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**THE EFFECT OF STOCK SPLIT ON LIQUIDITY STOCK IN  
COMPANIES WHICH LISTED ON BEI 2007-2015**

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**Abstract**

This study aims to determine the effect of stock split on liquidity stock in large companies, small companies, growing companies, and not growing companies. Stock prices are too high to make investors sluggish in the stock buyers. This was responded by the company by taking actions aimed at lowering the price of shares at a price range that attracts investors by carrying out a stock split, so that the stock becomes more liquid because there are many outstanding shares.

This study used 51 companies that did a stock split in the 2007-2015 period and was listed on the Indonesia Stock Exchange. The normality test showed that the data was normally distributed, so the test used was a Paired Sample T-Test.

Observations were made for 5 days before the stock split and 5 days after the stock split. The results of this study are the differences in Trading Volume Activity (TVA) between before and after a stock split in large companies, small companies, growing companies, and not growing companies. Then it can be concluded that the stock split has no effect on liquidity stock.

**Keywords:** *Stock split, liquidity, trading volume activity, company size, company growth*

**Introduction**

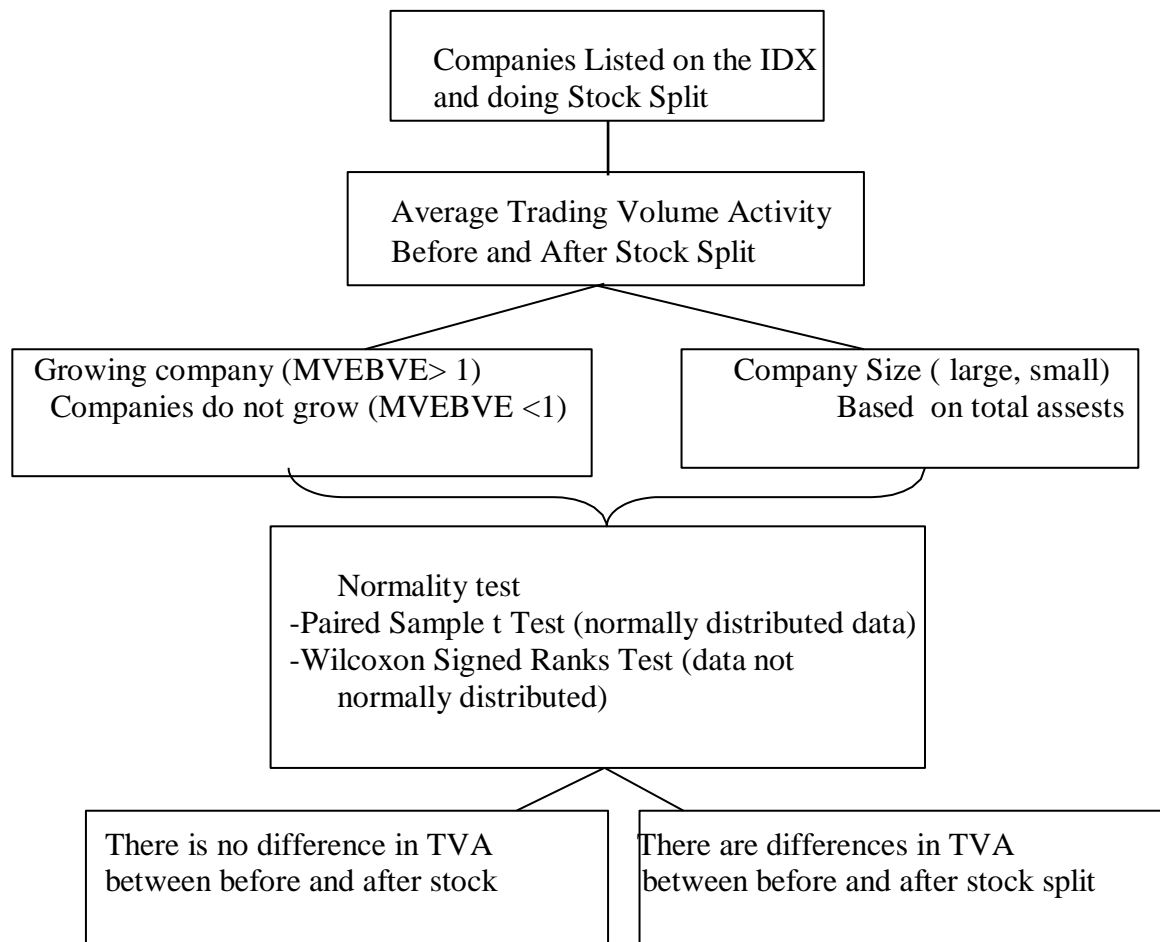
Companies to raise funds from investors is by entering the capital market. In trading activities in the capital market information plays an important role in every trading transaction activity. One such information is about the announcement of a stock split. Stock split is breaking up a sheet of shares into several shares with a lower nominal value. A stock split does not add value to the company or in other words a stock split does not have economic value (Hartono, 2010: 561-562).

Brigham and Gapenski (1994) explained that a stock split is an activity carried out by a public company to increase the number of shares outstanding. The reason the company did a stock split was because the company's stock price was overvalued, causing a lack of investor interest in buying the company's shares. A relatively lower price is expected to increase trading volume so that the number of shareholders increases and the demand for shares increases. For this reason, a stock split is expected to increase company liquidity.

Stock split is a positive signal for investors, this is because stock split requires costs, and only companies that have good prospects can bear these costs (Copeland, 1979). Previous research related to stock split has been carried out. Lamoureux and Poon (1987) investigating the market reaction to stock splits found that there was an increase in liquidity stock after a stock split but there was little evidence that the stock split increased trading volume. Research conducted by Copeland (1979) found that liquidity stock declined after a stock split, ie trading volumes were

lower than before. Research conducted by Grinblatt, Masulis and Titman (1984) in Hartono (2010: 564) uses daily data to see the effect of stock split announcements over three days of observation, they found a significant reaction from the announcement of a stock split. Raspati (2013) examining the impact of announcements of rights issue and stock split on liquidity stock found that an increase in liquidity stock after stock split on banking companies and financial institutions, right issue and stock split together affected the liquidity of banking company and financial institution shares by 98 %. Research conducted by Marwatiningsih and Trisnawati (2011) with the title differences in liquidity stock and stock returns around the stock split announcement found a significant difference in liquidity stock (TVA) between before and after the stock split that showed the effect of stock split on liquidity stock.

**Literature Review**



**1. Stock split**

Stock split is a stock split into n shares with a price per new share of 1 / n the previous share price, which is done by company managers to rearrange the stock market price by increasing the number of shares outstanding. Hartono (2010: 561-562). The existence of a stock split, issuer's

shares become cheaper and the number will be more, so stock trading is expected to be more liquid.

Stock split is an activity carried out by companies that have gone public to increase the number of shares outstanding (Brigham and Gapenski, 1994; in Lestari and Sudaryono, 2008). Meanwhile, according to Baker and Powell (1993) stock split does not give any reaction.

Stock split is an important tool in capital market practices because stock split can be used to arrange stock prices in a lower range, the more transactions are expected to increase liquidity stock.

Reasons for companies to do a stock split:

- a. Low stock prices will attract investors to conduct stock transactions to enable the stock price to rise.
- b. The number of shares outstanding is more, making it relatively marketable and liquid.

### **Theories Regarding Stock Split**

There are two theories in the literature relating to stock split:

#### **a. Signaling Theory**

The principle of signaling theory is that every action contains information because of asymmetric information. Asymmetric information is a condition where a party has more information than another party. For example the management has more information than the investor. Information received can be responded differently by investors. Signals from trusted companies will be responded more by investors.

Baker and Powell (1993) explained that stock split gives a positive signal to investors about the company's prospects in the future. Signaling theory encourages companies to conduct stock splits because of investment opportunities and good company prospects in the future Hartono (2010: 561-562). Stock split requires a fee so that only companies that have good prospects are able to carry out a stock split. Companies that do a stock split experience a large increase in profits before solving, this study supports the Copeland (1979) signaling theory hypothesis.

#### **b. Trading Range Theory**

According to trading range theory, stock split is used as a tool to rearrange stock prices at the desired price range so that it is increasingly possible for investors to buy shares in large quantities. This theory says that stock prices that are too high cause less active trading. The higher the stock price, the higher the value of the company and vice versa. A stock price that is too high will cause a decrease in stock trading activities, so a stock split is needed.

Copeland (1979) says that stock splits lead to a rearrangement of stock prices in the lower range. By directing the stock price to a certain range it is hoped that more market participants will engage in trading and will increase the liquidity of shares on the exchange. Thus the stock split is

carried out aiming that the stock price is not too expensive, so that it attracts investors to buy it and can increase liquidity stock.

## **2. Liquidity stock**

According to Baker and Powell (1993) liquidity stock is a measure of the number of transactions of a particular stock as measured by the activity of the trading volume of shares in the capital market in a certain period. Liquidity stock is said to increase if the increase in the number of shares traded is proportionally greater than the number of shares outstanding.

Copeland (1979) in Rosadevi (2013) explains that liquidity is measured by the amount of Trading Volume Activity (TVA) which is formulated as follows:

$$TVA_{i_t} = \frac{\text{Saham perusahaan } i \text{ yang diperdagangkan pada waktu } t}{\text{Saham perusahaan } i \text{ yang beredar pada waktu } t}$$

Information:

$TVA_{i_t}$  = TVA company I on the t-day

i = sample company name

t = certain day

If TVA gets bigger the stock becomes more liquid, on the contrary if TVA gets smaller the stock becomes more illiquid.

## **3. Company Size**

The size of the company is a value that indicates the size of the company. Company size is measured using total company assets. Ikenberry et.al (1996) tested whether a stock split is a signal by entering variable company size, the results of the study showed the effect of stock split on company liquidity by taking into account the size of the company, small companies were able to have a greater influence than large companies. The size of the company size is determined by the size of the total assets of the company which is valued by the size of the total assets owned by the company used to reduce the significant difference between the size of large companies and the size of small companies (Lestari and Sudaryono, 2008).

H1: There are differences in liquidity stock before and after the announcement of a stock split in large companies.

H2: There are differences in liquidity stock before and after the announcement of a stock split in smaller companies.

## **4 Company Growth**

Another variable used in this study is company growth, this variable is used to distinguish whether companies are included in the company's growth or not growth. In classifying company growth, this study uses a price-based proxy, namely MVEBVE (Market Value Equity to Book Value of Equity). If  $MVEBVE < 1$ , the company is classified as a non-growth company.

However, if  $MVEBVE > 1$ , vice versa, the company is classified as a growing company (Sakti and Rini, 2013).

Hartono (2003) explains that a growing company has a ratio greater than the value of one which means the market believes that the market value of the company is greater than the book value. The number of shares outstanding can increase liquidity stock because many investors are interested in buying and will increase liquidity stock

H3: There are differences in liquidity stock before and after the announcement of a stock split on growing companies.

A non-growing company has a smaller market value when compared to a growing company. Market value that is smaller than its intrinsic value shows that shares are sold at cheap prices (Hartono, 2003). Cheap stock prices actually attract the attention of investors to buy them so that the stock becomes liquid

H4: There are differences in liquidity stock before and after the announcement of a stock split at a company that does not grow.

### **Research methods**

The type of research used is event study research. Event study is a study that studies the market reaction to an event whose information is published as an announcement (Hartono, 2010). The purpose of using the event study method is to determine the comparison of values that occur before and after the event occurs, assess whether there are differences in circumstances before and after the event occurs (Hartono, 2010).

The events tested in this study were stock split events. Information from stock split events that are published will be tested for their impact on liquidity stock.

The sample in this study were companies listed on the Indonesia Stock Exchange (IDX) and those who conducted a stock split in 2007-2015 were 51 companies.

This study uses secondary data from the Indonesia Stock Exchange, <http://sahamoke.com> and <http://finance.yahoo.com/> for the 2007-2015 period.

Data analysis techniques using the data normality test, if the data are normally distributed then using the parametric test Paired Sample t Test. If the data are not normally distributed then use the Wilcoxon Signed Ranks Test nonparametric test.

## **RESEARCH RESULT**

### **Data Description**

The population in this study are all companies listed on the Indonesia Stock Exchange and conducted a stock split in the 2007-2013 period. Samples taken using the purposive sampling method, which is a sampling technique with certain criteria. The criteria used for sampling in this study are:

1. The name of the company is listed on the Indonesia Stock Exchange (IDX) and conducted a stock split in the period 2007-2015
2. Date of announcement from the issuer carrying out stock split activities
3. Number of shares outstanding and number of shares traded 5 days before the announcement of the stock split and 5 days after the announcement of the stock split.
4. Total equity and closing price to determine companies that grow and companies do not grow
5. The total assets of the company to determine large companies and small companies

Based on these criteria, the companies that are sampled in this study are:

**Table 1:**  
**Sample Data of Companies Conducting Stock Split**

Year	Sample
2015	11
2014	5
2013	6
2012	8
2011	10
2010	4
2009	1
2008	1
2007	5
<b>Total</b>	<b>51</b>

Source: [www.idx.co.id](http://www.idx.co.id); [www.sahamoke.com](http://www.sahamoke.com)

Normality testing will be conducted before testing the hypothesis. Based on the results of the normality test, the test tool used to test the hypothesis is Paired Sample T-Test

### **1. First Hypothesis Testing**

The first hypothesis proposed in this study is that there are differences in liquidity stock before and after the announcement of a stock split in large companies. Testing the first hypothesis is used the Paired Sample T-Test, which compares the average Trading Volume Activity (TVA) 5 days before the stock split and 5 days after the stock split in large companies. The hypothesis testing criteria are:

- a. If  $t > t_{table}$  then  $H_0$  is rejected and  $H_a$  is accepted instead
  - b. If  $t < t_{table}$ ,  $H_0$  is accepted and vice versa  $H_a$  is rejected
- Based on the significance level of 0.05 or 95% confidence level.

**Table 2**  
**Hypothesis Testing Results 1**

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	SEBELUM - SESUDAH	-443466.289	3804819.355	567188.981	-1586560.571	699627.993	-0.782	44	.438

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	SEBELUM	912752.82	45	4094144.628	610319.047
	SESUDAH	1356219.11	45	7689716.998	1146315.329

		N	Correlation	Sig.
Pair 1	SEBELUM & SESUDAH	45	.975	.000

Based on the table above it can be seen that the hypothesis testing paired sample t test obtained the average value of t count before the stock split of 912752.82 while the average t after the stock split of 1356219.11 so as to obtain changes in the t count of 443,466.29 with a significance of 0.438.

Based on the test results obtained significance value greater than  $\alpha = 0.05$ , then H1 is denied. These results indicate that there is no difference in liquidity stock before and after a stock split in large companies.

## 2. Second Hypothesis Testing

The second hypothesis in this study is to prove whether stock split has an impact on liquidity stock in small companies. Data analysis was performed using paired sample t tests.

**Table 3**  
**Hypothesis Testing Results 2**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	SEBELUM	20029.33	6	38738.975	15815.120
	SESUDAH	71666.67	6	71979.627	29385.560

		N	Correlation	Sig.
Pair 1	SEBELUM & SESUDAH	6	-.531	.278

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 SEBELUM - SESUDAH	-51637.333	98212.399	40095.044	-154704.925	51430.259	-1.288	5	.254

Based on the table it can be seen that the hypothesis testing paired sample t test obtained t count of -1.288 with a significance of 0.254. Based on the test results obtained significance values greater than  $\alpha = 0.05$ , then H2 is rejected. These results indicate that there is no difference in liquidity stock before and after a stock split in small-sized companies.

3. Third Hypothesis Testing

The third hypothesis in this study is to prove whether stock split has an impact on liquidity stock in growing companies. Data analysis was performed using paired sample t tests.

Table 4  
Hypothesis Testing Results 3

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 SEBELUM	145059.18	33	454831.111	79175.934
SEUDAH	199057.58	33	259955.169	45252.387

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 SEBELUM & SESUDAH	33	.807	.000

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 SEBELUM - SESUDAH	-53998.394	289112.003	50327.940	-156513.053	48516.265	-1.073	32	.291

Based on the table above it can be seen that the hypothesis testing paired sample t test obtained t arithmetic average before the stock split of 145059.18 and t arithmetic average after the stock split of 199057.58 so there is a difference of t arithmetic of -53,998.4 with a significance of 0.291. Based on the test results obtained significance value greater than  $\alpha = 0.05$ , then H3 is rejected. These results indicate that there is no difference in liquidity stock before and after a stock split in a growing company.



**4. Fourth Hypothesis Testing**

The fourth hypothesis in this study is to prove whether the stock split has an impact on liquidity stock in companies that do not grow. Data analysis was performed using paired sample t tests.

**Table 5  
Hypothesis Testing Results 4**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	SEBELUM - SESUDAH	-1028061.11	6058983.355	1428116.072	-4041122.648	1985000.425	-.720	17	.481

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	SEBELUM	2022933.33	18	6389578.799	1506038.166
	SESUDAH	3050994.44	18	12159721.245	2866073.783

		N	Correlation	Sig.
Pair 1	SEBELUM & SESUDAH	18	.978	.000

Based on the table above it can be seen that the hypothesis testing paired sample t test obtained t count of -0.720 with a significance of 0.481.

Based on the test results obtained significance value greater than  $\alpha = 0.05$ , then H4 is rejected. These results indicate that there is no difference in liquidity stock before and after the stock split in the company does not grow.

**Conclusion**

The results of the analysis of the differences in Trading Volume Activity (TVA) in large, small, growing, and non-growing companies on the Indonesia Stock Exchange in the 2007-2015 period, obtained the following conclusions:

1. There is no difference in trading volume activity before and after a stock split in large companies indicated by the probability value ( $\alpha$ ) of 0.438. This proves that the stock split has no impact on the liquidity of shares in large companies.
2. There is no difference in trading volume activity before and after a stock split in small companies. Paired sample t test results obtained a probability value ( $\alpha$ ) of 0.254. This proves that the stock split does not affect the liquidity of shares in small companies.

3. There is no difference in trading volume activity before and after a stock split in a growing company as indicated by the stable value of trading volume activity on the 5 days after the stock split. This proves that the stock split does not have an impact on liquidity stock in growing companies.

4. There is no difference in trading volume activity before and after the stock split in the company does not grow. Based on paired sample t test calculations, the probability value ( $\alpha$ ) of 0.481 indicates that there is no significant difference between trading volume activity before and after stock split. This shows that the stock split does not have an effect on liquidity stock in companies that do not grow.

Limitations in this study are the relatively short observation time of 5 days. This causes information related to stock split not fully absorbed by the market. The number of samples in this study is only a little 51 companies. By adding samples it is expected that research results will be more accurate and clear. The results of the study are expected to be one of the references for further research to obtain better results.

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