights issues, stock dividends, and other announcements; (iii) the companies that are actively traded for seven days before and seven days after the stock split; (iv) the company has complete research supporting data. The total number of samples of companies that carried out a stock split was 50 companies. However, 13 companies could not be included in the study because these companies did not meet the abovementioned criteria. So, the sample in this study amounted to 37 companies.

3. Results

3.1. Descriptive statistics

This section reports the result of descriptive statistics, including abnormal stock, stock trading volume, and systematic risk before and after the stock split.

Table 1. The descriptive statistic for abnormal stock return before and after the stock split.

| Stock Split | Min. | Max. | Mean | Std. Deviation |
|-------------|---------|--------|-----------|----------------|
| Before | -0.0074 | 0.1775 | 0.010959 | 0.0299274 |
| After | -0.1265 | 0.0236 | -0.006508 | 0.0234718 |

Table 1 shows that of the 37 companies that did the stock split, the average abnormal return value before the stock split was greater than the average abnormal return after the stock split. The average abnormal return before the stock split was 0.010959 and then decreased to -0.006508 after the stock split. Thus, it can be concluded that there is a negative abnormal return after the stock split, which indicates that the actual return is lower than the expected return. The lowest abnormal return before the stock split was -0.0074 occurred at PT. Mandala Multifinance Tbk. Before the stock split, the highest abnormal stock return was 0.1775 owned by PT. TBS Energi Utama Tbk. Meanwhile, the lowest abnormal return after the stock split was -0.1265, which occurred at PT. TBS Energi Utama Tbk. The highest abnormal return after the stock split of 0.0236 occurred at PT. Mark Dynamics Indonesia Tbk.

Table 2. The descriptive statistics for stock trading volume before and after the stock split.

| Stock Split | Min. | Max. | Mean | Std. Deviation |
|-------------|-----------|-----------|------------|----------------|
| Before | 0.0000076 | 0.0387578 | 0.00818973 | 0.010113985 |
| After | 0.0000072 | 0.3515990 | 0.01124665 | 0.057576242 |

Table 2 captures that of 37 companies, the average increase in share trading volume is greater after doing a stock split. Before the stock split, the average stock trading volume was 0.00818973, then increased to 0.01124665 after the stock split. The lowest stock trading volume before the stock split was 0.0000076 occurred at PT. Fast Food Indonesia Tbk. Before the stock split, the highest share trading volume was 0.0387578, owned by PT. Pelayaran Tamarin Samudra Tbk. Meanwhile, the lowest share trading volume after the stock split was 0.0000072 at PT. Ultrajaya Milk Industry Tbk. The highest share trading volume after the stock split of 0.3515990 occurred at PT. Bintraco Dharma Tbk. It shows PT. Bintraco Dharma Tbk. has been categorized as good company performance.

Table 3. The result of descriptive statistics for systematic risk before and after the stock split.

| Stock Split | Min. | Max. | Mean | Std. Deviation |
|-------------|---------|--------|----------|----------------|
| Before | -0.0863 | 0.0547 | 0.00368 | 0.022239 |
| After | -0.3346 | 0.1266 | 0.011165 | 0.065245 |

Table 3 displays that the average value of Systematic Risk increased after the stock split activity. The average value of Systematic Risk before the stock split, which was 0.00368, increased by 0.011165 after the stock split. The lowest average systematic risk before the stock split was -0.0863 at PT. Intikramik Alamasari Industri Tbk. The highest average systematic risk before the stock split was 0.0547 at PT. TBS Energi Utama Tbk. The lowest average systematic risk after the stock split is -0.3346 at PT. TBS Energi Utama Tbk. The highest average systematic risk after the stock split is 0.1266 at PT. Bukit Uluwatu Villa Tbk.

3.2. The differences between abnormal stock, stock trading volume, and systematic risk

This section reports the result of hypothesis testing using Wilcoxon Signed Ranks Test statistics.

Table 4. The result of hypothesis testing using the Wilcoxon Signed Ranks Test.

| Test statistics | Z | Asymp. Sig. (2-tailed) |
|-----------------------|---------------------|------------------------|
| Abnormal stock return | -2.995 ^b | 0.003 |
| Stock trading volume | -4.458 ^b | 0.000 |
| Systematic risk | -1.984 ^b | 0.047 |

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Table 4 shows the results of hypothesis testing using the Wilcoxon Signed-Rank. The Z statistic for abnormal stock return is -2.995 with the asymp. sig. (2-tailed) is 0.003. The Z statistic of stock trading volume is -4.458 with the asymp. sig. (2-tailed) is 0.000. For systematic risk, the value of the Z statistic is -1.984 with the asymp. sig. (2-tailed) is 0.047. Using 5 percent significant level, we can conclude that there is a significant difference between abnormal stock returns, stock trading volume and systematic risk before and after the stock split.

4. Discussion

This study found a significant difference in abnormal stock returns before and after the stock split. The stock split causes different abnormal returns between 7 days before and 7 days after the stock split. The difference resulting from the data processing does not show a difference in a positive direction but shows a negative direction. A negative abnormal return indicates that an event has a bad impact because the return is smaller than the expected return. Investors tend to wait for abnormal returns to move to a positive value first so that their investment gets the maximum return. Most investors know that companies that do stock splits will need a lot of money to carry out stock split activities, so they assume that stock splits do not increase the returns they will get and can even reduce their returns. It is in line with Eduardus Tandelilin, Hartono, & Hanafi (2013), who stated that one disadvantage of doing a stock split for the company is the cost of splitting, which includes agent transfer fees for the certification process and other costs. This study aligns with Puspita & Yuliari (2019) and Hernoyo (2013), which state differences in abnormal stock returns before and after the company performs a stock split. However, this study contradicts research conducted by Damayanti et al. (2014), which found no difference in abnormal stock returns before and after the company did a stock split.

There is a difference in stock trading volume before and after the stock split. The stock split causes the stock trading volume to differ between 7 days before and 7 days after the stock split. Based on the study results, it can be seen that the average Trading Volume Activity after the stock split has increased compared to before the stock split. The increase in Trading Volume Activity was caused by a decrease in stock prices due to a stock split that could attract investors to invest so that the company's shares became more liquid. The results of this study support the Trade Range Theory, which states that the company does a Stock Split because the stock price is too high. Through a stock split, the stock price will not be too high so that potential investors can buy it, increasing stock liquidity. Therefore, according to the trading range theory, the company divides the stock because it is considered that the stock price is too high. Therefore, it encourages the company to do a stock split. The results of this study are in line with research conducted by Damayanti et al. (2014) and Agus Amanda Tanoy (2020), which state that there are differences in Trading Volume Activity before and after the stock split. But contrary to research conducted by Hernoyo (2013), there is no difference in Trading Volume Activity before and after the stock split.

There are differences in systematic risk before and after the stock split. Based on the results of descriptive statistical analysis, the company's average systematic risk after the stock split was 0.011165, which was greater than before the stock split, which showed an average of 0.00368. It shows that the market reacts positively to the stock split event. There is an increase in the average systematic risk of shares before and after the stock split event, indicating that the company has information content in the stock split event that makes the market react. The increase in systematic risk after the stock split is also caused by the company doing the stock split having to pay a lot of costs incurred as a result of the stock split action. Therefore, investors are careful in taking steps to invest or not in company stocks that have a higher risk. However, stocks with high risk will also bring high returns, following high-risk high returns.

This study is in line with the research conducted by Ruhama (2012). She obtained the results that there were differences in systematic risk before and after the stock split. However, this study contradicts the research conducted by Puspita & Yuliari (2019) and Laksmi (2006), which found no difference in the systematic risk of stocks before and after the stock split. Investors related to the stock split will rearrange their investment portfolios. The stock's systematic risk level movement does not differ in conditions before and after the stock split occurs.

5. Conclusions

This research was conducted to identify the differences in stock returns, stock trading volume, and systematic risk before and after the stock split event. On the basis of the results of data analysis and hypothesis testing described in the previous chapter, this study found that there were differences in abnormal stock returns and stock trading volume before and after the stock split. Thus, it can be concluded that the stock split affects stock returns and stock trading volume. Thus, it can be concluded that the stock split affects systematic risk. Future studies can increase the number of samples and add a longer observation period to see how impactful the stock split is by the company. For calculating the expected return, you can use the market model or adjust the model to identify the market reaction in the event to be used as a comparison. In addition, future research is expected to examine other variables that are influenced by stock split events, such as dividends or profits, by extending the observation period, which will better reflect the market reaction.

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