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THE EFFECT OF NEW SHARE PRICE FRACTION ON LIQUIDITY

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**Reva Yuliani, Djoko Roespinoedji. The Effect of New Share Price Fraction on Liquidity--
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Keywords: Price fraction, depth, DTRS

ABSTRACT

This research was conducted to determine the effect of the new price fraction on liquidity. The new price fraction policy implemented by the Indonesia Stock Exchange on 02 May 2016 affects 5 groups of share prices. Based on the Decree of the Board of Directors of the Indonesia Stock Exchange Number Kep-00023 / BEI / 04-2016, one of the expected impacts of this change is an increase in stock liquidity. Through purposive sampling technique, a sample of 273 companies was obtained. This study uses daily transaction data for 30 days before and after the fraction reduction. Through the Wilcoxon Signed Rating Test, it was found that a decrease in price fraction had a positive effect on relative spread and depth. To overcome the contradiction in results, the Depth to Relative Spread was calculated, which shows that a decrease in the fraction does not affect the increase or improvement in liquidity in groups 1,2,3, has no significant effect in groups 4 and 5 has a significant effect.

Keywords: Price fraction, depth, DTRS.

INTRODUCTION

The Indonesia Stock Exchange (IDX) applies a change in the unit price change used in making selling offers or buying requests (price fractions) which are only effective starting from May through the IDX Directors Decree number Kep-00023 / BEI / 04-2016, The IDX applies 5 price fraction units from the previous 3 price fraction units. Following are the details of changes in the Amount of Equity Securities Fraction in the Regular Market and the Cash Market as stipulated in provision VI.5.2. Regulation Number II-A concerning Securities Trading which previously:

	Change details
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Price Group	Price Fraction	Maximum Level of Change
<Rp. 500	Rp. 1	Rp. 20
Rp. 500 - <Rp. 5.000	Rp. 5	Rp. 100
>= Rp. 5.000	Rp. 25	Rp. 500

Change Becomes:

Price Group	Change Details	
	Price Fraction	Maximum Level of Change
<Rp. 200	Rp. 1	Rp. 10
Rp. 200 - <Rp. 500	Rp. 2	Rp. 20
Rp. 500 - <Rp. 2.000	Rp. 5	Rp. 50
Rp. 2.000 - <Rp. 5.000	Rp. 10	Rp.100
>=Rp. 5.000	Rp. 25	Rp. 250

Source: www.idx.co.id

For the first group the price fraction is the price below Rp200 and has a price change (price fraction / tick price) per Rp1 with a maximum movement of Rp10. Furthermore, for the second group the price is set at Rp. 200 to below Rp. 500 and has a change in price per Rp. 2 with a maximum movement of Rp. 20. As for the third group at a price of Rp. 500 to below Rp. 2000, the price changes per Rp. 5 with a maximum movement of Rp. 50, the fourth group at a price of Rp. 2000 to below Rp. 5000 has a change in the fraction of Rp. 10 with a maximum change of Rp. 100 and above or equal to Rp. 5,000 and has a change in price of Rp. 25 with a maximum movement of Rp. 250.

Based on the definition from the Indonesia Stock Exchange, it is stated that the price fraction is a bargaining guide for trading shares in accordance with the share price and the maximum price change. The price fraction is determined in order to create transparent, efficient and orderly trade. The price fraction can be for shares, HMETD, and warrants. Furthermore, the Education Unit Marketing Division of the IDX Deri Yustria explained that the price fraction is one of the conditions regulated as a condition for trading on the regular market.

Old vs New faction changes

One of the positive points of the change in price fraction can be explained through an example as follows: if we use the old share price fraction with a price group below 500, for example, share A's current share price is 400. When the stock price rises 1 point or Rp. 1, - then the trader's profit is 0.25% (excluding brokerage

fees). Meanwhile, if we use the fraction of the new share price, then A's share will experience a point increase or Rp. 2, - then the Trader's profit is 0.5% (excluding brokerage fees). This example shows one of the positives of the recent change in price fractions.

Investor vs Trader

For investors, changes in share price fractions do not have a significant impact considering their long-term investment profile with a passive strategy, namely Buy and Hold, so they don't pay too much attention to stock price fluctuations. Conversely, for traders with short-term profits with active strategies, namely Buy and Sell, a new change in price fraction will allow traders to be more active and obtain optimal profits.

The phenomenon of changing fraction rules in Indonesia has occurred six times changing the rules for price fractions with the aim of finding the ideal size of the fraction that can increase liquidity. The following table summarizes the change in fractions that occurred before January 6, 2014 to May 2, 2016.

THEORETICAL BASIS

Return

Return comes from the positive difference between the purchase price of the shares previously made and the current selling price of the shares. The price arises because of trade transactions that occur or match. The meeting of supply and demand prices and the availability of shares for sale also support the formation of prices that make trade transactions match each other. The bid price in the capital market is often referred to as the offer / ask price, while the ask price is called the bid price. The difference between the bid and ask prices is often referred to as the bid-ask spread which is an indicator that is often used in measuring liquidity related to dimensions. immediacy (immediately want to transact) and width (transaction fee). The minimum spread between the bid and ask is known as the tick size (price fraction) which shows the minimum price change that can occur for each transaction. According to Jogiyanto (2017) returns are divided into two types, namely:

Return realization

Return realization (realized return) is the return that has occurred. Realized return is calculated using historical data. Realized return is important because it is used as a measure of the company's performance. This historical return is also useful as a basis for determining the expected return and risk in the future.

Return expected (expected return)

The expected return is the return that investors expect to receive in the future. In contrast to realized returns that have already occurred, expected returns have not yet occurred. In this study, using realized returns, namely returns that have occurred or returns that have actually occurred.

Liquidity

Liquidity shows the company's ability to meet its financial obligations that must be fulfilled immediately, or the company's ability to meet financial obligations when they are collected (Munawir in Satriana, 2017: 18).

Wild, et.al in Fatmawati (2017: 22) said that liquidity refers to a company's ability to meet its short-term obligations. Short term is conventionally considered a period of up to one year. This is related to the company's normal operating cycle, which includes the purchase-production-sales-billing cycle. Liquidity is one of the factors that determine the success or failure of a company. Provision of cash needs and resources to meet these needs determines the extent to which the company bears the risk.

The liquidity ratio according to Syahril and Purba (2013: 37) is the company's ability to pay short-term liabilities (or current debt) at maturity using current assets. The higher this ratio, the better it means that current assets can cover current liabilities which are called liquid. However, this ratio is too high is also not good, because the company cannot manage current assets effectively. Based on these definitions, it can be concluded that liquidity is the company's ability to meet its short-term obligations which must be met immediately by using its current assets.

Price Fraction

In conducting stock transactions, the number of multiples of the supply and the maximum supply and demand cannot be arbitrary. There is a procedure that regulates it so that it has uniformity. This setting of the multiplication of supply and demand is known as the fraction of the share price. The size of the share price fraction depends on the price of the shares being traded. The higher the price of a share, the greater the share price fraction used. The party that determines the size of this share price fraction is the Indonesia Stock Exchange (IDX).

If you force yourself to enter a bid and ask order that violates the rules of the stock price fraction, the order you place will be automatically canceled.

RESEARCH METHOD

Types of research

According to Sugiyono (2017), descriptive research methods can be done to determine the existence of independent variables, either only in one or more variables (independent variables or independent variables) without making comparisons of the variables themselves and looking for relationships with other variables. Descriptive method is a method that aims to determine the nature and deeper relationship between two variables by observing certain aspects more specifically to obtain data that is in accordance with the existing problem for the purpose of research, where the data is processed, analyzed, and further processed

with basic theories that have been studied so that the data can be drawn a conclusion.

Operational Variables

In this study, the variables used in measuring liquidity before and after changing the price fraction are the bid-ask spread variable (for the immediate and width dimensions) and the depth.

1. Bid-Ask Spread

The bid-ask spread is measured using two measures, namely Nominal Spread and Relative Spread as follows:

- a. Nominal Price_{it} = Ask_{it} - Bid_{it}
- b. Relative Spread = Persentase Spread = $\frac{(\text{Ask}_{it} - \text{Bid}_{it})}{(\text{Ask}_{it} - \text{Bid}_{it})}$

2. Market Depth

Market depth is measured using the size of the volume, value and value with the value, namely:

- a) Bid Depth (Volume) =BDvol
- b) Ask Depth (Volume) =ADvol
- c) Bid Depth (Value) = Vol Bid x Harga Bid
- d) Ask Depth (Value) = Vol Ask x Harga Ask

Population and Sample

In this study, the population used is all go-public stocks listed on the Indonesia Stock Exchange. The sampling in this study is based on the characteristics (objectives) set by the previous researcher, so that it is classified as a type of non-probability sampling.

The technique used is purposive sampling or sampling with a specific purpose. The characteristics determined by the researcher in drawing samples and the number in this study include:

1. Including shares affected by the new price fraction policy which was passed on May 2, 2016. These shares are shares having a price of less than Rp. 200, Rp. 200 to Rp. 500, -, the price of Rp. 500, - to Rp. 2000, -, Rp. 2000, - to Rp. 5,000 and the stock price of more than Rp. 5,000.
2. If an issuer has experienced a change in price group during the study period, it will be excluded from the sample.

3. Including stocks that during the observation period there were at least 10 trading transactions
4. Issuer shares do not announce dividend distribution, right issue, stock split, IPO during the research period
5. Completeness of the data required in conducting this research are fulfilled.
6. Not delisted.

Based on the predetermined criteria above, a sample of 236 stocks was obtained which can be seen in the following table:

Price Fraction	Number of Samples
<Rp. 200	28
Rp. 200 - <Rp. 500	35
Rp. 500 - <Rp. 2.000	91
Rp. 2.000 - <Rp. 5.000	59
>=Rp. 5.000	60
Total	273

Source: Data that has been processed

Data analysis

The data analysis technique used is the Wilcoxon signed ranking test which has the use of evaluating the effect of a treatment. The work steps for this test are as follows (Sanusi, 2011: 149):

1. Formulate the null hypothesis and alternative hypothesis.
2. Ho: there is no difference between before and after treatment
3. H1: there is a difference between before and after treatment.
4. Determine the rank for each of the pairs of observations (data) before Xsb and after Xss according to the magnitude from the smallest to the largest regardless of the sign of the difference. If there are two or more identical signs, the rating for each item is the average rating.
5. Put a positive or negative sign in the rating for each difference according to the sign of the difference. If there is a zero difference, just ignore it.

6. Add up all the ratings that are positive and all the ratings that are negative. Next, regardless of the sign, watch for the smaller value between the two. The smaller value is considered as t_{count} .
7. Compare t_{count} with t_{table} value for the selected α . When looking at the table, pay attention to the signs of 0 because the 0 will reduce the number of n . So, if n is 10, while the zero sign is 2, then n becomes 8.
8. Make a decision using the following criteria:

If $t_{hitung} > t_{tabel} H_0$; then accepted

If $t_{hitung} < t_{tabel} H_0$; then rejected

DISCUSSION

The indicators used in testing liquidity in this study are relative spread, depth and DTRS. Based on the above test, the relative spread in group 1 shows that 25 of the 28 stocks have decreased their relative spread significantly, which indicates a narrowing of the spread between bids and offers on stock transactions on the Stock Exchange or the closer the distance between bids and offers is thus more supportive of match transactions between sellers and buyers. Based on theory, a decrease in relative spread in this group indicates an increase in liquidity. The relative spread in this study is an indicator of the immediacy and width dimensions. Therefore, it can be seen that the policy of reducing the price fraction has a positive effect on immediacy and width, that is, it can reduce the immediacy and the width represented by the relative spread indicator. The decrease in relative spread that occurs shows costs. immediacy and transaction costs (width) are getting lower after the fraction reduction policy.

Next is the measurement of depth which is an indicator to determine the ability of shares to absorb transactions without affecting the price. 25 of the 28 stocks in group 1 experienced a significant decrease in depth, which means that a decrease in the price fraction has a positive effect on depth so that the 3rd hypothesis in this study which says that a decrease in fraction has a negative effect on depth is rejected on stocks in this group. Based on the theory, a decrease in depth indicates a decrease in the ability of shares to absorb transactions, thus indicating an illiquid state. Thus it can be seen that the results of relative spread and depth in this group show inconsistent results regarding the effect of the new price fraction policy on liquidity in this group. Depth reduction is possible because of the end of the year effect where the change in fraction occurs at the beginning of the year, namely in 2016 and in this study, the time 30 days before the change is used.

The end of the year usually gives stock investors the effect of selling their shares immediately, assuming that the selling price of the shares at that time is the best price compared to having to face the uncertainty of the stock price at the beginning of the year. Thus, the transactions and volume of shares that support the depth figure are getting bigger. Furthermore, at the beginning of the year, it is possible that investors tend to need time before making the intention to buy stocks

again, so that the number of transactions and volume that occurs is not too high and affects the decrease in depth. To overcome this, the calculation of Depth to Relative Ratio (DTRS) is then performed, which shows the trade-off between the decrease in relative spread and depth. The results of DTRS in group 1 show that 50 of 74 stocks experienced a significant decline in DTRS after the new fraction policy. The smaller the DTRS indicates an increasingly illiquid state.

Therefore, the decrease in the fraction that occurred in group 1 had no effect on increasing liquidity or did not improve liquidity in group 1. This result is the same as Setyawasih, Riyanti (2011). Not different from group 1, in groups 2, 3 and 4 there is a decrease in relative spread and depth after the new price fraction policy. This shows that the reduction in fraction has a positive effect on immediacy costs and transaction costs (width) and depth, so that the 1st and 2nd hypotheses in this study were previously accepted while the 3rd hypothesis which states that the decrease in fraction has a negative effect on depth is rejected.

After that, the DTRS calculations were carried out for the other 3 groups, namely groups 2, 3 and 4, which showed a trade off between a decrease in depth and relative spread. with group 1, DTRS in group 3 shows a significant decrease, so it can be seen that the fraction policy has no effect on increasing liquidity in group 3 or there is no significant difference between liquidity before and after the existence of new fraction policies in the two groups as in group 1 For group 4, DTRS increased, but not significantly.

Different results occurred in group 2, where 32 of the 35 shares experienced an increase in DTRS and had a significance below 0.05. This indicates that there is a significant difference between liquidity before and after the change in fractions, which means that changes in fractions can improve liquidity in group 2. This result is the same as Setyawan, R. I. (2010).

CONCLUSION

Based on the results of the descriptive statistical test and the Wilcoxon signed ranking test conducted previously, the new price fraction reduction policy has a positive effect on immediacy, width and depth. To overcome the inconsistency of the results between relative spread and depth to liquidity, a depth to relative spread (DTRS) is calculated to make a trade-off between a decrease in relative spread and a decrease in depth. The results are:

1. DTRS groups 1 and 3 experienced a significant decline so that changes in fraction policy were unable to improve liquidity in both groups.
2. In group 4, DTRS increased for most shares in the group 22 shares out of a total (N) 36, but not significant. Thus, the change in the new price fraction policy has an effect on increasing liquidity in group 4, but not significantly.
3. A different thing happened in group 2 where 51 of the 86 stocks experienced an increase in DTRS and had a significance below 0.05. This indicates that

there is a significant difference between liquidity before and after the change in fractions, which means that changes in fractions can improve liquidity in group 2.

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