
Impact of Before and After Stock Split on Trading Volume Activity, Stock Returns, and Abnormal Returns (Study on Companies Listed on the IDX in 2015-2019)

Akhmad Hendra Rahman¹, Bambang Widagdo², Titiek Ambarwati³

Management Department, Universitas Muhammadiyah Malang, Indonesia

Corresponding E-mail: hendra.sr08@gmail.com

Abstract

Capital market are venues where are channeled between the suppliers who have funds and those who are in need of capital. One of the corporate actions to influence the number of shares and share's value to attract the investor is stock split. To looking of the effect stock split of the company can be seen from trading volume activity, return, and abnormal return. In this research discusses the effect of the stock split events can affect trading volume activity, return of shares, and abnormal return by looking at the difference in trading volume activity, return of share, and abnormal return both before and after the stock split. Event window of this research which is 5 days before and 5 days after the stock split events. The data collected are historical data taken from various sources on the internet. The samples are based on purposive sampling, in this research using kolmogorov smirnov test for the normality data and using wilcoxon sign rank test to obtain the result. In this research declared that the stock split positively affects to trading volume activity. And the stock split will not affect both returns and abnormal returns.

Keywords: *stock split; return; abnormal return; trading volume activity*

Abstrak

Pasar Modal merupakan tempat bertemunya pihak yang membutuhkan dana dengan pihak yang memiliki kelebihan dana. Salah satu tindakan koperasi untuk mempengaruhi saham beredar dan nilai saham untuk menarik investor adalah pemecahan saham. Untuk melihat pengaruh stock split dapat dilihat dari aktivitas volume perdagangan, return, dan abnormal return. Penelitian ini membahas tentang pengaruh stock split terhadap aktivitas volume perdagangan, return saham, dan abnormal return dengan melihat perbedaan rata-rata aktivitas volume perdagangan, return, dan abnormal return sebelum dan sesudah stock split. Penelitian ini menggunakan jendela observasi 5 hari sebelum dan 5 hari setelah stock split. Data diambil dari data historis dari berbagai sumber di internet. Sampel yang digunakan adalah purposive sampling. Menggunakan uji Kolmogorov Smirnov untuk uji normalitas dan uji peringkat bertanda Wilcoxon untuk mendapatkan hasilnya. Hasil penelitian menyatakan bahwa stock split berpengaruh positif terhadap aktivitas volume perdagangan, sedangkan stock split tidak berpengaruh terhadap return saham dan abnormal return.

Kata kunci: *pemisahan saham, pengembalian, pengembalian abnormal, aktifitas volume perdagangan*

Article info

Received (15/09/2021)

Revised (29/09/2021)

Accepted (30/09/2021)

Corresponding Email: hendra.sr08@gmail.com

INTRODUCTION

Investment can be interpreted as someone's actions on several funds currently owned to obtain profits in the future. There are two kinds of investments, namely real investments as tangible assets and financial sector investments as written contracts. Investments that are mostly made are financial investments, financial investments can be made in the capital market. A capital market is a meeting place for supply and demand for long-term financial instruments, generally more than one year. In the economic aspect of the country, the capital market has a goal so that the public ownership of shares in the capital market is wider and faster (Sa'diyah, 2021). Therefore, the community can allocate their funds in a useful way. Companies must pay attention to their investors so that it is not easy to attract their investments because investments in securities are volatile (Satiti & Sa'diyah, 2020). There are several ways to increase stock trading liquidity, namely from most companies doing stock splits. Because a stock split is a cooperative action to split its shares when the share price is already valued high for investors, and a stock split makes the number of outstanding shares also increase.

A stock split is merely a "cosmetic" change because this is only an effort to make the stock look attractive to investors, it also does not make the welfare or prosperity of the investor. The treatment of this stock split only creates an illusionary effect for investors, as if investors feel more prosperous by holding more shares. The stock split does not add to the economic value of the stock but is only one tool to increase stock liquidity. The reason for this action is considered a good signal by investors from the company because investors think that the company's manager is a message that there are opportunities in the future. With a stock split, making the stock cheaper, which is acceptable in the eyes of investors, there should be a market reaction to the stock and an increase in the price of the stock from before. This will result in stock returns to investors or cooperatives, if the stock price continues to increase it will produce abnormal returns because the return ratio is greater than the return that occurs in the market due to stock split information. The evidence that stock splits are an important tool for increasing stock liquidity is that many companies took stock split actions, namely, there were 68 companies during 2015-2019:

Table 1. List of Stock Split companies in 2015-2019

Year	Amount
2015	14
2016	25
2017	4
2018	13
2019	12

Source: www.ksei.co.id

It can be seen in table 1 if added up from 2015 to 2019 then 68 companies did stock splits. The most data that carried out stock splits were in 2016 as many as 25 companies, while the least in the following year was only four companies. Overall, from year to year, there are fluctuations in the number of companies that do this, but it can be said that a lot is seen from the number for 5 years. Based on previous studies, research conducted by (Sa'diyah, 2021) on the impact of stock splits on stock prices and trading volume activity which results in significant differences in closing stock prices before and after the stock split. splits. Trading volume activity also has a significant difference before and after the stock split. There are differences in the results that are inconsistent with the results shown in previous studies and phenomena that are not following the theory, the researchers aimed to

determine the effect of the stock split on trading volume activity, stock returns, and abnormal returns in companies listed on the Indonesia Stock Exchange in 2015 up to 2019.

LITERATURE REVIEW

The stock split is a policy by company managers to increase the number of outstanding shares by reducing the nominal value of the shares (Fahmi, 2015: 117). Halim (2015: 76) says that a stock split is the splitting of the number of shares into more shares using a proportionally lower nominal value per share. The purpose of splitting the par value of shares is to increase stock liquidity. The reason why companies do stock splits in the trading range theory is that the inactive stock trading is because the stock price is too high. So that the price can be reached by investors and the price is not too high so that stock liquidity increases by doing a stock split (Hartono, 2013). Chances are small for companies that are in an unhealthy financial condition or are falling. So, the company indicates that its finances are healthy by doing a stock split. As stated in the signaling theory, which is a theory that looks at the signs that describe the condition of the company (Widagdo & Sa'diyah, 2021).

Trading volume activity is the ratio between the number of shares traded at a certain time to the number of shares outstanding at a certain time (Husnan, 2005). The number of shares issued is reflected in the number of shares when the company issues shares (Sa'diyah & Widagdo, 2020). Signs that the market will improve are indicated by the very high volume of trading activity. The information generated from the stock split is seen from the size of the average trading volume activity between before and after the stock split is carried out, if the shares are more liquid, it means that the trading volume of the shares is greater than the shares being circulated. Therefore, the market is said to be strengthening with an increase in trading volume activity and vice versa. As a measure of the company's performance, it can be said that return is considered important. Realized return or actual return is the return that occurs at time t which is the difference between the current price relative to the previous price or can be calculated by the formula $(P_{i,t} - P_{i,t-1}) / P_{i,t-1}$.

According to Jogiyanto (2013), abnormal return is the difference between the actual return and the expected return, the expected return can be calculated in three ways, namely mean adjusted model, market model, and market adjusted model. The mean-adjusted model assumes that the expected return has the same constant value of the average realized return during the estimation period, as follows:

$$E [R_{i,t}] = \frac{\sum R_{it}}{t} \quad (1)$$

Where:

$E [R_{i,t}]$ = expected return of the i -th security in the t event period

R_{it} = return on the realization of the i -th security in the t event period

t = length of the estimated period

The expectation model can be formed using the OLS (Ordinary Least Square) regression technique with the equation:

$$E(R_{it}) = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \quad (2)$$

Where:

$E(R_{it})$ = expected return of the i -th security in the estimation period t

α_i = *intercept*, independent of R_{mt}

β_i = *slope*, systematic risk, dependent on R_{mt}

R_{mt} = return market

e_{it} = residual error of security i in the t -th estimation period

Expected return calculated using the market index because according to the market adjusted model the best estimator for estimating the return of a security is the market index at that time of day. To calculate the expected return, the following formula is used:

$$E(R_{it}) = \frac{IHS_{G_t} - IHS_{G_{t-1}}}{IHS_{G_{t-1}}} \tag{3}$$

Where :

$E(R_{it})$ = expected return

JCI = Composite Stock Price Index on day t

$JCI-1$ = Composite Stock Price Index on day $t-1$

This causes the stock price to be cheap and easy to reach. It is hoped that investors will be interested in buying the stock so that the stock will be more liquid and the trading volume activity will increase and have an effect. Stock prices are also expected to slowly rise when demand increases, when the stock price is higher than the previous price it produces a maximum return.

H1= There is an effect on trading volume activity before and after the stock split

H2= There is an effect on stock return before and after stock split

H3 = There is an effect on abnormal return before and after the stock split

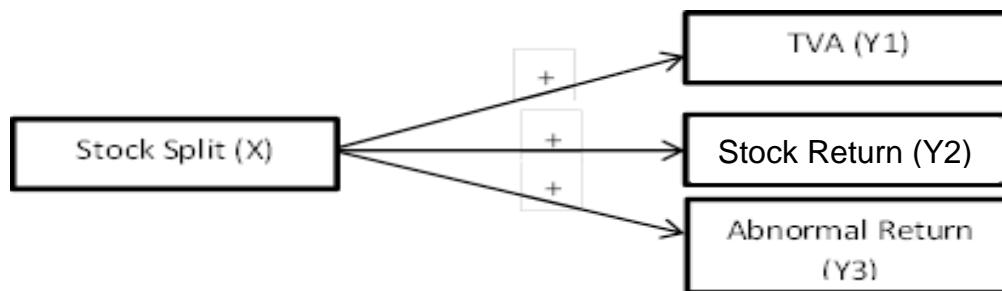


Figure 1. Research Framework

RESEARCH METHOD

This research is an event study with stock split (X) as the independent variable, while the dependent variable is trading volume activity (Y1), stock return (Y2), and abnormal return (Y3). The population contained in this study are companies that carry out stock splits listed on the IDX in 2015-2019. This study using purposive sampling technique criteria as follows; (1) companies listed on the Indonesian stock exchange for the period 2015-2019, (2) there is no other cooperative action, and (3) during the observation period, the data were complete. The data used in this study is secondary data obtained from companies that carry out stock splits listed on the IDX in 2015-2019. The data analysis method is an event study method to manage and discuss data obtained from a stock split event in 2015-2019. The first step was to define the observation window that can be seen in Table 2 below:

Table 2. Observation Window

Before the Event	Incident	After Event
-5 -4 -3 -2 -1	0	1 2 3 4 5 6
T-5	T0	T5

Source: Own Primary Data

The observation window in this study is 5 days before and 5 days after the stock split. The second step was calculating all dependent variable data and their average. The third step was performed normality test with Kolmogorov Smirnov test and the last did a different test with Wilcoxon signed-rank test.

RESULTS AND DISCUSSION

Normality test was performed to determine the appropriate analytical tool for the next difference test. Normality test using Kolmogorov Smirnov normality analysis tool. The data is normally distributed if the significance value is $>5\%$. The following results from the Kolmogorov Smirnov test can be seen in table 2:

Table 3. Kolmogorov Smirnov Results

Variable	N	Kolmogorov Smirnov	Asymp sig.
TVA	35	0.179	0.006
Return	35	0.196	0.002
Abnormal Returns	35	0.158	0.027

Source: SPSS output data processed

From the calculation results shown in the table that all variables have a probability value less than 5%, TVA 0.006 <0.05 , stock returns 0.002 <0.05 , abnormal returns 0.027 <0.05 . From these data, the data is not normally distributed. Thus, the analysis tool uses the Wilcoxon signed ranked test. Hypothesis testing in this study used the Wilcoxon signed ranked test on the average trading volume activity, stock returns, and abnormal returns. 5 days before and 5 days after the stock split.

Table 4. Wilcoxon Signed Ranked Test

Hypothesis	Variable	Average before	Average after	Status	Asymp sig.	Hypothesis status
H1	TVA	0.002	0.011	positive	0.000	Accepted
H2	Return	0.006	0.002	negative	0.098	Rejected
H3	Abnormal returns	0.006	0.001	negative	0.112	Rejected

Source: SPSS output, data processing

Based on the results of the hypothesis that was carried out with the Wilcoxon Sign Ranks Test on the trading volume activity variable 5 days before and after the stock split was carried out on 35 companies with a significant level of 5% (0.05) indicating that there was an effect after carrying out the stock split policy.

This means that the announcement of a stock split on the Indonesia Stock Exchange has a significant effect on stock liquidity. The company conducts a stock split so that the share price is not too high so that the stock trading volume increases. The results of this study have proven the stock split theory, namely the trading range theory which states that a stock split event will increase stock trading liquidity. This theory states that if the stock price is too high, it will cause the shares to be traded less actively because the public finds it difficult to own shares with a stock price that is too high (Fahmi, 2015). The illiquid shares will have a bad impact because they will harm investors. After all, the shares are not easy to invest in. For issuers, liquidity is very important because if the shares are not actively traded, the issuer will be issued shares from the capital market (delisting) with a stock split, the stock price is not too high so that many investors will be able to transact. The hypothesis explains that there is no significant difference in stock returns and tends to be negative, in other words, there is no significant effect on stock returns (H2 Rejected).

The results of this study are not following the Signaling Theory which states that stock splits provide information to investors about the prospect of a substantial increase in future returns. The increased return is a signal about short-term profits and long-term profits, that management has more information about the company's prospects than outsiders (investors), by giving a signal that the company is in good condition. Conversely, a declining return indicates that the company's condition is not good. The hypothesis explains that there is no difference in abnormal returns before and after and tends to be negative, in other words, there is no effect on abnormal returns (H3 Rejected). Judging from these results, the stock split does not affect abnormal returns even though it makes the stock price cheaper, but the value side remains the same. Judging from the average abnormal return, it also decreased that the value after the stock split was lower than the average value before the stock split. The results of this study are not following the theory that underlies the stock split policy, namely the signaling theory which states that company managers will convey good prospects regarding the condition of the company and provide a positive signal around the announcement of the stock split (Hartono, 2017).

CONCLUSION

Based on the results of the analysis and discussion that have been carried out previously, it can be concluded that hypothesis 1 is accepted, there is an influence on trading volume activity before and after the stock split and is positive, this indicates that the stock split event can increase stock trading liquidity because the stock price is lower. too high to be lower can attract investors to buy company shares. Hypothesis 2 is rejected, that there is no significant difference in stock returns before and after the stock split and tends to be negative after the stock split can be said to have no positive effect. As a result of distrust of investors to the company that carried out the stock split and access to information received by the market was different so that there was no significant difference in the results after this action was carried out. Hypothesis 3 is rejected, there is no significant average abnormal return effect in the period before and after the announcement of the stock split. This indicates that the stock split event did not cause the stock price to change significantly, it was seen that the average abnormal return after the stock split had a negative value a few days after the event, and the lack of information contained on the stock split announcement.

REFERENCES

- Azis, M., Mintarti, S., & Nadir, M. (2015). *Manajemen Investasi Fundamental. Teknikal, Perilaku Investor dan Return Saham*. Yogyakarta: Deepublish.
- Darmadi, T., and Fakhruddin, HM. (2001). *Pasar Modal di Indonesia*. Jakarta: Salemba Empat
- Fahmi, Irham. (2015). *Pengantar Manajemen Keuangan Teori dan Soal Jawab*. Bandung: Alfabeta
- Halim, Abdul. (2005). *Analisis Investasi*. Jakarta: Salemba Empat
- Hanafie, L., & Diyani, L. A. (2016). Pengaruh Pengumuman Stock Split Terhadap Return Saham, Abnormal Return dan Trading Volume Activity. *Jurnal Bisnis Dan Komunikasi*, 3(2), 13–20.
- Hartono, Jogiyanto. (2013). *Teori Portofolio dan Analisis Investasi*. Yogyakarta: BBFE
- Hernoyo, Muhammad. 2013. Effect of Stock Split Announcement on Return. *Management Analysis Journal*. 110-116.
- Sa'diyah, C. (2021). Analysis Of Factors Affecting Adoption Of Financial Technology Application. *Sentralisasi*, 10(1), 57–70.
- Sa'diyah, C., & Widagdo, B. (2020). Indonesia's Capital Market Reaction Election Events. *Sentralisasi*, 9(2), 97–107.
- Sakti, Paramita Octavia. 2013. Analysis of the Effect of Stock Split on Abnormal Returns and Trading Volume Activity in Growing and Non-Growing Companies. *Diponegoro: Journal of Management* 113
- Samuel, Muhammad. (2006). *Capital Markets and Portfolio Management*. Erlangga Publisher. Surabaya.
- Santoso, Slamet. (2013). *Economic Statistics Plus SPSS Application*, Ponorogo: Umpo Press.
- Satiti, Novita Ratna., Sa'diyah, C. (2020). Indonesian Management and Accounting Research The Effect of Financial Literacy on Malang District Society's Financial Behavior. *Indonesian Management and Accounting Research*, 19(02).
- Situmorang, BP and Mahfud, MK (2016), Analysis of the Impact of Stock Splits on Trading Volume Activity and Abnormal Returns on Stocks Listed on the IDX in 2011-2015, *Diponegoro Journal of Management*, Vol. 5, No. 4.
- Sugiuno. (2013). *Quantitative, Qualitative, and Development Research Methods*. Bandung: Alfabeta.
- Tandelilin, Eduardus. (2010). *Portfolio and Investment Theory and Applications*. First edition. Yogyakarta: Kanisius
- Widagdo, B., & Sa'diyah, C. (2021). ANALYSIS OF THE EFFECT OF WCTO, FATO AND TA ON COMPANY VALUE WITH ROE AS INTERVENING VARIABLES. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 5(1), 16–25. <https://doi.org/10.31857/s0026898421020051>