MARKET REACTION BEFORE AND AFTER STOCK SPLIT

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Abstract

The issuer believes that with the high stock price, it can make investors uninterested. Therefore, efforts that can be made by conducting a stock split which is based on the Trading Range Theory where the market assumes that by conducting a stock split it can keep stocks from being too expensive and more investors will invest. Signaling Theory states that a stock split is a tool for conveying more information about the company's prospects. This study aims to obtain empirical evidence regarding the comparison of Trading Volume Activity and Abnormal Return before and after the stock split announcement. The results of the Wilcoxon signed ranks test on the average Trading Volume Activity five days before and five days after the Stock split showed that there was a significant difference, while the results of the Paired Sample T-test for Abnormal Return showed a difference five days before and five days after the stock split. Based on the results of the study above, it can be concluded that there is a significant difference in Trading Volume Activity and Abnormal Return before and after the Stock Split. The suggestion that can be conveyed in this study is that not all information provided is valuable information so investors need to be able to sort out information as a consideration in decision making.

Keywords: ***Stock Split, Trading Volume Activity, Abnormal Return***

PENDAHULUAN

Capital market can be one of the alternatives that can be used by capital owners or investors in making investments. Investors can also choose the company that they will invest in order to obtain maximum profit. the information contained in the capital market is certainly needed by investors in determining investments. In the capital market there are various types of information that are public or private which are then tested for information content. Information is intended to see the reaction of an announcement. Investors can also assess the information content of the level of stock liquidity that can be seen from the volume of stock trading by measuring trading volume activity where this tool is used to analyze whether a trend will continue or vice versa. According to Wismar'ien (2004), trading volume activity is carried out by comparing the number of shares owned by a company to be traded in a certain period with the total number of shares outstanding in the company in the same period. Trading volume activity is used to observe the reaction of the capital market through the movement of trading volume when the capital market is studied (Mahendra & Rasmini, 2019).

Abnormal return is the excess of the actual return over the normal return, where the normal return is the expected return (return expected by investors), thus the abnormal return is the difference between the actual return and the expected return (Jogiyanto, 2000). This abnormal return is used to test whether the market can provide a fast and accurate reaction to achieve a new equilibrium price that can fully reflect the information that is already available or is known as an efficient market. The market can be said to be inefficient if one or more market players can feel abnormal returns over a long period of time (Alam et al., 2020).

Stock split is a method used to divide the number of shares outstanding and the share price of a company without any addition to shareholder equity. Stock split is also defined as the act of dividing the nominal value of shares into smaller fractions and the number of shares becomes large. If before the stock split the share price on the market was Rp. 1,000 per share, then after the stock split the share price in the market became Rp. 500 per share (Tjiptono & Fakhrudin, 2001). Stock split is an activity carried out by a public company to increase the number of shares in the capital market. Where this case occurs when the share price is valued too high so that it reduces investors to buy it.

According to Baker and Gallangher (Marwata, 2001) one of the objectives of stock split is to return the price per share to the optimal trading level, thereby increasing liquidity. Previous research argues that stock splits are merely a distribution of shares that is merely an effort to be more attractive in the eyes of investors, even though in fact it does not increase development for investors. The act of stock splitting will create a mirage effect for investors, where investors feel more prosperous because they hold a large number of shares. Although theoretically stock splits have no economic value, many events in the capital market show that stock splits are important events in capital market practices. Stock splits that make stock prices cheaper are expected to be able to maintain the level of stock trading within the optimal range and make stocks more liquid.

Research conducted by Amin (2020) on companies listed on the IDX concluded that the average trading volume did not differ in the period before and after the stock split announcement. A different conclusion was obtained from research conducted by Sesa et al (2022), at the IDX the results of the study proved that there was a significant difference in the volume of stock trading before and after the stock split. Research on abnormal returns that occur around the stock split date was studied by Rumanti and Moerdiyanto, (2011) at the IDX. The results of their study prove that there is a significant difference in abnormal returns around the announcement date. Different results were found in research conducted by Amin (2020) Research with an observation period between 2015 and 2019 proved that there was no significant difference in the period before or after the stock split. Different results were also found in research conducted by Prima Amelia (2022) the conclusion of this study is that there is no significant difference in abnormal returns between the period before or after the stock split.

PT Unilever Indonesia Tbk conducted a stock split on January 2, 2020, where the average abnormal return results showed before the stock split 0.0046 and after the stock split decreased by -0.0004. Meanwhile, the average trading volume activity before the stock split was 0.0016 and after the stock split decreased by 0.0002. PT Industri Jamu dan Farmasi Sido Muncul Tbk conducted a stock split on September 14, 2020, where the average abnormal return results showed before the stock split 0.0210 and after the stock split decreased by -0.1489. Meanwhile, the average trading volume activity showed before the stock split 0.0036 and after the stock split decreased by 0.0016.

From empirical data and previous research, it is clear that companies that do stock splits actually experience a decline. This shows that there is a Gap phenomenon where there is a discrepancy between theory and reality. Where stock splits should provide a positive signal for investors so that investors are interested in investing their capital and increasing liquidity and stock returns. The differences in several research results (research gaps) on trading volume activity and abnormal returns and the gap phenomenon above, it is necessary to further study the market reaction before and after stock split in Companies Listed on the Indonesian Stock Exchange using the trading volume activity and abnormal return variables.

LITERATURE REVIEW
Capital Market

The capital market is a market where investors meet to sell and buy securities. According to Robert Ang (1997), the capital market is a situation where the actors (sellers and buyers) can negotiate the exchange of one commodity or group of commodities. Meanwhile, according to Sunariyah (1997), the capital market is a market prepared to trade stocks, bonds and other types of securities by using the services of securities brokers, both government and private. Tandelilin (2001) stated that the capital market can be said to be efficient if the prices of all traded securities have reflected all available information. Meanwhile, according to Suad Husnan (1992), efficient capital market is a market where information is widely available, cheap for investors, and all relevant information has been reflected in the prices of these securities. Efficient capital market will provide information received by the market to be projected on the prices of securities. The market will process the appropriate information and then the market will evaluate stock prices based on these prices. The information that has been presented is very much needed by investors in determining decisions where to invest their shares. With this information, it provides investors with a view of the company's future prospects and the expected profits to be obtained maximally with minimal risk.

When there is information asymmetry, disclosure decisions made by managers can affect stock prices because the asymmetry of information between investors who are more informed and less informed will reduce liquidity in a company's stock market. This imbalance of information obtained by market players is called information asymmetry. Rahmawati et. al (2006) stated that information asymmetry is a condition where one party has information that is not known by another party. Of course, investors who know more information will only trade if it is considered profitable for them. On the other hand, securities companies also know that they will gain an advantage if they trade with investors who are less informed.

Stock Split

The important information needed by investors is regarding stock split announcement information. According to the dictionary of financial and investment terms, a stock split is the split of a number of outstanding shares of a company without any addition to shareholder equity. According to Jogiyanto (2000), a stock split is the splitting of a share into n shares so that the price per new share after the stock split is 1/n of the previous price. Meanwhile, according to Robert Ang (1997), a stock split is an action taken by an issuer by splitting the value of its shares into a smaller nominal value. A stock split can also be interpreted as an action to split a share price value into a smaller price split and the number per share becomes large. A stock split only replaces the outstanding shares with a larger number of shares by lowering the par value of the shares. The reason a company carries out a stock split is of course to increase stock liquidity and create a signal that the company will convey to the public. The ability of a company to carry out a stock split can be supported by two theories (Mason and Roger, 1998 in Rohana, Jeannet, Mukhlasin, 2003), namely Trading Range Theory and Signaling Range Theory.

1. Trading Range Theory

Trading Range Theory explains that stock splits increase stock trading liquidity. According to this theory, management can assess the price of shares traded as too high (Overprice) so that it is less attractive to trade. Management tries to rearrange the stock price at a certain price range that is lower than before (McNicholes, et, al, 1990 in Khomsiyah, 2001).

Where this is expected to increase market participants to be involved in trading more and more. With a stock split, the stock price will be lower so that many investors will be able to transact (Ikenberry et.al, 1996). Thus, the management's motive in conducting a stock split is based on practical market behavior that is consistent with the assumption that by conducting a stock split, it can keep shares from being too expensive, which then the nominal value of the shares is split because there is a price limit.

Signaling Theory

States that there is asymmetric information, namely a condition where one party has more information than the other party (Pramastuti, 2007). The information received can be responded to differently by investors. Here, companies that have reliable fundamentals can be distinguished from companies that are less reliable by sending signals to the capital market. Signals from companies that have reliable fundamentals will certainly get a response from investors, so that the signal becomes qualified, while signals sent by companies with less reliable fundamentals certainly cannot match the signals sent by companies with reliable fundamental conditions (Hendrawijaya, 2009). Stock split events are part of the signaling theory that companies that provide information to the public try to do. Management has more information about the company's prospects than investors. Stock splits are an effort made by management to attract investor interest. Stock splits require costs and only companies with good prospects are able to do so. Conversely, if a company that does not have good prospects tries to give an invalid signal through a stock split, it will not be able to bear the costs.

Trading Volume Activity

Trading Volume Activity is the number of shares traded at a certain time to the number of shares outstanding at a certain time (Husnan, 2005). Trading volume is one indicator that can be used to see market reactions to events or information related to a stock. Changes in trading volume can be measured using Trading Volume Activity (TVA). The size of a change in the average TVA between before and after a stock split is the result of the announcement of a stock split on the volume of stock trading.

H1: Perceived is a significant difference in trading volume activity in the period before and after the stock split.

Abnormal Return

Abnormal return is the difference between the actual return and the expected return (Robert Ang, 1997). The actual profit level is a comparison between the difference in stock prices in the current period and the previous period. A positive abnormal return indicates that the level of profit obtained will be large, namely between the actual return and the expected return. In relation to the stock split event, if there is a positive abnormal return after the stock split, it can provide above normal profits to investors and vice versa if there is a negative abnormal return, it indicates that the profit obtained is below normal. The abnormal return formula is as follows:

$$AR\ it = R\ it - E\ (R\ it)$$

Brown and Warner's (1985) research states that expected returns are returns that must be estimated. According to Brown and Warner (1985), expected returns can be found using market adjusted model. By using this model, estimation period is not used to form estimation model because the estimated security return is the same as the market index return.

H2: Perceived is a significant difference in abnormal returns in the period before and after the stock split.

Event Study

According to Jogiyanto (2000) event study is a study that examines the reaction of a market to an event whose information is published as an announcement. If the announcement contains information, then the market is expected to react at the time the announcement is received by the market.

According to Peterson (in Marwan and Faizal 1998), an event study of shares is an observation of the movement of share prices in the capital market to determine whether there is an abnormal return obtained by shareholders as a result of the event.

The content of the information tested is intended to determine the reaction of an announcement. If the announcement issued contains information, then it is expected that the market can react when the announcement is received by the market. This market reaction can be seen from changes in the securities concerned, which can later be measured using the price of Trading Volume activity and abnormal return. Information that can be used to see market reactions is the announcement of a stock split (Sri Fatmawati and Marwan Asri, 1999). The announcement of a stock split as information given to the market is T_0 in the event study in this study.

Research Framework

The method used is event study. Event study is conducted as an effort to review the market response to an announcement related to an event whose information is published (Pangesti, 2019). The stages carried out in the event study are: determining day 0 (event date), namely the date of the stock split announcement, determining the window period around the event date. The window period or event window that is used as a reference is five days before and after the stock split is announced.

Making a comparison of trading volume and abnormal returns in the window period against day 0 to observe the differences in the two periods against day 0. This study also carries out several stages and analysis in the final stage will conclude the results of the analysis carried out regarding whether or not there is a difference in trading volume and abnormal stock returns before and after the stock split announced by companies listed on the IDX for the period 2020-2023.

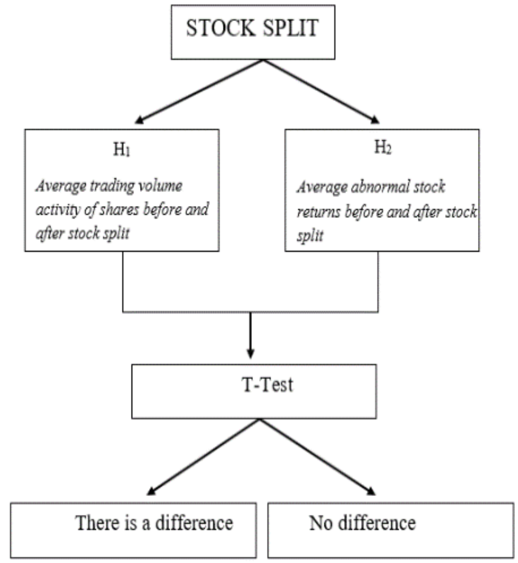

Figure 1. Conceptual Framework Model
(Source: Sri Fatmawati and Marwan Asri, 1999)

RESEARCH METHODS

This research was conducted by first identifying the problem, creating research objectives that are limited by problem limitations to be able to present a comparison of trading volume and abnormal stock returns before and after the announcement of a stock split for companies listed on the IDX 2020-2023. Reference searches in the form of journals and previous studies related to stock splits and their impacts on the comparison of trading volume and abnormal stock returns were carried out in a literature study. This study also uses data sourced from several websites such as www.idx.co.id and www.finance.yahoo.com and analyzes books, theses, articles, and journals related to stock splits and their effects on the comparison of trading volume and abnormal stock returns, so that insight into the topic becomes broader. The method used is an event study.

The sample used in this study was 33 companies. The data collection technique was carried out using purposive sampling. Purposive sampling technique according to (Sugiyono, 2018) is sampling using several specific considerations according to the desired criteria to be able to determine the number of samples to be studied. To avoid ambiguity in the meaning of the variables to be analyzed in this study, the following is an operational definition of the variables used:

Table 1. Operational Research Variables

Variable	Indicator	Proxy	Scala
Stock Split	*Return*	$\frac{P_{i,t}-P_{i,t-1}}{P_{i,t-1}}$	Rasio
	Expetation *return*	$\frac{\sum_{j=t1}^{t2} R_{i,j}}{T}$	
Abnormal Return	*Abnormal return*	$R_{i,t}- E\ (R_{i,t}\ )$	Rasio
	Mean *abnormal return*	$\frac{\sum_{i=1}^{k} RTN_{i,t}}{K}$	
Stock Trading Volume	TVA	$\frac{\text{Number of shares of Company i traded on t}}{\text{the number of shares of company i outstanding on t}}$	Rasio
	Mean TVA	$\bar{X}\ TVA = \frac{\sum^{n} TVA_i}{n}$	

(source: researcher, 2024)

RESULT AND DISCUSSIONS

Descriptive Statistics

The analytical calculations used in this study are Microsoft Office Excel 2010 and SPSS 24 programs. The results of descriptive statistics from 33 companies that have conducted Stock Splits from 2020-2023 can be seen in table 4.1 page 52 where the table displays the average, maximum, minimum and standard deviation values of the Average Trading Volume Activity and Abnormal Return of Sample Companies for 5 Days Before and 5 Days After the Stock Split.

Tabele 2. Descriptive Analysis Results of Average Trading Volume Activity and Abnormal Return Before and After Stock Split of Sample Companies

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
TVA before	33	.0000	.3389	.020629	.0620856
TVA after	33	.0000	.0352	.002450	.0062052
Abnormal Return before	33	-.0192	.0466	.007031	.0128466
Abnormal Return after	33	-18.058	-.0004	-.640961	.4479717
Valid N (listwise)	33				

(Source : data processed by researchers, 2024)

Based on data on changes in trading volume in the capital market, it can show trading activities that occur on the Stock Exchange and reflect investment decisions made by investors. Trading volume activity is usually measured by looking at the stock trading volume activity indicator, which is done by comparing the number of shares traded in a certain period with the number of shares outstanding in the company in the same time period.

Average Trading Volume Activity table, the minimum value in the period before the Stock Split is 0.0000 and the maximum value is 0.3389, the mean is 0.0206 with a standard deviation of 0.0621, while in the period after the stock split the minimum average Trading Volume Activity value is 0.0000 and the maximum is 0.0352, the mean is 0.0024 with a standard deviation of 0.0062. If the average Trading Volume Activity is smaller than its standard deviation, this indicates a deviation from the average value.

while the Average Abnormal Return table, the minimum value in the period before the Stock Split is -0.0192 and the maximum value is 0.0466, the mean is 0.0070 with a standard deviation of 0.0128, while in the period after the stock split the minimum average value of Abnormal Return is -1.8058 and the maximum is -0.0004, the mean is -0.6410 with a standard deviation of 0.4480. If the average Abnormal Return is smaller than its standard deviation, this indicates a deviation from the average value.

Wilcoxon Signed Ranks Test

Based on the results of the normality test above, it can be seen that the value of Trading Volume Activity in this study has a significance probability value of 0.000, where the significant value is 0.000 and the value is <0.05 or the data is not normally distributed so that the statistical test that will be used in the Trading Volume Activity test is the Wilcoxon signed ranks test to determine whether there is a significant difference in the Trading Volume Activity data before and after the stock split announcement where the data to be tested ranges from 5 days before and 5 days after the stock split. The following describes the results of the different test analysis of Trading Volume Activity:

Table 3. ***Test results Wilcoxon signed ranks test***

Ranks

		N	Mean Rank	Sum of Ranks
TVA Sesudah - TVA Sebelum	Negative Ranks	27[a]	17.46	471.50
	Positive Ranks	4[b]	6.13	24.50
	Ties	2[c]		
	Total	33		

a. TVA Sesudah < TVA Sebelum

b. TVA Sesudah > TVA Sebelum

c. TVA Sesudah = TVA Sebelum

(Source : data processed by researchers, 2024)

Based on the data, it shows that out of 33 companies that were the samples of the Trading Volume Activity study, there were 27 companies that experienced a decline (Negative Rank) after the stock split announcement with an average decline value (mean rank) of 17.46 and a negative ranking of 471.50. While for companies that experienced an increase (positive rank) only 4 companies from after the stock split announcement with an average decline value (mean rank) of 6.13 and a negative ranking of 24.50. And there is a difference in Trading Volume Activity between before and after the stock split announcement (Ties = 2).

Table 4. Hypothesis Testing *Wilcoxon signed ranks test*

Test Statistics[a]

	TVA Sesudah - TVA Sebelum
Z	-4.381[b]
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

(Source : data processed by researchers, 2024)

Based on the data, the results obtained are the difference in Trading Volume Activity between before and after the stock split announcement in 33 sample companies on the Indonesia Stock Exchange in 2020-2023. The Trading Volume Activity variable shows an asymptotic sig value of 0.000 <0.05 confidence level. This means that it can be concluded that H1 is accepted. Which can be interpreted that the announcement of a stock split in the company has quite an influence on Trading Volume Activity so that this proves that the market and potential investors are still unsure about the stock split action taken by the company because the market risk is too great.

In a study with 33 samples of companies before and after the stock split experienced an average difference where this is supported by the significance value for Trading volume activity of 0.000 this value is smaller than the significance value that has been set, namely 0.05. then with the results of the test that has been done using the Wilcoxon signed ranks test, the First Hypothesis (H1) is accepted, because this finding is in accordance with Rumanti and Moerdiyanto (2011). In the trading range theory, it states that the announcement of this stock split can cause an increase in stock trading volume or liquidity due to cheaper prices so that it is attractive to consumers. However, the results of this study showed that there was a decrease in Trading volume Activity after the announcement of the stock split in the company, which means that prospective investors and the market are still unsure about this stock split corporate action because of the uncertain market risk.

Table 5. Output Uji Paired *Abnormal Return*

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	95% Confidence Interval of the Difference Upper			
Pair 1	Abnormal Return Sebelum - Abnormal Return Sesudah	70.33333333	10.98952628	1.91303098	66.43661675	74.23004991	36.765	32	.000

(Source : data processed by researchers, 2024)

Based on the data, it can be seen that the significance value is 0.000, where the value is <0.05, so it can be concluded that H2 is accepted. Where it can be interpreted that the abnormal return before and after the stock split means that there is a significant difference.

In a study with 33 samples of companies before and after the stock split experienced an average difference where this is supported by the significance value for Abnormal Return of 0.000 this value is smaller than the significance value that has been set, namely 0.05. then with the results of the test that has been done using the paired sample t-test, the First Hypothesis (H2) is accepted, because this finding is in accordance with the results of the study put forward by Rumanti and Moerdiyanto (2011) and is not in accordance with the Signaling theory which states that managers convey good or positive information about the conditions in the company to the public who do not yet know it, the existence of a significant difference in the period before and after the stock split can be interpreted that the theory put forward is inversely proportional to the Signaling theory because investors can find out by evaluating the information brought by the stock split action and are more confident in companies that are able to provide promising returns, not just profits that will be obtained in the future.

CONCLUSIONS

There is a significant difference in Trading Volume Activity before and after the Stock Split. This can be seen from observations made 5 days before and 5 days after showing a significance value of 0.000 and is smaller than the significance value that has been set, namely (0.05), which means that there is a difference between Trading Volume Activity between 5 days before and 5 days after. This can be based on the market's poor response to the issuer's corporate action of Stock Split.

There is a significant difference in Abnormal Return between before and after the Stock Split. This can be seen from observations made 5 days before and 5 days after showing a significance value of 0.000 and is smaller than the significance value that has been set, namely (0.05), which means that there is a difference between Abnormal Return between 5 days before and 5 days after. This can be based on the issuer being able to analyze the signals given by the issuer, but investors are still not sure that the corporate action can provide benefits so that investors are more careful in making investments.

SUGGESTIONS

For further research, it is expected to re-test other variables that will be influenced by this stock split corporate action such as stock prices and stock returns by extending the observation period which will be able to better reflect how the market reacts. It is expected that the next Abnormal Return calculation method can use the mean adjusted model so that the data can be seen for consistency from this study.

The results of this study can provide input to issuers that this stock split action does not guarantee that Abnormal Return will increase as expected. Therefore, issuers should not only focus on this Stock Split event but also in the future the company must be able to improve the company's performance so that it can provide trust and confidence for investors in evaluating that issuers can provide benefits in the future, not just providing dreams.

For investors, not all information provided by the capital market is valuable information, therefore investors need to evaluate and sort out each piece of information provided. So that this information can be a reference for investors in considering all decisions that will be taken, including not rushing to make buying and selling actions.

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