

THE IMPACT OF STOCK SPLIT ANNOUNCEMENT ON TRADING VOLUME, RETURN, AND STOCK PRICE IN COMPANIES IN PERIOD BEFORE AND DURING COVID-19

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ABSTRACT

The purpose of this study was to determine the effect of stock split announcements on trading volume, return and stock price in companies before and during Covid-19. The research method used in this research is quantitative research method. The sample in this study were companies that announced a stock split of 36 companies. The method of determining the sample using purposive sampling technique. This study uses a statistical analysis test of two sample tests with a 15-day observation period is $t = -7$ (7 days before stock split), $t = 0$ (event date) and $t = +7$ (7 days after stock split). The data analysis method used in this study is the Wilcoxon Signed Ranks Test. The results of this study indicate that there is a statistically significant difference in the average TVA before and after the announcement in the period before and during Covid-19. While there is no statistically significant difference in the average return and stock price before and after the announcement in the period before and during Covid-19.

Keywords: Stock split, trading volume, stock return, stock price, Covid-19.

INTRODUCTION

The capital market is a platform for investors to make investments. According to Husnan (2015), the capital market has an important role for a country's economy because of the two functions of the capital market, namely first, as a means for business funding or for companies as additional funds from investors. The presence of Covid-19 is considered as one of the impacts that hamper the rate of economic growth. Currently, the Covid-19 pandemic is spreading from one side of the country to the other. Initially, it did not affect the stock exchange, but as more victims were confirmed, the stock exchange responded negatively (Khan, et al., 2020).

Economic performance that experienced a slowdown had an impact on the activities carried out by the company. Companies take efficiency policies to reduce operating costs to minimize the possibility of losses. Badar Nadeem (2020) conducted research to obtain empirical evidence regarding the effect of Covid-19. This study uses daily stock return data and shows the result that the stock market reacts negatively to the addition of positive Covid-19 confirmation cases.

Indonesia also responded to the Covid-19 disaster. The President of the Republic of Indonesia, stipulated Presidential Decree (KEPPRES) of the Republic of Indonesia Number 11 of 2020 regarding emergencies, and also issued Government Regulation in Lieu of Law of the Republic of Indonesia Number 1 of 2020. Namely on state financial policy and financial system stability in the context of facing threats that endanger the national economy and / or financial system stability.

Corporate Action is an activity carried out by a public company that can affect the value of the company, both in financial and non-financial terms. Companies take corporate action as an

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addition of fresh funds to meet company objectives, such as payment of due obligations, business expansion and increasing liquidity. From 2020 to 2022, there are several corporate actions, one of which is a stock split (Lindananty, 2021). Companies that have a large market capitalization are more attractive to investors because supported by an increase in trading volume will encourage stock demand. Increased demand for shares will affect the share price. One of the strategies carried out by issuers is corporate action during the pandemic, namely by conducting a stock split.

Stock split is a corporate decision that increases the number of equity shares outstanding in the company. A stock split results in a decrease in par value and an increase in the number of shares proportional to the split so that the stock price is not too high for investors' ability to buy at a low price, which can affect the liquidity of stock trading. The purpose of a stock split is to attract investors to buy the shares offered (Yudhistiro, 2006). The announcement of a stock split will of course cause price changes up and price changes down. Market reaction is usually measured using return as the value of changes in stock prices.

Previous studies have found a positive and significant market reaction to stock split announcements. Stock splits convey information about the current value of the company. Grinblatt, Masulis, Titman (1984) found a significant reaction to stock split announcements by companies. Stock splits are considered a positive signal for managers of a company because it presents good long-term prospects for the company to the public who do not know about the information. The phenomenon of stock splits carried out by companies is still argued by experts. The existence of a mismatch between theory and practice is one thing to consider. Theoretically, a stock split only increases the number of shares in circulation but does not add extra value for investors such as welfare, does not add economic value to the company or does not directly affect the company's cash flow. However, from some empirical evidence found, the market reacted to the announcement of a stock split, even the effect of a stock split showed controversial results from several studies that were found by writers.

The studies by the researchers above limit their analysis to changes in liquidity and stock return after the effective date of the company's stock split. The impact of stock splits on liquidity and stock return in special events that affect the economy in the capital, especially after the announcement date and before the ex-date, have not yet been researched in detail in the literature. company's shares before and during pandemic. This research will be conducted by measuring the level of stock liquidity through trading volume activity (TVA) to see the effect of stock splits on the level of liquidity of the company's shares. This research also measures the level of stock returns through the stock return ratio by calculating the comparison between the daily closing stock price and the closing stock price the day before on companies listed on the Indonesia Stock Exchange that have announced a stock split policy during the research period from 2017-2022.

THEORITICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

This section explains the theory used in the research, a framework that describes the relationship between research variables, and the development of research hypotheses.

Signalling Theory

Signaling Theory was first introduced by Spence (1973) in the context of the labor market, was later development and implementation in the context of the capital market (Spence, 2001). According to Hartono (2014), signaling theory is closely related to the stock split phenomenon in the context of the capital market. Stock splits are often considered as a form of signal from companies to investors. When a company decides to take corporate action, namely a stock split, this can be interpreted by investors as a positive signal about the company's prospects.

The information provided by the company and received by the investor, will be interpreted first and then analyzed whether the information obtained from the investor can be considered a positive signal (good news) or a negative signal (bad news) (Jogiyanto, 2010).

Efficient Market Hypothesis

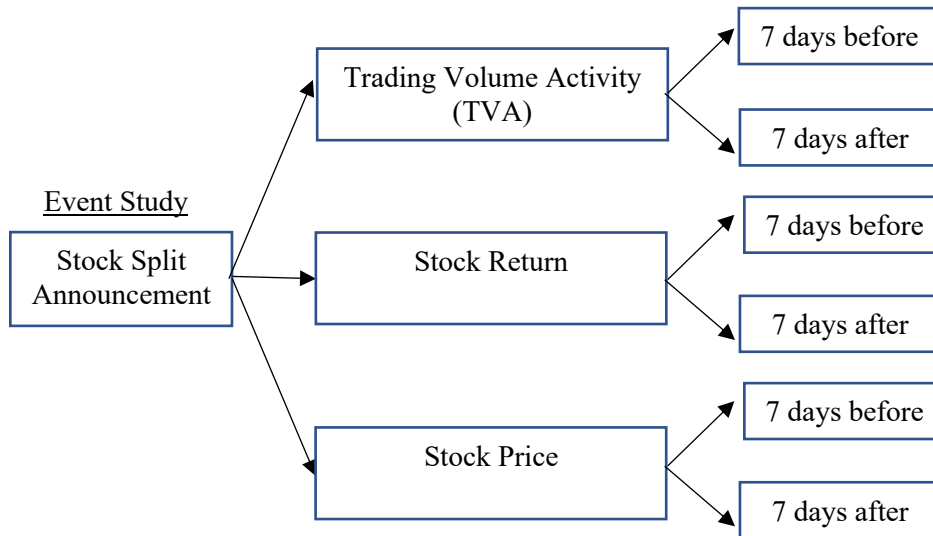
Efficient Market Hypothesis was first introduced by Fama in 1970. A market is said to be efficient if no one, neither individual investors nor institutional investors, will be able to obtain returns over a long period of time using existing trading strategies. This means that the prices

formed in the market are a reflection of the information available. This hypothesis believes that if new information spreads, the stock price will adjust quickly and unbiasedly to the new information, so that the stock price will be corrected back to fair value and there is no opportunity for investors to earn a return.

Conceptual Framework

The logical connections between variables may be better understood with the assistance of this study approach. This research will explore whether or not the independent variable influences the variable that will be evaluated.

Figure 1 Conceptual Framework



Hypothesis Development

The effect of stock split announcement on the company's Trading Volume Activity

It is generally understood that a split decision may be intended to bring the stock price down to an optimal level. If the stock price is considered too high in the market, it will cause a decrease in investor purchasing power, resulting in a decrease in stock trading volume. Baker and Gallagher (1980) argue that most of the managers announces split with the intention that the stock price is in the optimal trading range so as to increase shareholder liquidity.

Van Horn (2009) says that a stock split works to position the stock price at a lower price, which will attract more interest from investors, which will influence the volume of stock trading activity. To determine how much the stock split announcement affects the volume of stock trading activity, and to see whether the volume changes that occurred in a positive or negative direction, we can measure it using Trading Volume Activity (TVA). Based on the explanation above, the following hypothesis is formulated:

H1: There is a significant difference in stock split announcement on Trading Volume Activity of the company.

The effect of stock split announcement on the company's stock return

The increase in stock prices due to low stock prices attracts many investors, causing liquidity to increase and stock prices to increase. The increase in stock price will bring stock returns and will provide abnormal returns if the stock return is greater than the market return.

In research by Ikenberry (1996) shows that by doing a stock split, the company can rearrange the share price at a low price and will make investors interested in conducting company stock transactions so that it will increase the liquidity of the company's stock trading. From the research above, it shows that stock splits announcement affect stock returns through stock liquidity on the grounds that stock trading transactions will have an influence on the amount of return that

will be received by investors. Based on the explanation above, the following hypothesis is formulated:

H2: There is a significant difference in stock split announcement on the company's stock return.

The effect of stock split announcement on the company's stock price

Stock prices are often used as a reflection of the performance of a company. Companies with continuously increasing stock prices are considered by investors to have good performance, thus attracting investors to buy shares in the company. Maurice Kendall (1953) examined that stock price movements are irregular or random (random walk) due to new information that is not known when it will be received causing unpredictable stock price movements. Thus, stock prices during transactions in the secondary market always move up and down due to the performance of issuers received by investors through news or official announcements. Based on the explanation above, the following hypothesis is formulated:

H3: There is a significant difference in stock split announcement on the company's stock price.

RESEARCH METHODOLOGY

This section describes the research population and sample, the variables used and their measurements, and the research model.

Population and Sample

Population according to Sugiyono (2017) is a generalization area consisting of objects or subjects that have certain qualities and characteristics set by researchers to study and then draw conclusions. The population in this study are companies that make stock split announcements of 41 companies released by the Indonesia Stock Exchange (IDX) for the period 2017-2022. This study uses non-probability sampling techniques in determining the sample. With this method the sample is taken from the population based on specific criteria set. Based on the purposive sampling technique, the criteria used for selecting companies are as follows:

1. Companies listed on the Indonesia Stock Exchange and their shares are actively traded from 2017-2022.
2. The company only carries out a stock split policy, while companies that carry out policies other than stock splits such as dividend policies, rights issues, bonus shares, warrants, and other policies are not used. The reason for determining these sample criteria is because other policies carried out by the company along with the stock split event will affect the research results.
3. The selected sample is actively traded stocks.
4. The company issues financial reports annually during the research period. Companies with incomplete data are not included in the sample.

Research Variables and Operational

This study uses 1 independent variable and 3 dependent variables. The independent variable used is stock split activity. The dependent variable used is stock liquidity projected using TVA and stock price, and market reaction projected using stock return. The operational definition of each variable will be explained as follows.

Table 1
Operational Definition of Research Variables

Variable	Operational Definition	Measurement
1. Trading Volume of Shares	Comparison between daily number of shares traded and number of shares outstanding	$TVA = \frac{\text{Total number of shares traded}}{\text{Total number of shares outstanding}}$

Variable	Operational Definition	Measurement
2. Stock Return	Comparison between the daily closing stock price and the closing stock price the day before	$R = \frac{(P_t - P_{t-1})}{P_{t-1}}$
3. Stock Price	The closing price of share of the company (window period)	Closing Price

Data Analysis Method

This research is a type of event study research that aims to examine stock split announcements before and during the pandemic. Descriptive statistical test and a data normality test used before conducting a hypothesis test. In conducting a normality test, the normality test used is the Kolmogorov-Smirnov test. If the data is normally distributed, the parametric statistical test used is the Paired Sample T-Test. Paired Sample T-test is a test to determine whether there is a difference in the value of one sample before and after a certain treatment (Sugiyono, 2017). Wilcoxon Signed Rank Test, also known as Wilcoxon Match Pair, is a non-parametric test to analyze the significance of differences between two paired ordinal-scale data that are not normally distributed (Sugiyono, 2017). If the data is not normally distributed, the Wilcoxon Signed Rank-Test is used as a nonparametric statistical test. All tests are carried out using the help of the SPSS 29 program.

RESULT AND DISCUSSION

The research results and discussion section contains an explanation of sample selection and findings which include descriptive statistical analysis, normality test, and hypothesis testing.

Description of Research Objects

This study uses secondary data sources. The population used consists of companies that announced a stock split listed on the Indonesia Stock Exchange in 2017-2022. The purposive sampling method was used to determine the sample. The sample selection steps taken in this study are as follows:

Table 2
Sample Selection

No.	Criteria	Total
1.	Companies listed on the Indonesia Stock Exchange and their shares are actively traded from 2017-2022.	41
2.	Companies shares were not actively traded for the 2017-2022 period	(3)
3.	Companies that carry out other corporate action than stock splits, namely stock dividends, bonus shares, warrants and other announcements.	(2)
Total Research Sample		36

Descriptive Statistics

Table 3 shows descriptive statistics for the variables in before Covid-19 used, which contains mean, standard deviation, minimum and maximum values. provides descriptive statistics for the variables used in the analysis. Based on the descriptive analysis of table 3 shows that of the 15 companies that announces the stock split, the average increase in share trading volume is greater after announces a stock split. The average trading volume activity (ATVA) before announces the stock split was 0.001278 with a standard deviation of 0.001975. The lowest trading volume activity (TVA) is 0.00000 which is the trading volume activity (TVA) of PT Bumi Teknokultura Unggul (BTEK). While the highest trading volume activity (TVA) of 0.0070 was in PT Kapuas Prima Coal (ZINC). Whereas after announces the stock split, the average trading volume activity (ATVA) was 0.002604 with a standard deviation of 0.0038291. The lowest trading volume activity (TVA) is 0.00003 which is the trading volume activity (TVA) of PT Ultrajaya Milk Industry (ULTJ). While

the highest trading volume activity (TVA) of 0.0142 was in PT Mitra Adiperkasa (MAPI). The average return value before announces the stock split was greater than the average return after announces the stock split. The average stock return (AR) before stock split was 0.000805 with a standard deviation of 0.0121224. The lowest stock return before stock split is -0.0276 which is the stock return of PT Bintraco Dharma (LPIN). While the highest stock return before stock split of 0.0252 was in PT Mahaka Radio Integra (MARI). Whereas after announces the stock split, the average stock return (AR) was 0.011307 with a standard deviation of 0.0188804. The lowest stock return is -0.0140 which is the stock return of PT Mandala Multifinance (MFIN). While the highest stock return of 0.0567 was in PT Sanurhasta Mitra (MINA). The average value of stock price increased after announces the stock split. The average stock price before stock split was 807.950 with a standard deviation of 766.36890. The lowest stock price is 133.00 which is the stock price of PT Bumi Teknokultura Unggul (BTEK). While the highest stock price of 2834.57 was in PT Bank Rakyat Indonesia (BBRI). Whereas after announces the stock split, the average stock price was 846.487 with a standard deviation of 784.95933. The lowest stock price is 163.57 which is the stock price of PT Bumi Teknokultura Unggul (BTEK). While the highest stock price of 2961.71 was in PT Bank Rakyat Indonesia (BBRI).

Table 3
Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
ATVA_Before	15	.00000	.0070	.001278	.0019755
ATVA_After	15	.00003	.0142	.002604	.0038291
AR_Before	15	-.0276	.0252	.000805	.0121224
AR_After	15	-.0140	.0567	.011037	.0188804
Price_Before	15	133.00	2834.57	807.950	766.36890
Price_After	15	163.57	2961.71	846.487	784.95933

Source: IBM SPSS 29, 2024

Table 4 shows descriptive statistics for the variables in during Covid-19 used, shows that of the 21 companies that announces the stock split, the average increase in share trading volume is greater after announces a stock split. The average trading volume activity (ATVA) before the stock split was 0.004094 with a standard deviation of 0.0075508. The lowest trading volume activity (TVA) is 0.0000 which is the trading volume activity (TVA) of PT Arkadita Digital Media (DIGI). While the highest trading volume activity (TVA) of 0.0325 was in PT Surya Citra Media (SCMA). Whereas after announces the stock split, the average trading volume activity (ATVA) was 0.006267 with a standard deviation of 0.0128135. The lowest trading volume activity (TVA) is 0.0000 which is the trading volume activity (TVA) of PT Arkadita Digital Media (DIGI). While the highest trading volume activity (TVA) of 0.0499 was in PT Buyung Poetra Sembada (HOKI). The average value of stock return decreased after announces the stock split. The average stock return (AR) before stock split was 0.026633 with a standard deviation of 0.1252339. The lowest stock return is -0.0308 which is the stock return of PT Paramita Bangun Sarana (PBSA). While the highest stock return of 0.5703 was in PT Arkadita Digital Media (DIGI). Whereas after announces the stock split, the average stock return (AR) was -0.004400 with a standard deviation of 0.0304450. The lowest stock return is -0.1238 which is the stock return of PT Arkadita Digital Media (DIGI). While the highest stock return of 0.0229 was in PT Jasuindo Tiga Perkasa (JTPE). The average stock price before announces a stock split was 1492.762 with a standard deviation of 1884.91189. The lowest stock price is 229.71 which is the stock price of PT Jasuindo Tiga Perkasa (JTPE). While the highest stock price of 6849.29 was in PT Bank Central Asia (BBCA). Whereas after announces the stock split, the average stock price was 1471.993 with a standard deviation of 2052.15155. The lowest stock price is 141.43 which is the stock price of PT Jasuindo Tiga Perkasa (JTPE). While the highest stock price of 7473.57 was in PT Bank Central Asia (BBCA).

Table 4
Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
ATVA_Before	21	.0000	.0325	.004094	.0075508
ATVA_After	21	.0000	.0499	.006267	.0128135
AR_Before	21	-.0308	.5703	.026633	.1252339
AR_After	21	-.1238	.0229	-.004400	.0304450
Price_Before	21	229.71	6849.29	1492.762	1884.911
Price_After	21	141.43	7473.57	1471.993	2052.151

Source: IBM SPSS 29, 2024

Normality Test

The average stock trading volume of 15 companies significance probability before and after the stock split is 0.001 and 0.001. The average stock trading volume of 21 companies significance probability before and after the stock split is 0.001 and 0.001. The significance probability for the average stock trading volume before the stock split is smaller than the real level of 5% (0.05). For this reason, hypothesis testing on stock trading volume will use the Wilcoxon Test. The average stock return of 15 companies significance probability before and after the stock split is 0.001 and 0.200. The average stock return of 21 companies significance probability before and after the stock split is 0.001 and 0.001. The significance probability for the average stock trading volume before the stock split is smaller than the real level of 5% (0.05). For this reason, hypothesis testing on stock return will use the Wilcoxon Test. The average stock price of 15 companies significance probability before and after the stock split is 0.008 and 0.013. The average stock price of 21 companies significance probability before and after the stock split is 0.001 and 0.001. The significance probability for the average stock trading volume before the stock split is smaller than the real level of 5% (0.05). For this reason, hypothesis testing on stock return will use the Wilcoxon Test.

Hypothesis Test

Table 5, we found that the test of the first hypothesis obtained a significance level of 0.007. Based on the test results, the significance value is smaller than $\alpha = 0.05$, it can be concluded that H1 which states that there is a significant difference in stock split announcement on the company's s stock trading volume, is accepted. These results indicate that there are differences in stock trading volume before and after stock splits announcement. It can be stated that this study supports the hypothesis that there is a difference in stock trading volume before and after the stock split announcement.

Table 5
Wilcoxon Signed Ranked Test of TVA

	N	Mean Rank	Sum of Ranks
ATVA_After - ATVA_Before			
Negative Ranks	10	16.20	162.00
Positive Ranks	26	19.38	504.00
Ties	0		
Total	36		

Test Statistics

	ATVA_After - ATVA_Before
Z	-2.687
Asymp. Sig. (2-tailed)	.007

Source: IBM SPSS 29, 2024

Table 6, found that the test of the second hypothesis obtained a significance level of 0.354. Based on the test results, the significance value is greater than $\alpha = 0.05$, it can be concluded that H2 which states that there is a significant difference in stock split announcement on the company's s

stock trading volume, is rejected. These results indicate that there is no differences in stock return before and after stock splits announcement.

Table 6
Wilcoxon Signed Ranked Test of Return

		N	Mean Rank	Sum of Ranks
AR_After - AR_Before	Negative Ranks	16	17.13	274.00
	Positive Ranks	20	19.60	392.00
	Ties	0		
	Total	36		

Test Statistics

	AR_After - AR_Before
Z	-.927
Asymp. Sig. (2-tailed)	.354

Source: IBM SPSS 29, 2024

Table 7, found that the test of the third hypothesis obtained a significance level of 0.008. Based on the test results, the significance value is smaller than $\alpha = 0.05$, it can be concluded that H3 which states that there is a significant difference in stock split announcement on the company's stock price, is accepted. These results indicate that there are differences in stock price before and after stock splits announcement. It can be stated that this study supports the hypothesis that there is a difference in stock price before and after the stock split announcement.

Table 7
Wilcoxon Signed Ranked Test of Price

		N	Mean Rank	Sum of Ranks
Price_After - Price_Before	Negative Ranks	10	16.30	163.00
	Positive Ranks	26	19.35	503.00
	Ties	0		
	Total	36		

Test Statistics

	Price_After - Price_Before
Z	-2.671
Asymp. Sig. (2-tailed)	.008

Source: IBM SPSS 29, 2024

Based on the hypothesis testing that has been carried out, the following conclusions can be drawn:

The effect of stock split activity on the company's Trading Volume Activity

Paired test was carried out with the Wilcoxon test using the help of the SPSS 29 program. In table 5, found that the test of the first hypothesis obtained a significance level of 0.007. Based on the test results, the significance value is smaller than $\alpha = 0.05$, These results indicate that there are differences in stock trading volume before and after stock splits announcement, therefore, **H1 is accepted.**

Based on the results of the hypothesis analysis, it is known that the results of this study are in line with signaling theory where the announcement of a stock split is considered the beginning of a positive signal because company managers will convey good future prospects to the public (Jogiyanto, 2010). The increase in TVA value that occurs is influenced by investor attraction to the stock itself.

The effect of stock split activity on the company's Stock Return

Paired test was carried out with the Wilcoxon test using the help of the SPSS 29 program. In table 6, we found that the test of the second hypothesis obtained a significance level of 0.354. Based on the test results, the significance value is greater than $\alpha = 0.05$. The wilcoxon test results state that there is no significant difference in stock returns before and after the stock split announcement, therefore, **H2 is rejected**.

In table 3 and 4, in period before Covid-19, the average return value before the stock split announcement was 0.0008 and increased to 0.011. The average return value during the Covid-19 period decreased from 0.026 to -0.004, however, during the period Covid-19 capital market reacted negatively, this was probably because insider trading was easier to implement in stable economic conditions. The results of this study support the semi-strong efficient market hypothesis because stock prices adjust quickly to public information so that no investor can gain above-normal returns by trading on the announcement day, because adjustments have already been made to stock prices. Fama (1969) presents evidence to support that semi-strong efficiency is more accurate. It is not possible to fully test this policy as information regarding splits is often leaked to the market before the split is announced by private or insider information.

The effect of stock split activity on the company's Stock Price

Paired test was carried out with the Wilcoxon test using the help of the SPSS 29 program. we found that the test of the third hypothesis obtained a significance level of 0.008. Based on the test results, the significance value is smaller than $\alpha = 0.05$. These results indicate that there are differences in stock price before and after stock splits announcement, therefore, **H3 is accepted**.

From the results of the study, the stock price quickly reacted to this information. The results of this study support the semi-strong efficient market hypothesis. The price after the stock split announcement rose, it means that the stock split announcement is good news, and there is significant change in period before Covid-19. So, after the announcement, the stock price can reflect the announcement rapidly if the market is considered to be efficient in semi-strong form. However, it is important to understand that market reactions are not always linear or instantaneous, and there are many factors that can affect stock price movements in the short term.

Based on these explanations, it can be concluded that the stock split announcement has a significant effect on trading volume and price in companies listed on the Indonesia Stock Exchange in 2017-2022. However, the stock split announcement has no significant effect on stock returns in the company.

CONCLUSION AND LIMITATION

This section contains research conclusions, research limitations, and suggestions for future research.

Conclusion

This research was conducted to analyze the effect of stock split announcement on stock trading volume, stock return, and stock price in the period before and during Covid-19 on companies listed on the Indonesia Stock Exchange in 2017-2022.

Based on the results of the data processing, the study concluded that, stock split announcement has an effect on the volume of stock trading in the period before and during Covid-19, this can be seen from the probability value which is smaller than the significance level (0.05), which is 0.007. Therefore, the first hypothesis is accepted (H1 is accepted), which means that there is a significant difference in stock trading volume before and after the stock split announcement. Stock split announcement had no effect on stock returns in the period before and during Covid-19, this can be seen from the probability value that exceeds (0.05), which is 0.354. As a result, the second hypothesis (H2) is rejected, because the research results prove that the stock split announcement has no significant effect on stock returns in the period before and during Covid-19. Stock split announcement has an effect on the stock price in the period before and during Covid-19, this can be seen from the probability value which is smaller than the significance level (0.05),

which is 0.008. Therefore, the third hypothesis is accepted (H3 is accepted), which means that there is a significant difference in stock price before and after the stock split announcement.

Limitation

This study has limitations that can also be a direction for future research, among others:

1. This study only examines how the differences in TVA, stock returns, and stock price when before and after the stock split announcement in the period before and during Covid-19.
2. The observation period used is still too short, namely 7 days of observation before and after the stock split announcement, so that the information conveyed by the stock split has not been fully accepted by the market.
3. The number of samples in the study is still relatively few, namely 36 companies in the period 2017-2022. This is because many companies do not publish stock split announcements to the market. If the research sample can be more, the research results obtained will be clearer.

Suggestion

Based on the conclusions and limitations of this study, some suggestions that can be addressed are:

1. For future researchers, the results of this study can be a reference and consideration for further research. Research development can be carried out by examining the market reaction to other corporate actions such as dividend distribution in the period before and during Covid-19.
2. For future researchers, it can develop the research by adding research variables to measure market reactions such as stock variance or bid-ask spread to estimate the actual stock liquidity. The research sample can also be increased to obtain more satisfactory results.
3. For investors or future investors who want to buy shares, they can observe the market reaction around the stock split date, in order to obtain information content that can be used to predict the risks that may arise for investors in proposing a stock split as one of the corporate actions that affect liquidity and price.

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