IMPACT OF STOCK REPURCHASE ANNOUNCEMENT ON INDONESIA STOCK MARKET REACTION 2015-2019

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Abstract
The negative global sentiment, Corona Virus Disease 2019 (COVID-19) caused several listed companies in Indonesia to conduct a stock repurchase in the hope of maintaining and increasing the company’s stock price. The research objective is to analyze the effect of stock repurchase announcements on market reactions that are reflected in abnormal return and trading volume activity in 2015-2019 as a guide for companies to make decisions in the present and the future regarding the same issue. This research uses a sample of 64 companies listed on the Indonesia Stock Exchange (IDX) during the observation period. This study uses the event study method with the significance of the hypothesis test of 0.05. The results showed that there is no significant difference between before and after stock repurchase announcements for both variables. This is caused by the presence of negative sentiment throughout the observation period such as the Brexit tragedy, elections in the US won by Donald Trump, and the issue of the trade war by the US-China, this makes the market does not yet have full trust in the Indonesian capital market. Based on the results of the study, it can be concluded that the stock repurchase announcement did not have a significant effect on the market reaction.

Keywords: Abnormal Return; IHSG; Market Reaction; Stock Repurchase; Trading Volume Activity

1. Introduction
Rapid economic competition nowadays requires companies to be more creative in finding opportunities. One of the opportunities that can be utilized is involving the public to participate in capital participation in the company so that the company can expand the business even more. Companies that have shared ownership with the public require management to work professionally. In this way, the company will provide good information to the public. This information can be a signal that one of them affects the stock price either positively or negatively on the stock market. A quick reaction to the information given to the market means that the market is efficient. The market will react to information to reach a new equilibrium price (Hartono, 2003). One of the information is the stock repurchase. The stock repurchase is one of the corporate actions that repurchase shares that have been offered to the public. Stock repurchase becomes a stock price stabilization solution due to the influence of undervalued stock prices
because stock repurchase conducted by the company or issuer will result in an increase in earnings per share (EPS) of share ownership by the public and also intended to make a profit for shareholders when the shares price increase.

At the beginning of 2020 until this research been written, the Indonesia stock market (IDX) was experiencing significant pressure as indicated by Jakarta Composite Index (IHSG) experienced the level of 3,937.632, it is the lowest level of the IHSG throughout 2020 until the time of this research been written, or the lowest since August 27, 2013, which shows the level of 3,967,724. This significant pressured caused by negative sentiment, one of them is the coronavirus outbreak which has continued to suppress global economic performance since the beginning of 2020. This has been made worse since the World Health Organization (WHO) announced that Corona Virus Disease 2019 (COVID-19) became a global pandemic on March 12, 2020. This negative sentiment also resulted in capital markets around the world experienced unstable conditions.

Based on this condition, Otoritas Jasa Keuangan (OJK) issued a policy through Surat Edaran Otoritas Jasa Keuangan (SEOJK) No. 4/2020 which contains allowing issuers or public companies to repurchase outstanding shares without having to go through the approval of the General Meeting of Shareholders in fluctuating market conditions. Issues or companies that will buy or are repurchasing their shares can do a maximum of 20% of paid-up capital total repurchase, with the least provisions outstanding shares being 7.5% of paid-up capital. The company can buy back shares after submitting information disclosure to OJK. This policy was taken because it is considered as a price stabilization solution since it will increase the EPS of share ownership and the investor will perceive it as the positive signal, and as said by Rasbrant (2011), if investors consider the stock repurchase transaction as a positive signal, then it will increase the company's image in the eyes of investors. This increasing company's image will ideally affect the stock price, but it is still uncertain that stock repurchase will have an impact on market reactions, whether it has a positive impact or a negative impact.

Therefore, this research is written to explain the effect of the stock repurchase announcement on the market reaction using a sample of the last 5 years (2015-2019) as a reference for stakeholders to make decisions regarding the conditions of the stock repurchase announcements that occurred throughout 2020 due to fluctuations of IHSG. This research will examine whether stock repurchase transactions affect market reactions or not based on two variables, which are abnormal return and trading volume activity since the movement of the trading volume shows the level of investor interest in trading these shares and abnormal returns reflect the stock price movement during the stock repurchase announcement. This research will analyze the significant difference of abnormal return and trading volume activity between before and after the stock repurchase announcement. This research also wants to confirm results documented in previous studies that showed the market reacts positively to stock repurchase, which is marked by significant positive changes in abnormal returns (Stephens & Maxwell, 2003; Nishikawa et al, 2011; & Rasbrant, 2011) and also test the Trading Volume Activity (TVA) variable refers to similar research conducted by Nur and Dadan (2017) which shows a significant negative market reaction. Besides, in this research, the author will divide the total sample of companies into sub-samples based on the respective industry sector of the company. The author will also conduct a similar study for the sub-samples to explain the effects of the stock repurchase announcements on market reaction using a sample of the last 5 years (2015-2019) for each industry sector. The author decides to conduct a sub-sample research to compare the results of the total sample research with the results of each industry sector research, with the hope that if there is a
difference between the results of an industry sector with the overall sample results, the author can further analyze the differences and relate it to phenomena that occur in the real world.

2. Literature Review

Capital Market

According to Husnan (2001), capital markets can also be defined as long-term financial instruments (securities) trade, both in the form of stocks and bonds, both issued by the government (public authorities) and by go-public companies (financial markets). In Indonesia, its capital market is called the Indonesia Stock Exchange (IDX) and been supervised by OJK. IDX itself has an index as a statistical measure that reflects the overall price movement of whole companies listed in IDX and is evaluated periodically, it is called the Jakarta Composite Index (IHSG). In the capital market, one of the securities traded is stock. Stock or shares are securities that are traded as proof of equity participation or ownership of individuals or institutions in a company (IDX, n.d.). The portion of ownership is determined by the number of stock is invested in the company concerned.

Efficient Market Theory

Fama first mentioned the efficient market hypothesis in an article in 1965, that what is called an efficient market is a condition where the price of securities fully reflects the available information. A market is said to be efficient if the reaction of market prices to new information is very fast and unbiased (Malkiel, 1989). According to research done by Scholes (1972) information is quickly and efficiently reflected in the price of a security at any point in time, so old information cannot be used to predict the price of that security in the future.

Stock Repurchase

The stock repurchase is a corporate action in which a company repurchases its shares that have subsided in the stock market, which is owned by shareholders. The purpose and objectives of implementing this corporate action include to increase stock liquidity, obtain profits by reselling after prices have increased or as a step to reduce paid-up capital (BAPEPAM-LK, 2008). Stock repurchase also can be considered as the information for the market which will affect the stock price.

Event Study

In this research, the author commits to conduct research using event study. An event study is an important methodological approach and is also widely used to test the market reaction of an event or announcement (Sorescu, et al., 2017). Event Study is also a research technique that allows us to assess and study the effect of an event on stock prices in the capital market. Event studies directly measure the effect of events on the company's stock price at the time before the event, during the event, and after the event, in this research, the stock repurchase announcement will be the event. In this research, the variables assessed are abnormal return and trading volume activity.

Abnormal Return

Abnormal return is the difference between the actual return and the expected return (Hartono, 2003). Abnormal return is a proxy of market reaction, if there is information on the event being observed, then the abnormal return will follow the event, and vice versa, if the event has no information content, then the event does not provide an abnormal return (Wirajaya, 2011). The
The author decides to use the market model abnormal return in conducting this research. This is based on research conducted by Brown and Warner (1980) who found that market models perform well under a wide variety of conditions. The abnormal return can be calculated by:

\[
AR_{it} = R_{it} - E(R_{it})
\]

Which,

\[
E(R_{it}) = \alpha_i + \beta_i(Rm_{it}) + \epsilon_{it}
\]

\[
Rm_{it} = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}}
\]

\[
R_{it} = \frac{P_t - P_{t-1}}{P_{t-1}}
\]

**Arithmetic Mean**

\[
\text{AR}_{it} = \text{Abnormal return of stock } i \text{ at period } t
\]

\[
R_{it} = \text{Return of stock } i \text{ at period } t
\]

\[
E(R_{it}) = \text{Expected return of stock } i \text{ at period } t
\]

\[
\alpha_i = \text{Intercept for stock } i
\]

\[
\beta_i = \text{Slope coefficient which is a beta of stock } i
\]

\[
Rm_{it} = \text{Market return at period } t
\]

\[
IHSG_t = \text{Composite stock price index at period } t
\]

\[
IHSG_{t-1} = \text{Composite stock price index at period } t-1
\]

\[
P_t = \text{Stock price of company at period } t
\]

\[
P_{t-1} = \text{Stock price of company at period } t
\]

**Trading Volume Activity**

Stock trading volume activity is the total shares traded on the secondary market on a particular day during the observation period. The size of the trading volume indicates the level of interest of investors in investing in the stock \( i \). The TVA approach is used to test market hypotheses that are not efficient yet. This happened because, in an inefficient market, the price changes occurred do not reflect the available information immediately, so researchers can only observe the reaction of the capital market through trading volume movements (Teddi, 2006). According to Baldric and Twenty (2005) calculating the trading volume of shares can be seen using the Trading Volume Activity (TVA) indicator like the following model:

\[
TVA_{it} = \frac{V_{it}}{VM_{it}}
\]

\[
TVA_{it} = \text{Trading volume activity of stock } i \text{ at period } t
\]

\[
V_{it} = \text{Total volume of company } i \text{’s share traded at period } t
\]

\[
VM_{it} = \text{Total number of company } i \text{’s share outstanding at the same observation period}
\]

**3. Methodology of Research**

This research uses 64 companies that conducted the stock repurchase announcement during 2015-2019 as the sample. This research will use 5 days before and 5 days after the event as the event window, and 30 days before the event window as the estimation period for calculating the expected return.
Hypothesis

In this research, the hypothesis developed is that there is a significant difference between before and after the stock repurchase announcements for each variable, or the details of the hypothesis can be explained as follows:

1. H1: There is significant abnormal return difference between 5 days before the stock repurchase announcement and 5 days after the stock repurchase announcement.
2. H2: There is significant trading volume activity difference between 5 days before stock the repurchase announcement and 5 days after the stock repurchase announcement.

Normality Test

The normality test aims to determine the proper statistics tools that will be used for this research and also to test whether the data has a normal distribution or not. For this research, the Shapiro-Wilk test was chosen because it is the most powerful normality test among other tests, and also Shapiro-Wilk is better used in small-middle sample size (Razali & Wah, 2011). The basic concept of Shapiro-Wilk is to compare standard normal distribution with research data distribution (or later called p-value) using two-tailed tests. This test uses a level of significance (α) = 5% (= 0.05). If the p-value above the significant level means the data is normal distribution and vice versa.

Statistical Hypothesis Test

After conducting a normality test, the data will be tested using a statistical hypothesis test to assess the significant differences between before and after the announcement of the stock repurchase for each variable. This test consists of 2 types of statistical tests, the first is the parametric statistical test used for normally distributed data and the second is the non-parametric test for not normally distributed power. In this research, the parametric statistic test used is the Paired T-test, and the nonparametric statistic test used is the Wilcoxon Signed Rank Test.

For Paired T-tests, the mean data of before and after the event for each variable will be compared whether they have significantly different results or not, if the p-value (sig.) > 0.05, then H0 is accepted, and vice versa. This also applies to the Wilcoxon Signed Rank test, provided that the data must come from the same population, and data should use an ordinal scale.
4. Result and Discussion

General Descriptive for the Variables

For abnormal return, based on (Table 1) the overall company's average abnormal return (AAR) before the announcement is 0.00004933, at the stock repurchase announcement is 0.01303541, and after the announcement is 0.00337353. This reflects that there are reactions that tend to be positive from investors. While for trading volume activity, based on (Table 2) average trading volume activity (ATVA) before the announcement of the stock repurchase is 0.00175205, at the time of the announcement is 0.00182443 and after the announcement is 0.00248378. This reflects that there are reactions that tend to be positive from investors.

|        | AAR Before Announcement | At Announcement | After Announcement |
|--------|-------------------------|-----------------|-------------------|
| Mean   | 0.00004933              | 0.01303541      | 0.00337353        |
| Minimum| -0.041562               | -0.52556        | -0.033332         |
| Maximum| 0.053342                | 0.128516        | 0.140323          |

|        | ATVA Before Announcement | At Announcement | After Announcement |
|--------|--------------------------|-----------------|-------------------|
| Mean   | 0.00175205               | 0.00182443      | 0.00248378        |
| Minimum| 0                        | 0               | 0                 |
| Maximum| 0.020089                 | 0.14260         | 0.074466          |

Normality Test

Based on result in (Table 3), it concludes that AR and TVA data for both of before and after the stock repurchase announcement are not normally distributed. So, the Wilcoxon Signed Rank test will be used for both of variables since its significance < 0.05.

| Period                      | Abnormal Return | Trading Volume Activity |
|-----------------------------|-----------------|-------------------------|
| Before Announcement         | 0.000           | 0.000                   |
| After Announcement          | 0.000           | 0.000                   |

Statistical Hypothesis Test

After the normality test results for each data are obtained, the next step is to conduct a statistical hypothesis test to test the significant difference of each variable between before and after the stock repurchase announcement.
**Abnormal Return**

Table 4 Hypothesis Test for Abnormal Return

|                           | Z  | Asymp. Sig. (2-tailed) |
|---------------------------|----|------------------------|
| Abnormal Return Before Announcement | -0.829 | 0.407                 |
| Abnormal Return After Announcement |        |                       |

Based on the results of the Wilcoxon Signed Rank Test that can be seen from the (Table 4), that the p-value of the two data (shown by Asymp. Sig. 2-tailed) produces a number of 0.407, which means > 0.05. So H0 is failed to be rejected, this means there is no significant difference between the average abnormal return before the stock repurchase announcement and the abnormal average return after the stock repurchase announcement.

**Trading Volume Activity**

Table 5 Hypothesis Test for Trading Volume Activity

|                           | Z  | Asymp. Sig. (2-tailed) |
|---------------------------|----|------------------------|
| Abnormal Return Before Announcement | -0.445 | 0.657                 |
| Abnormal Return After Announcement |        |                       |

Based on the results of the Wilcoxon Signed Rank Test that can be seen in the (Table 5) that the p-value of the two data (shown by Asymp. Sig. 2-tailed) shows value of 0.657, which means > 0.05. So H0 is failed to be rejected, this means there is no significant difference between trading volume activity before the stock repurchase announcement and trading volume activity after the stock repurchase announcement.

**Result Discussion**

The absence of a significant market reaction to stock repurchase can also be caused by information that is easily accessed by investors so that information about stock repurchase announcements is no longer private, bearing in mind that abnormal returns will be more affected by private information (Rachzari, 2016). Not only that, market trust in capital market performance also influences the significance of market reaction. Through 2015-2019, IHSG recorded a sufficient increase significantly and listed as one of the best exchanges in the world. The results of this positive trend should ideally give a positive signal to the market and can increase market trust in the Indonesia stock exchange, but this is not very meaningful given that throughout 2015-2019, many global issues have become negative sentiments for world capital markets, including for Indonesian capital market, such as the UK decision for leaving the European Union, the election in the US won by Donald Trump, and the trade war between China and US. This issue is what makes the market does not yet have full trust in the Indonesian capital market even though the current year has got a performance with a positive trend. With this, it supports no significant market reaction to the stock repurchase conducted by companies.
Industry Sector Analysis

For industry sector analysis, there are 8 industry sectors divided from a total of 64 samples of companies. The test will be the same as the whole data samples before. And the hypothesis statistical test results are, for basic industry and chemicals has significance value of 0.228 for AAR and 0.893 for TVA; agriculture has significance value of 0.109 for AAR and 0.109 for TVA; consumer goods industry has significance value of 0.683 for AAR and 0.997 for TVA; finance has significance value of 0.182 for AAR and 0.625 for TVA; infrastructure, utilities, and transportation has significance value of 0.581 for AAR and 0.416 for TVA; mining has significance value of 0.887 for AAR and 0.741 for TVA; property, real estate, and building construction has significance value of 0.213 for AAR and 0.534 for TVA; and trade, service, and investment has significance value of 0.858 for AAR and 0.783. Based on the result, it means that all of the industry sectors do not have a significant difference between before and after the stock repurchase for both variables. This result is in line with the overall data results of 64 companies, which means that all aspects that influence the absence of a significant market reaction to the stock repurchase, also have the same effect on each industry sector.

5. Conclusion

According to the research conducted, there are several conclusions obtained. Based on the abnormal return variable, this research confirms that there is no significant difference between the abnormal return before the stock repurchase announcement and the abnormal return after the stock repurchase announcement. This means that a company's abnormal return is not affected by stock repurchase. Based on the trading volume activity variable, this research found that there is no significant difference between trading volume activity before the stock repurchase announcement and trading volume activity after the stock repurchase announcement. This means that investor interest in a stock is not influenced by the stock repurchase.

Based on the results of this research which confirms that there is no impact of stock repurchase towards market reaction in terms of abnormal returns and trading volume activity, the recommendations that author can give, for companies, the authors recommend to not sticking to the stock repurchase program as ways to increase stock prices and increase investor interest. The author also recommends companies to do a stock repurchase when the company has excess funds (idle cash) and does not use stock repurchase as a substitute for cash dividends because based on this research, no significant changes in positive abnormal returns are found, so there is no profit gained by the investor (capital gain). This can be a negative perception towards the company.

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