# Comparative Analysis Of Stock Liquiditi Level, Price Share And Stock Returns Before And After Stock Split On The Compass 100 Index Year 20172021 

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#### Abstract

Article's History: Received 21 April 2023; Received in revised form 28 April 2023; Accepted 20 Mei 2023; Published 1 Juni 2023. All rights reserved to the Lembaga Otonom Lembaga Informasi dan Riset Indonesia (KITA INFO dan RISET). Suggested Citation: Permatasari, P. D., \& Widodo, A. (2023). Comparative Analysis Of Stock Liquiditi Level, Price Share And Stock Returns Before And After Stock Split On The Compass 100 Index Year 2017-2021. JEMSI (Jurnal Ekonomi, Manajemen, Dan Akuntansi), 9 (3). 774 - 782. https://doi.org/10.35870/jemsi.v9i3.1165

Abstract This study aims to examine differences in stock liquidity, stock prices and stock returns before and after a stock split. This type of research is quantitative research. The objects in this study were companies listed on the Indonesia Stock Exchange (IDX) in the Kompas 100 index category. The sampling technique in this study used purposive sampling. The number of samples is 13 companies. Data collection using documentation techniques. The results of the paired sample $t$-test showed that there was no difference in stock liquidity before and after the stock split with a significance value of 0.968 . There is no difference in stock prices before and after the stock split with a significance value of 0.079 . There is a difference in abnormal returns before and after the stock split with a significance value of 0.000 .


Keywords: Stock Liquidity, Stock Price and Stock Return (Abnormal Return)

## Theoretical Background

The capital market is a means for companies to obtain capital investment and a means for investors to invest funds. This causes stock tranding activity and investor wekfare to be a major concern. Some of the activities that affect the number of shares outstanding include stock splits, reverse stock splits, stock dividends, repurchases of treasury share and so on.
Istock split is an activity of dividing or splitting shares into smaller nominal values with a certain ratio and followed by increasing the number of share outstanding according to a certain ratio and increasing the number of share outstanding. Stock split activity is not a capitalizing activity (noncapitalizing event) because there is no change in the total nominal value of ordinary share capital and share premium before and after the stock split even though there is no change in the book value of the shares (Natalia, 2019).
Sanusi and Khel (2018) state that companies have several objective for conducting stock splits. By carrying ot stock split activities, the company expects the distribution of the company's share ownership to be more evenly distributed or spread in terms of investors who are able to buy the company's share not only limited to investors who have large capital, but investors who have small capital as well. In addition, the activity can increase the liquidity of these shares, which is caused by a share price that is relatively cheaper than the previouse share price. This is quite favorable information for investors so that it can increase the number of potential investors who play a role in increasing stock tranding transactions of companies that conduct stock splits.

Stock liquidity is the ability to buy and sell stock securities more quickly at a known price. Increasing liquidity can be done by rearranging the share price with stock split activities. The more investors who make transactions against the stock, the volume of stock tranding will increase. Stock liquidity shows some of the many stock tranding frequencies. High stock liquidity can attract investor interest in company share to get short-term stock returns and long-term stock returns. Investors will increase the volume of stock lots purchased and increase the market increase (Natalia, 2019). Research conducted by Natalia (2019) shows that there are differences in liquidity before and after stock splits. However, it is inversely proportional to the results of research by Wulandari and Dewi (2019) which shows that there is no significant difference in stock liquidity (tranding volume activity) befoer and after stock splits.

Stock prices according to Suryansyah, et al (2018) are prices formed form the interaction of seller and buyers of share based on their expectations of company profits. The stock price on the exchange is largely determined by market forces, which means the power of demand and supply for shares fluctuates every day, the share price also follows the fluctustion pattern. The share price at the time the company was established, its shares are reflected in the rupiah amount of its share capital. The higher the share price, the higher the company is valued. Therefore, every company that issues share in very concerned about its share price.

A stock price that is too low often means that the company is not perfoming well. However, if the price is too high it can affect the ability of investors to buy shares so that the share become less liquid and make the share price difficult to increase again. For this reason, many companies conduct stock splits of their shares, the aim is to increase investor purchasing power and the share price (Suryansyah et al 2018). Research conducted by Suryansyah et al (2018) shows that there is a significant difference between the average relative share price of companies before and after stock splits. However, this research is inversely proportional to research conducted by Mardiyaningsih and Andhitiyara (2020) which states that there is no difference in stock price before and after stock splits.

Return is the retrieval of financial gain that a person gets for the capital spent. Natalia (2019) reveals that investors are interested in investing in stocks that are really known with certainty everything. This is addressed by stock returns that have a significant difference between stock return before and after the stock split, it can be interpreted that the stock split announcement has a positive effect on stock returns and provides a positive signal for investors in investment decisions. Dewi, et al (2019) research shows that there are differences in stock return before and after stock splits. However, this research is inversely proportional to research conducted by Natalia (2018) which states that there is no difference in stock returns before and after stock splits.

The object of the reseacrh to be carried out is companies listed on the Indonesia Stock Exchange (IDX), especially the stocks listed in the Kompas 100 index category in 2017-2021. In the appendix 2 data, there are 13 Kompas 100 index companies that have done a stock split in a period of 5 years. In 2017 there were 4 Kompas 100 index companies that did a stock split. In 2018 there was a decrease in the number of Kompas 100 index companies that did a stock split, namely there were only 2 companies. Thus decrease in number also occurred in 2019, where there was only 1 Kompas 100 index company that did a stock split. In 2020 there were 2 Kompas 100 index companies that did a stock split, this number was consistent with 2018 where there were 2 Kompas 100 index companies that did a experienced a significant increase in the number form the previous year, namely there were 4 companies, but this number was consistent with the number in 2017.

The reason for choosing the research object is because the Kompas 100 index is a stock price index resulting form the collaboration of the Indonesia Stock Exchange with Kompas daily. The Kompas 100 index has 100 stocks incorporated in it, the number 100 is considered to have reflected the performance of the combined share of 346 issuers. If the 100 stocks in the Kompas 100 index are tested, their movements will be relatively similar to the composite stock price index ( JCl ). Thus, investors have another reference when compared to the JCl which has a very board scope whie LQ 45 has not too many choise. The LQ 45 index is more volatile because it only contains the 45 most liquid stocks, while the JCl also takes into account inactive stocks Suruji in Marbun (2011).

Form the explanation that has been described, the problem formulation in this study is how the difference in stock liquidity levels, stock prices and stock returns before and after the stock split of the
compass 100 stock index. So the purpose of this study is to prove and explain the differences in stock liquidity levels, stock prices and stock returns before and after stock splits on the compass 100 stock index.

## Literature Review

## Signaling Theory

Signal theory is a company management behavior in providing clues to investors regarding management's views on the company's prospects for the future (Brigham and Hosuton, 2014). The company's urge to provide information is because there is information asymmetry between the company and outsiders because the company knows more about the company and its future prospects than outsiders (investors and creditors).

## Tranding Range Theory

Trading range theory explains that stock splits will increase stock tranding liquidity. According to this theory, a stock price that is too high (over price) causes the stock to be less actively traded, thus encouraging the company to conduxt a stock split.

## Event Study

Event study is a study of market reactions to an event whose information is published as an announcement (Jogiyanto, 2017). In event studies, the terms event window, event date and estimation period are known.

## Stock Split

Stock split is the splintting of a share into $n$ share. The price of a new share after a stock split $1 / n$ of the previous share price. Thus, actually a stock split does not add value to the company or in other words a stock split has no economic value (Jogiyanto, 2017).

## Stock Liquidity

According to Bodie et al. In Lubis (2018) states that liquidity is how much it costs and the ease of an asset to be converted into cash by selling it.

## Share Price

Stock price is the price formed form the interaction of sellers and buyers of shares based on their expectations of company profits (Suryansyah, et al., 2018).

## Stock Return

According to Jogiyanto (2010), stock returns can be divided into two, namely realized return and expected return. Realized return is the return that has occurred which is calculated based on historical data. This realized return is important in measuring the campany's performance and as a basis for determining future returns and risk. Expected return is the return expected in the future and is still uncertain.

## Hypothesis

## Differences in Stock Liquidity Level Befor and After Stock Split

Stock liquidity is measured by dividing the number of shares traded on a daily basis by the number of shares outstanding in the event period. Based on the reference of the tranding range theory, it states that stock split activities will increase stock tranding liquidity. The decrease in stock demand is because all investors are interested in buying shares at too high a price, aspecially individual investors who have a limited level of funds. So that with a stock split, the share pricewill become more affordable for small investors so that level of demand for share will increase which will lead to more liquid tranding of the coompany's shares. Similar to the signal theory where the company will give a positive signal to the market and the market will react positively to the signal given by the company. With the announcement ofa
stock split, it will provide a positive signal conveyed by the company to investors so that investors will be interested in buying share, this can be concluded form the increase in tranding volume activity after the implementation of the stock split.
H 1 : it is suspected that there is a difference in stock liquidity before and after a stock split.

## Stock Price Difference Before and After Stock Split

Stock price is the value of shares in rupiah which is formed as a result of the action of buying and offering shares on the stock exchange by fellow stock exchange members (Hadi in Mardiyaningsih and Andhitiyara, 2020). The stock price reflects the performance of the issuer, the movement of the stock price is in line with the issuer's performance. If the issuer's performance is good, the share price will also tend to increase. The stock price can also be formed due to the impact of astock split. By doing a stock split, it will make the number of shares in circulation more, so that it can affect the theoretical price of shares after a stock split, in the sense that the share price is not too expensive. In addition, the impact of a stock split will restore the price and average tranding size of the shares to the targeted range.

The relationship between signal theory and stock prices before and after stock split announcements is that the market considerd that a stock split is a positive signal that can make investors more confident in purchasing shares. Investors still believe in the prospects of companies after doing a stock split. Similar to the tranding range theory which states that by doing a stock split, the share price can be reached by small investors so that it can make shares attractive to investors so that the share price will increase.
H 2 : it is suspected that there is a difference in stock prices before and after stock split.

## Difference in Stock Return Before and After Stock Split

Return is the profit that investors enjoy on an investment they make. Stock returns will be received by investors, influenced by the type of investment chosen when investing. To measure the amount of return that investors will receive with the stock split event, it is measured by the abnormal return received by investors. Abnormal return is the difference between actual return and axpected return (Hartono, 2016).

The relationship between abnormal return and signal theory is that the company's future growth prospects are anticipated by investors by sharing to buy the company's shares, which is a good signal for investors, causing an above-average return. Abnorma return cab be referred to as excess return, which is the excess of the return that actually occurs against the normal return (Jogiyanto, 2010). H 3 : it is suspected that there are differences in stock returns before and after stock split.

## Research Model



Figure 1 Research Model
The use of a 5 -day interval before and after the stock split is based on a reference form the research of Mardiyaningsih and Andhitiyara (2020) statistically proven to occur in a span of 5 days before and after the announcement of the stock split there was a significant abnormal return. So this research was conducted using an event window of 5 days before and 5 days after the stock spliy announcement.

## Research Methods

This type of research data is quantitative data with data sollection techniques, namely documentation in the form of financial reports. The type of data is secondary data which come form teh annual report of the Kompas 100 index company listed on the official website www.idx.co.id. The research population is the Kompas 100 index company that did a stock split form 2017-2021 with the sampling technique, namely purposive sampling. The analysis technique used is the normality test and paired sample $t$ test. The operational definitions of the variables are:

## Stock Liquidity

Stock liquidity is proxied by tranding volume activity (TVA). According to Munthe in Wulandari and Dewi (2019) the TVA formula is:

$$
\text { TVAi, } t=\frac{\text { company i shares traded at time } t}{\sum \text { companyi shares outstanding at time } t}
$$

## Share Price

To measure the stock price, the closing stock price in the observation period is used. In Melati and Nurwulandari's research (2017) what is meant by stock price is the market price recorded every day at the closing time of a stock (closing price).

## Stock Return

According to Mardiyaningsih and Andhitiyara (2020) stock return proxied by abnormal return is the difference between expected return and actual return. According to Jogiyanto (2017) abnormal return using the formula:

$$
\text { RTNi, } \mathrm{t}=\mathrm{Ri}, \mathrm{t}-\mathrm{E}(\mathrm{Ri}, \mathrm{t})
$$

## Result and Discussion

## Normality Test Results

This test is carried out to determine whether the data on the variables studied are normally distributed or not. The results are:

Table 1
Tranding Volume Activity Normaly Test Results

|  | TVA <br> Before the <br> Event | TVA After <br> the Event |
| :--- | :---: | :---: |
| Kolmogorov | 0,263 | 0,286 |
| Smirnov Z <br> Asymp. Sig. (2- <br> tailed) | 0,797 | 0,258 |

Source: data processed, 2023.
Table 2
Stock Price Normality Test Results

|  | SP Before <br> the Event | SP After <br> the Event |
| :--- | ---: | ---: |
| Kolmogorov <br> Smirnov Z <br> Asymp. Sig. (2- <br> tailed) | 0,345 | 0,337 |
| Source: data processed, 2023. | 0,717 | 0,192 |

Table 3
Abnormal Return Normality Test Results

|  | AR <br> Before <br> the Event | AR After <br> the Event |
| :--- | ---: | ---: |
| Kolmogorov <br> Smirnov Z | 0,225 | 0,115 |
| Asymp. Sig. (2- <br> tailed) | 0,123 | 0,196 |

Source: data processed, 2023.
Based on the test results, it can be seen that all variables are declared normally distributed, because the value of Asimp. Sig 2tailed has a value $>0,05$.

## Hypothesis Test Results (Paired Sample T-Test)

Paired sample $t$-test is a test of two paired samples. Teh paired sample itself is the same subject but with different treatments. The test results are:

## Table 4

Paired Sample T-test Results

| Variables | Sig (2 tailed) | Conclusion |
| :--- | :---: | :---: |
| Trading volume activity before and after the event | 0,968 | Hypothesis rejected |
| Pre- and post- event stock prices | 0,079 | Hypothesis rejected |
| Abnormal return before and after the event | 0,000 | Hypothesis accepted |

Source: data processed, 2023.
Form Table 4, it can be explained:

## 1. Hypothesis 1 Test Results

The paired sample $t$-test above shows a significance value of 0.968 , because the sig value 0.968 > 0.05 , the conclusion drawn is to reject the hypothesis which reads that there is a suspected difference between tranding volume activity before and after the stock split in 2017-2021 in the Kompas 100 stock index. So, the results of this studiy indicate that there is no difference between tranding volume activity before and after the stock split in 2017-2021 in the Kompas 100 stock index company.
2. Hypothesis 2 Test Results

The paired sample t-test above shows a significance value of 0.079 , because the sig value 0.079 > 0.05 , the conclusion drawn is to reject the hypothesis which reads that there is a suspected difference between stosck prices before and after the stock split in 2017-2021 in the Kompas 100 stock index. So, the results of this studiy indicate that there is no difference between stock prices before and after the stock split in 2017-2021 in the Kompas 100 stock index company.
3. Hypothesis 3 Test Results

The paired sample t-test in table 4 shows a significance value of 0.000 , because the sig value 0.000 < 0.05 , the conclusion drawn is to accept the hypothesis which reads that there is a difference between abnormal returns before and after the stock split in 2017-2021 in the Kompas 100 stock index company. So, the results of this study indicate that there is a difference between abnormal return before and after thestock split in 2017-2021 in the Kompas 100 stock index company.

## Discussion <br> The Effect of Tranding Volune Activity on Stock Events in Kompas 100 Index Companies in 20172021

The results of the first hypothesis test show that there is no difference between tranding valume actvity before and after the stock split event in 2017-2021 in the Kompas 100 stock index company. Tranding volume activity does not have information content, causing no reaction when the announcement is received by the maret. The absence of a market reaction after a stock split indicates that information circulating in the capital market is not able to be received by investors quickly. This research is not in line with the theoretical signaling theory where stock split are an effort to attract investors' attention by signalin that the company has good conditions, but investors capture stock split announcements as bad news that is unable to provide future profits. Management has more information about the company's prospects than outsiders (investors)

The results of this study contradict the research of Mardiyaningsing and Andhityara (2020) which states that there are difference in stock liquidity (tranding volume activity) before and after stock splits. Likewise, research form Natalia (2019) and Rahayu and Murti (2017) has succeeded in proving that there is a significant difference in stock liquidity before and after stock split.

## The Effect of Share Price on Stock Events imm Compass 100 Index Companies in 2017-2021

The results of the second hypothesis test show that there is no difference in stock prices before and after the stock split in 2017-2020 in the Kompas 100 stock index. The results of this study contradict the research of Suryansyah et al (2018) that there is a significant difference between the relative stock market price before and after the stock split. This indicates that the stock split announcement in campanies listed on the IDX in 2017-2021 does not have information content that causes market participants to react to the event. The results state that there is no difference between the average share price before and after the stock split event in Kompas 100 stock index company. The difference in stock price s before and after the stock split in the company indicates a positive reaction given by investors to the stock split carried out by the company. The lower nominal value of shares after teh stock split in company succeeded in attracting investors to buy shares, can reach the share price after the stock split with a lower nominal value. An increase in the number of investors who make requests to buy a stock causes an increase in the share price of the stock. Therefore, the share price after the stock split has increasedform the share price before the stock split. Based on the theory that the increse in stock prices is caused by investors' reactions to inforemation and optimistic campany management on the company's future prospects which are signaled through a stock split. The higher the return and investor expectations of the return and prospects of the company are interested in buying share after a stock split in company.

## The Effect af Abnormal Return on Stock Events in Kompas 100 Index Companies in 2017-2022

The results of the third hypothesis test show that there are differences in abnormal return before and after the stock split in 2017-2021 in the Kompas 100 stock index company. The results of this study are in accordance with Dewi et al (2019), which show that there are differences in stock return (abnormal return) before and after stock split. This means that the abnormal return has a difference before and after the stock split, causing a reaction when the announcement is received by the market.

Stock split provide a postive signal to the company as a seller of shares to shareholders and other investors who have the potential to become investors consider the stock split announcement information as a positive signal or good news form the company, so that there is a significant change that occurs between the abnormal return before an after the stock split.

This research is in line with the theory that stock splits can provide information to investors about the prospect of increasibg future returns. When the information is announced and all market participants have received the information, market participants first interpret and analyze the infomation as a good signal or a bad signal. In this study, there is a difference in abnormal return before and after the stock split. This makes investors prefer to sell their shares rather than get abnormal returns. These results indicate that the market is efficient, meaning that the market can absorb existing information, namely the stock split announcement so that stock prices and stock retums are influenced by existing events.

## Conclusion

Form the test results and discussion, it can be concluded: 1) there is no difference in stock price before and after the stock split event in 2017-2021 in the Kompas 100 stock index company, 2) there is a difference in abnormal return before and after the stock split event in 2017-2021 in the Kompas 100 stock index company, 3) there is no defference in average tranding volume activity (TVA) before and after the stock split event in 2017-2021 in the Kompas 100 stock index company.

## Recommendation

For further research, it is expected to add other samples or use other indices so that the research results will be more varied, not only using samples or populations from companies listed on the Indonesia Stock Exchange in the Kompas 100 Stock Index category, but can also be expanded using other company sectors. .

For future researchers, it is expected to use different events that are more recent or suggested to use other events that have a wider influence on the capital market such as regional and international events.

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