www.bircu-journal.com/index.php/birci
Budapest International Research and Critics Institute-Journal (BIRCI-Journal)
Humanities and Social Sciences
ISSN 2615-3076 Online)
ISSN 2615-1715 (Print)
Budapest Institute

# Impact of Covid-19 on Stock Return, Stock Liquidity and Share Price Volatility on IDX30 Index

**Nur Kamri Hardi[1], Pardomuan Sihombing[2]**
[1,2] *Master of Management, Universitas Mercu Buana, Jakarta, Indonesia*
*nurkamrihardi@gmail.com, pardomuan.sihombing@mercubuana.ac.id*

## Abstract

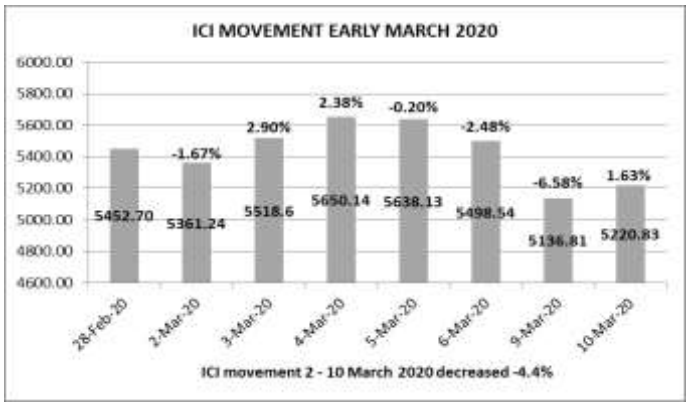
*The first Covid-19 case in Indonesia was announced on March 2, 2020. This study aims to analyze the effect of the Covid-19 outbreak on stock returns, stock liquidity and stock price volatility on the IDX30 Index. The population in this study are 30 companies listed on the IDX30 Index for the period February 2020 - July 2020. The sampling technique used was purposive sampling. Data collection is done by documenting the required data on the capital market website. The data analysis technique used is the normality test using Jarque Bera and hypothesis testing using the Paired Sample T-Test which is processed using the EViews 12 application. The results of this study indicate that there is no difference in IDX30 stock returns before and after the announcement of the first Covid-19 case in Indonesia. As for stock liquidity and stock price volatility, there are differences before and after the announcement of the Covid-19 case.*

Keywords
Covid-19; IDX30; stock returns; stock liquidity; stock price volatility

## I. Introduction

Covid-19 was announced by WHO on March 13, 2020, declared a pandemic (CNN, 2020). In Indonesia, the first COVID-19 case was announced on March 2, 2020. The outbreak of this virus has an impact of a nation and Globally (Ningrum et al, 2020). The presence of Covid-19 as a pandemic certainly has an economic, social and psychological impact on society (Saleh and Mujahiddin, 2020). Covid 19 pandemic caused all efforts not to be as maximal as expected (Sihombing and Nasib, 2020).

The Covid-19 pandemic has made investors panic. The stock price crash in March 2020 marked one of the largest stock market crashes in history (Mazur et al, 2020). This can be seen from the decline in the Indonesia Composite Index (ICI) that occurred from March 2 to March 10, 2020 by -4.4% (IDX, 2020).

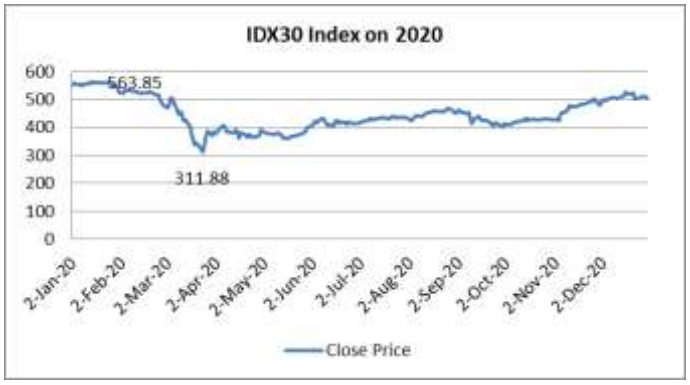



*Source: IDX, 2020.*

***Figure 1.*** *ICI Movement Early March*

During the Covid-19 outbreak, domestic stock prices decreased significantly (Nurmasari, 2020), IDX30 was no exception. IDX30 is an index that measures the performance of 30 companies that have high liquidity and large market capitalization and are supported by good company fundamentals. The IDX30 index can be the best choice to pursue risk and return such as the Indonesia Composite Index (ICI). The constituent market capitalization of IDX30 represents more than 50% of the market capitalization of the ICI. The IDX30 index is also the IDX index that is most widely used as the underlying of Index Mutual Fund products, as well as ETFs (IDX, 2020)

On March 24, 2020 IDX30 decreased by 311.88 or 44.69% from the highest value before the announcement of the Covid-19 outbreak in Indonesia, which was 563.85 on January 14, 2020 (investing.com, 2020).




*Source: Data processing results from the investing.com site, 2020.*

***Figure 2.*** *IDX30 Index on 2020*

Investor confidence in the impact of the Covid-19 pandemic has had an impact on the Indonesian economy. This can be seen through changes in the price and trading volume of shares on the Indonesia Stock Exchange. This change is an adjustment to the information obtained so that it will reach a new equilibrium price (Jogiyanto, 2017).

To prove that the event had more impact on the Indonesian capital market, a test will be conducted on the information content of the event by using an event study. Jogiyanto (2017) defines event study as a study that studies the market reaction to an event whose information is published as an announcement. Event study, can be applied to events outside the economy but that affect the capital market. Covid-19 is an event outside the economy but affects the Indonesian economy, especially the capital market, this is the background for the author to use the event study method.

## II. Review of Literature

### 2.1 Event Study

According to Mackinlay (1997), event study is how to measure the effect of a particular event on a firm's value. The purpose of the event study is to provide rationality in the market that the effect of an event will be quickly reflected in the price of a security in the capital market. Meanwhile, Jogiyanto (2017) states that event studies can be used to test the information content of an announcement and can also be used to test the efficiency of the semi-strong form of the market. Information content testing is intended to see the reaction of an announcement.

## 2.2 Covid-19 Outbreak

Plague according to the Large Dictionary Indonesian is defined as an infectious disease that spreads quickly, attacking a large number of people in a wide area (such as smallpox, dysentery, cholera). According to WHO (2020), Covid-19 (Coronavirus Disease 2019) is a disease caused by a new corona virus called SARS-CoV-2. WHO first became aware of this new virus on December 31, 2019 in Wuhan, China? Most people infected with the Covid-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people and people with medical problems such as cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illnesses.

## 2.3 Stock Liquidity

Liquidity refers to the speed and ease with which investors can realize the cash value of an investment (Bodie et al, 2022). Liquid shares will be easier to transact, both sold and bought, and easier to convert into cash. In investing sometimes investors take into account the level of liquidity of the investments they invest. The more liquid, the better, because investors will be more interested in liquid stocks.

There are several indicators that can be used to measure the liquidity of a stock. According to Conroy et al (1990), the parameters that are often used to measure a stock's liquidity are:

1. Trading volume activity
2. Spread rate
3. Information flow
4. Number of shareholders
5. Number of outstanding shares
6. Transaction costs
7. Stock price
8. Stock price volume

In this study, the author will use trading volume activity to measure the level of liquidity of the shares of the IDX30 index companies listed on the Indonesia Stock Exchange (IDX).

The results of the TVA calculation reflect the comparison between the number of shares traded and the number of shares outstanding in a certain period. Trading volume activity (TVA) can be calculated using the formula (Foster, 1986):

$$TVA = \frac{\sum \text{shares traded in a certain period}}{\sum \text{shares outstanding in a certain period}}$$

## 2.4 Stock Return

Expected future profits are compensation for the time and risk associated with the investment made. In the context of investment, the expected profit is often also called return or rate of return. Stock return is the level of profit enjoyed by investors on an investment they make (Ang, 1997).

According to Brigham and Houston (2018) the formula used to calculate stock returns is as follows:

$$R = \frac{P_1 - P_0}{P_1}$$

Where:
R = Stock return
$P_0$ = Current share price
$P_1$ = Previous share price

## 2.5 Stock Price Volatility

Stock price volatility is the magnitude of the distance between fluctuations or fluctuations in stock prices that are influenced by information in the capital market. Stock price volatility refers to how quickly prices change and affect the value of limit order options (Harris, 2003). Increased stock price volatility means the possibility of rising or falling stock prices is also getting bigger. The more volatile the stock price, the higher the risk and return of the stock. For this reason, investors or shareholders can see what factors influence stock prices to change with this uncertainty before making a decision. Stocks with high volatility are suitable for long-term investments, while stocks with low volatility are suitable for short-term investments.

Mathematically, the price volatility for each stock is shown by the following formula (Parkinson, 1980):

$$PV = \sqrt{\frac{1}{n}\sum ln\left(\frac{H_t}{L_t}\right)^2}$$

Where:
PV = Stock price volatility
Ht = highest share price in period t
Lt = lowest share price in period t
n = number of observations

Based on the background explanation, problem formulation, purpose and use, theoretical basis, and previous research, the formulated hypothesis is as follows:

## 2.6 The effect of the Covid-19 outbreaks on stock returns

The Covid-19 outbreak has had an impact on the capital market, especially for stock returns. Liu et al. (2020) evaluated the results of Covid-19 on the stock markets of various countries and found the negative impact of the pandemic on stock returns. Research was also conducted by Al-Awadhi et al. (2020) show that the daily growth in the total confirmed cases and the total number of deaths caused by Covid-19 has a significant negative effect on the stock returns of all companies in China. Meanwhile Darmayanti et al. (2020) conducted research and found that the US stock market reacted significantly negatively to the rise in confirmed cases and deaths from Covid-19.

Research on the impact of Covid-19 in Indonesia has been carried out by Nurmasari (2020), who found that the share price of PT Ramayana Lestari Santosa, Tbk experienced a significant difference before and after the announcement of the first Covid-19 case in Indonesia, namely on March 2, 2020. Based on the explanation above, the hypothesis is proposed:

$H_1$: There are differences in stock returns in companies listed on the IDX30 index before and after the announcement of the Covid-19 outbreak.

## 2.7 The effect of the Covid-19 outbreaks on stock liquidity

One indicator that can be used to measure the liquidity of a stock is Trading Volume Activity (TVA). Research conducted by Chiah and Zhong (2020) shows that trading

activity around the world has shown a significant increase during the Covid-19 pandemic. The research of Zaremba et al. (2021) also show that workplace and school closures can limit stock market liquidity in emerging market stock markets.

Research on the Indonesian capital market was also conducted by Zulfitra and Tumanggor (2020) which showed that the Covid-19 pandemic had a significant impact on stock liquidity on the Consumer Goods Index and the Manufacturing Index in Indonesia. Thus, the second research hypothesis is:

$H_2$ : There is a difference in stock liquidity in companies listed on the IDX30 index before and after the announcement of the Covid-19 outbreak.

### 2.8 The effect of the Covid-19 outbreak on stock price volatility

Stock price volatility is the fluctuation of stock prices in the capital market. Volatility is influenced by information in the capital market. This can be seen from previous studies that show the effect of an event on stock price volatility.

Research on stock price volatility was conducted by Essaddam and Mnasri (2015) which showed that terrorism had a significant impact on stock market volatility. Albulescu (2021) also investigates the impact of daily new Covid-19 cases and death rates on US stock market volatility. The results show that sanitation issues increase the realized volatility of the S&P 500.

The volatility of stock prices in Indonesia was also investigated by Sarwindah et al. (2022) which shows that the number of positive cases of Covid-19 has a significant negative effect on the volatility of retail companies' stock prices. Haryanto (2020) also observed that the Covid-19 pandemic had a real impact on fluctuations in the IDR/US$ exchange rate and ICI fluctuations. Then the third hypothesis for this study, namely:

$H_3$: There are differences in stock price volatility in companies listed on the IDX30 index before and after the announcement of the Covid-19 outbreak.

Broadly speaking, the framework of this research can be stated in the diagram presented in the following figure:

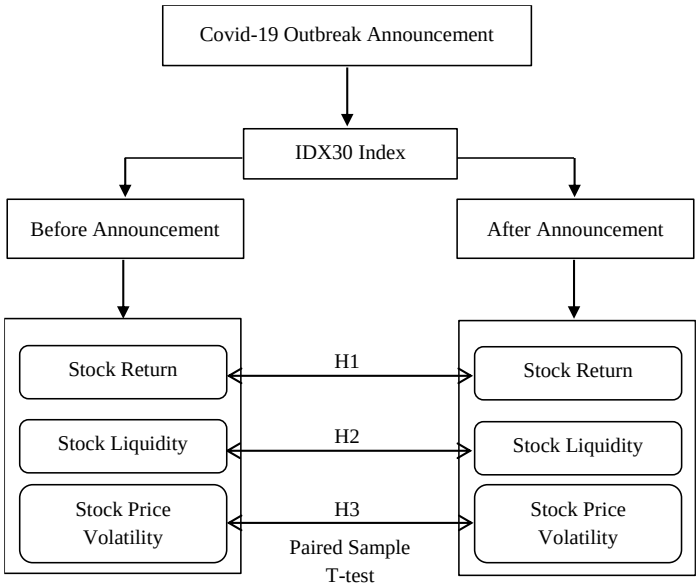



***Figure 3.*** *Framework*

## III. Research Method

### 3.1 Types of Research

This type of research is event study research. The event window in this study is 20 trading days before the announcement of the Covid-19 outbreak in Indonesia to 20 days after the announcement of the Covid-19 outbreak in Indonesia. March 02, 2020 or the date of the announcement of the Covid019 outbreak in Indonesia is used as t = 0.

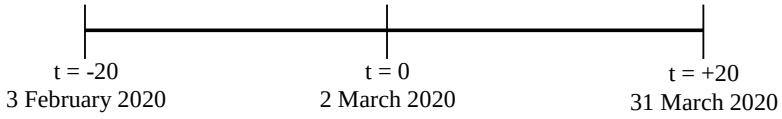



***Figure 4.*** *Event Window*

### 3.2 Population and Research Sample

The population in this study were 30 companies or issuers listed in the IDX30 sector on the Indonesia Stock Exchange for the period February 2020 - July 2020. In this study, the researcher used a purposive sampling technique, namely sampling based on the criteria determined by the researcher in order to represent the research. The sampling criteria in this study are the IDX30 Index (30 stocks that have high liquidity, large market capitalization and good fundamentals) which are listed on the Indonesia Stock Exchange in the period February 2020 - July 2020.

### 3.3 Data analysis method

The data analysis method used in this research is descriptive statistics. Researchers used a different test (paired sample t-test) to empirically test the effect of the announcement of the Covid-19 outbreak in Indonesia on stock returns, stock liquidity and stock price volatility of companies listed on the IDX30 Index.

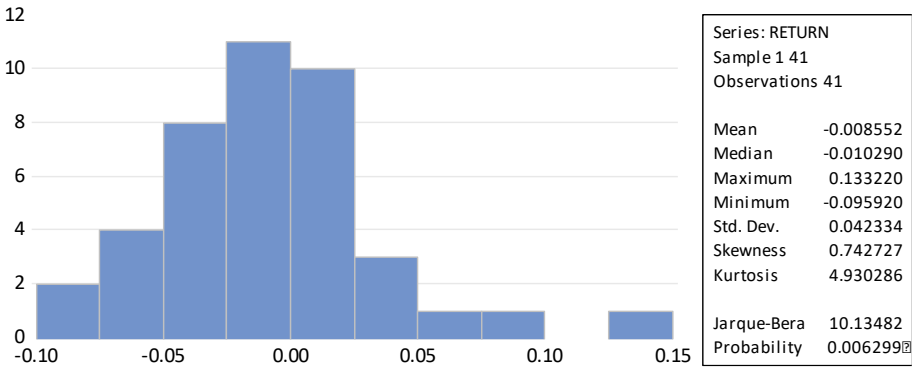
Before testing the hypothesis, the normality test was first carried out. Normality testing was done by Jarque Bera Test. According to Widarjono (2018), the decision making of the Jarque Bera test is carried out if:

1. Jarque Bera probability > significance level (0.05), then the residual has a normal distribution.
2. Jarque Bera probability < significance level (0.05), then the residual does not have a normal distribution.

## IV. Result and Discussion

### 4.1 Descriptive statistics

The results of descriptive statistical analysis for this study can be seen in the following graph:

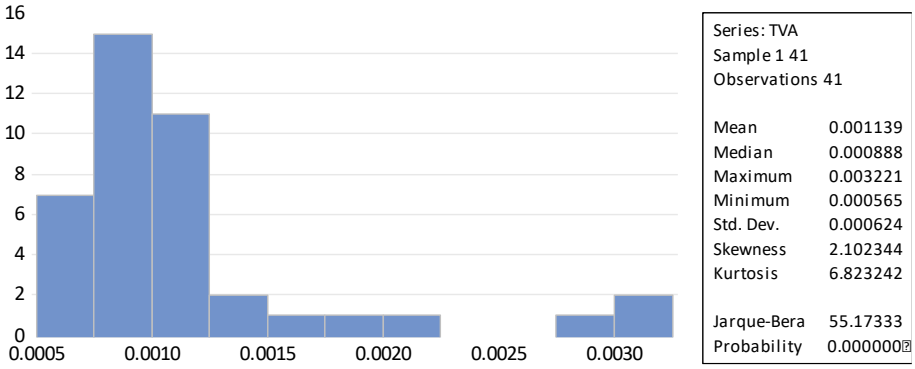



*Source: The results of data processing using EViews 12, 2022.*

***Figure 5.*** *Statistics of Average Stock Return of IDX30*

From the results of data processing using the EViews 12 application, the mean value of the IDX30 stock return average is -0.008552 which indicates that there is a decrease in stock returns during the observation period. The maximum value of 0.133220 reflects the highest return during the observation period and the minimum value of -0.095920 reflects the lowest return during the observation period. The value of the standard deviation of stock returns that is greater than the mean value (0.042334 > -0.008552) indicates an uneven distribution of the data.

Skewness value (γ) which is not equal to 0 (zero) and kurtosis value (δ) which is greater than 3 (three) indicates that the data distribution is not completely normally distributed (there are deviations or deviations from the normal distribution) because the normal distribution has = 0 and = 3 (Spiegel et al, 2000). The negative value of Skewness indicates the possibility of negative observation (loss) because the data distribution has a longer left tail (Jorion, 2007). As a result, the existence of negative skewness will increase risk while positive skewness can reduce the risk of a stock market. While the kurtosis value is greater than three, it may indicate that the distribution has a fat tail. The probability value of 0.006299 <0.05 indicates that the stock return data is not normally distributed.

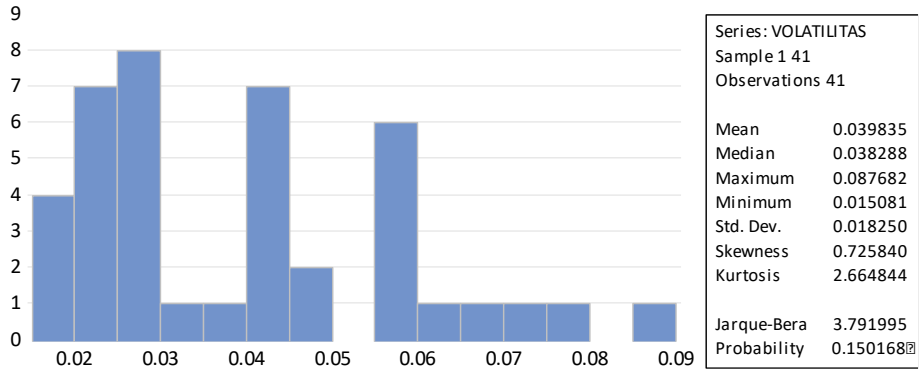



*Source: The results of data processing using EViews 12, 2022.*

***Figure 6****. Average TVA Statistics of IDX30*

Based on the Trading Volume Activity (TVA) data above, the mean TVA value is 0.001139 and the standard deviation value is 0.000624, indicating that the mean value is greater than the standard deviation value, thus indicating a normal distribution of data. The difference between the maximum and minimum values of 0.002656 indicates that the range of the highest and lowest values is quite far.

The TVA variable has a Skewness value of 2.102344 which means it has a positive skewness. This shows that there is an increase in stock trading spread on the right side of the average so that in the form of a graph it will form a graph that is skewed to the left side. The Kurtosis value of 6.823242 explains that there is a lot of data in the same range of values compared to other value ranges so that it will form a sharp upward graph. The probability value of 0.000000 <0.05 indicates that the stock TVA is not normally distributed.




*Source: The results of data processing using EViews 12, 2022.*

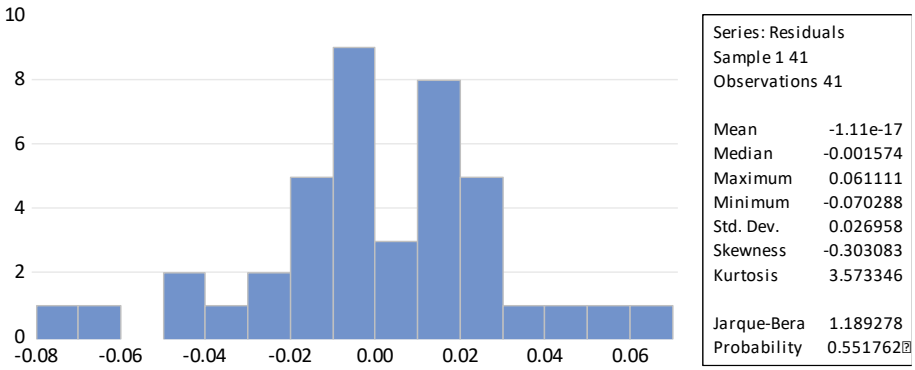
***Figure 7.** Stock Price Volatility Statistics IDX30*

The data above shows the mean value which is greater than the standard deviation (0.039835 > 0.018250) thus indicating a normal distribution of data. The maximum and minimum values have a fairly large difference of 0.072601 which indicates that there is quite high volatility in the data set.

The Skewness value of 0.725840 indicates that volatility has a positive skewness or tail that extends to the right (to a positive value). This indicates that the stock price of IDX30 which has a price at time t is quite different from the price at time t-1. The kurtosis value of 2.664844 is less than the standard value of the normal distribution, k > 3, meaning the curve is pointed or commonly referred to as the Leptokurtis form, the same as the analysis of the skewness results. The kurtosis figure also shows a data pattern that is "sharp peak" and "fat tail" (Lin, 2017). The probability value of 0.150168 > 0.05 indicates that the stock price volatility data is normally distributed.

## 4.2 Normality Test

Normality test aims to determine whether the sample data comes from a normally distributed population. The correct and correct data used in this study is data that is normally distributed. In this study, the Jarque-Bera test (JB-test) was used to determine whether the data were normally distributed or not. In this test, if the probability of JB count is greater than 0.05 then the data is normally distributed, but if it is less than 0.05 then the data is not normally distributed.




*Source: The results of data processing using EViews 12, 2022.*

***Figure 8.*** *Normality Test*

Based on the results of testing the research data, the Jarque-Bera probability value is 0.551762. The obtained value is known to be greater than the significance level (0.551762 > 0.05), so it can be concluded that the residuals have a normal data distribution. This means that the null hypothesis (H0) is accepted and the data is normally distributed so that it is suitable for use in research

### 4.3 Hypothesis Test

This study uses Paired Sample T-test to test the hypothesis. The conclusion accepts the hypothesis by looking at the significance level (Asymp Sig) 1%, 5% and 10%, if the significance level is greater than alpha, then Ho is accepted, which means there is no difference, while the significance level is smaller than alpha, then Ha is accepted, which means there is the difference before and after the announcement of the Covid-19 pandemic in Indonesia. The results of hypothesis testing from this study are as follows:

H1: There are differences in stock returns in companies listed on the IDX30 index before and after the announcement of the Covid-19 outbreak

**Table 1.** Hypothesis Test Results 1

| Method | df | Value | Probability |
|---|---|---|---|
| t-test | 38 | 0.319568 | 0.7510 |

Category Statistics

| Variable | Count | Mean | Std. Dev. | Std. Err. of Mean |
|---|---|---|---|---|
| SEBELUM | 20 | -0.006228 | 0.014046 | 0.003141 |
| SETELAH | 20 | -0.010611 | 0.059700 | 0.013349 |
| All | 40 | -0.008419 | 0.042865 | 0.006778 |

*Source: The results of data processing using EViews 12, 2022.*

The results of testing the data using EViews 12 above show that the probability t-test value is 0.7510, which is greater than 0.05. Based on this probability value, H1 is rejected, i.e. there is no difference in stock returns before and after the announcement of the Covid-19 pandemic in Indonesia. The mean value before Covid-19 was -0.006228 and after Covid-19 was -0.010611, this indicates that there was a decline in stock returns after the announcement of the Covid-19 outbreak in Indonesia.

H2: There is a difference in stock liquidity in companies listed on the IDX30 index before and after the announcement of the Covid-19 outbreak

**Table 2.** Hypothesis Test Results 2

| Method | df | Value | Probability |
|---|---|---|---|
| t-test | 38 | -3.751280 | 0.0006 |

Category Statistics

| Variable | Count | Mean | Std. Dev. | Std. Err. of Mean |
|---|---|---|---|---|
| SEBELUM | 20 | 0.000816 | 0.000202 | 4.52E-05 |
| SETELAH | 20 | 0.001465 | 0.000747 | 0.000167 |
| All | 40 | 0.001141 | 0.000632 | 9.99E-05 |

*Source: The results of data processing using EViews 12, 2022.*

Based on the table above, the probability t-test value is 0.0006, meaning that the probability t-test value is less than 0.05 which indicates that there are differences in stock liquidity before and after the announcement of the Covid-19 outbreak in Indonesia, so H2 is accepted. From the mean value obtained, it can be seen that there was an increase in stock trading liquidity after the announcement of the Covid-19 outbreak in Indonesia.

H3: There are differences in stock price volatility in companies listed on the IDX30 index before and after the announcement of the Covid-19 outbreak

**Table 3.** Hypothesis Test Results 3

| Method | df | Value | Probability |
|---|---|---|---|
| t-test | 38 | -7.791748 | 0.0000 |

Category Statistics

| Variable | Count | Mean | Std. Dev. | Std. Err. of Mean |
|---|---|---|---|---|
| SEBELUM | 20 | 0.025508 | 0.006996 | 0.001564 |
| SETELAH | 20 | 0.054133 | 0.014866 | 0.003324 |
| All | 40 | 0.039821 | 0.018483 | 0.002922 |

*Source: The results of data processing using EViews 12, 2022.*

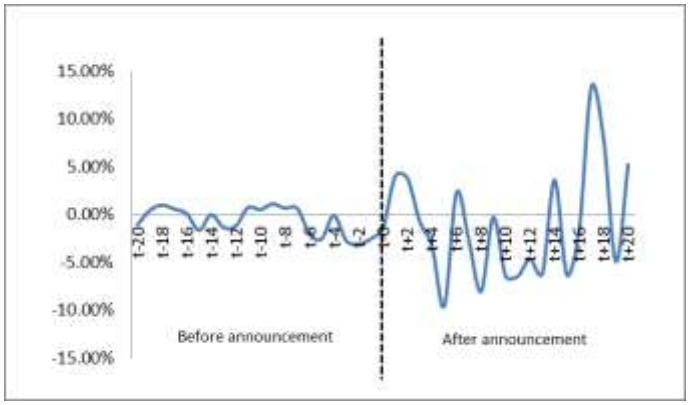
From the test results in table 3, it can be seen that the probability t-test value obtained is 0.0000 or less than 0.05, meaning that there are differences in stock price volatility in companies listed on the IDX30 index before and after the announcement of the Covid-19 outbreak. in Indonesia so that H3 is accepted. This shows that there is a movement in stock prices that is influenced by information on Covid-19 in the capital market.

### 4.4 Discussion

The following is a discussion of the results of the research "Impact of Covid 19 on Stock Return, Stock Liquidity and Stock Price Volatility on IDX30 on the Indonesia Stock Exchange" that has been carried out:

**a. IDX30 stock returns before and after the announcement of the Covid-19 outbreak in Indonesia**

The calculation of the average stock return at the IDX30 company can be seen in the following figure:




*Source: The results of data processing using Ms Excel, 2022.*

***Figure 9.*** *Average Stock Return IDX30*

As seen in figure 9, IDX30 stock returns during the observation period tended to fluctuate. From the data obtained, it can be seen that the lowest decline in stock returns during the observation period was on March 9, 2020 (t+5) and the highest increase in stock returns occurred on March 26, 2020. This was due to negative sentiment from the Covid-19 outbreak. which makes investors to move assets into safer assets and avoid risky assets (Haryanto, 2020). The results of hypothesis testing using the EViews 12 application show that the probability t-test value is 0.7510 > 0.05 so there is no difference in stock returns before and after the announcement of the Covid-19 pandemic in Indonesia during the event date.

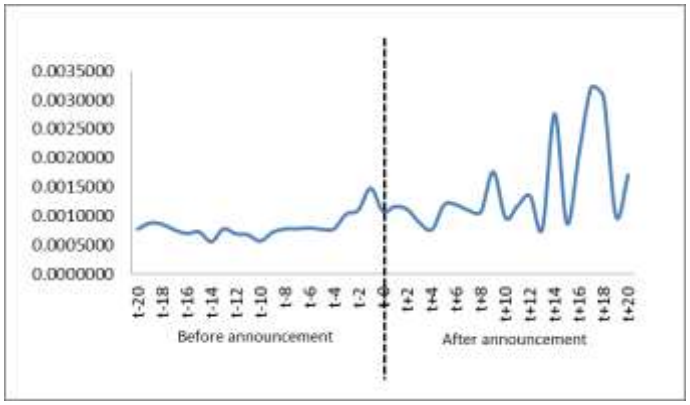
This shows that IDX30 has a stable stock return. Investors are calmer in investing their money in this index because stock returns tend to be stable, which is indicated by the absence of differences before and after the announcement of the Covid-19 outbreak. The market reaction to this situation should not be of much concern to investors who invest in the IDX30 index. This is due to very strong market confidence and expectations that the companies included in this index will be able to get through difficult times. Investors did not react to the announcement of the Covid-19 outbreak, so they still held the shares and were still reluctant to release their preferred shares.

These results are supported by research conducted by Darmayanti et al. (2020) which stated that there was no change in stock returns before and after the announcement of the first case of covid-19 in Indonesia. This study is also in line with research conducted by Galido and Khanser (2013) which states that there is no difference in stock returns before and after the event.

The results of different studies conducted by Al Awadhi et al. (2020) show that the daily increase in the number of confirmed cases and deaths from COVID-19 adversely affects the stock returns of all companies in China. Liu et al. (2020) evaluated the results of COVID-19 on the stock markets of various countries and found the negative impact of the pandemic on stock returns.

IDX30 stock liquidity before and after the announcement of the Covid-19 outbreak in Indonesia

The following is a graph of the average Trading Volume Activity (TVA) of IDX30 shares before and after the announcement of Covid-19 in Indonesia:




*Source: The results of data processing using Ms Excel, 2022.*

***Figure 10.*** *Average TVA Stock IDX30*

From the IDX30 average stock liquidity chart above, it can be seen that there was an increase in stock liquidity on the IDX30 index after the announcement of the Covid-19 outbreak. This is indicated by the probability t-test value for the H2 test of 0.0006 or smaller than 0.05, which means that the Covid-19 pandemic has an influence on stock liquidity so that there are differences in stock liquidity before and after the announcement of the Covid-19 outbreak in Indonesia.

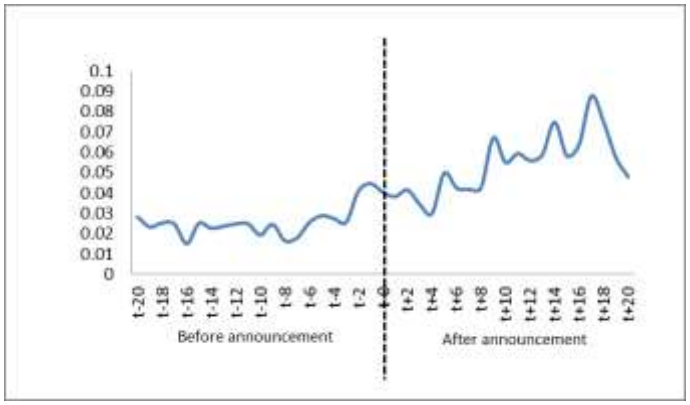
The results of the study which showed differences in stock liquidity meant that the market showed a significant change in trading volume activity following the announcement of the Covid-19 pandemic in Indonesia. This difference indicates that investors tend to make trading transactions, either buying or selling, which are significant, so that in general there is a difference in stock liquidity.

The response of investors to positive and negative signals is to greatly affect market conditions. They will act in various ways in response to these signals. Such as hunting for stocks that are sold cheaply or taking action in the form of inaction such as "wait and see" or wait and see first developments and then take action. And to be understood, the wait and see decision is not something that is not good or wrong, but it is seen as an investor's reaction to avoid the emergence of big risks (Fahmi, 2014). This is evident from the movement of stock returns which did not react directly after the announcement of the Covid-19 outbreak.

The results of this study show similarities with research conducted by Chiah and Zhong (2020) which showed that TVA worldwide experienced a significant increase during the Covid-19 pandemic. Nurmasari (2020) also showed that the volume of PT Ramayana Lestari Sentosa's share transactions experienced a significant increase after the announcement of the first case of Covid-19 in Indonesia. The results of other studies that are also in line are research by Zaremba et al. (2021) which shows that government policies to suppress the spread of the Covid-19 outbreak in these countries have a significant effect on stock market liquidity.

This is different from the research conducted by Zulfitra and Tumanggor (2020) which showed that there was no significant effect of the COVID-19 outbreak on stock liquidity on the LQ45 index and the Finance Index. The results of other studies that are also not in line are the research by Putri and Sihombing (2020) which shows that there is no significant difference between the volume of stock trading before and after the stock split.

**b. IDX30 stock price volatility before and after the announcement of the Covid-19 outbreak in Indonesia**




*Source: The results of data processing using Ms Excel, 2022.*

***Figure 11.*** *Stock Price Volatility IDX30*

The IDX30 stock price volatility chart above shows that there was an increase in stock price volatility after the announcement of the Covid-19 pandemic in Indonesia compared to before the announcement of the Covid-19 pandemic in Indonesia. This indicates the greater possibility of stock prices rising and falling rapidly after the announcement of the Covid-19 pandemic in Indonesia.

The results showed that the differences in IDX30 stock price volatility before and after the announcement of the Covid-19 outbreak in Indonesia. The Covid-19 pandemic has caused investor concerns so that they will be more interested in storing their wealth in the form of safe assets and avoiding risky assets (Haryanto, 2020). This panic prompted them to sell their shares in the capital market. This has led to a significant increase in IDX30 stock price volatility after the announcement of the Covid-19 pandemic in Indonesia.

The results of this study are in line with the results of research conducted by Baek et al. (2020) which explains that any information regarding Covid-19 has an impact on stock price volatility. In addition, the research of Essaddam et al. (2015) also show consistent results that terrorism has a significant impact on stock market volatility.

These results contradict the research of Sarwindah et al. (2022) who explained that the number of patients who recovered from Covid-19 had no significant positive effect on the volatility of retail company stock prices during the Covid-19 pandemic from April 2020 to June 2021.

## V. Conclusion

Based on the results of the research that has been done, the following conclusions can be drawn:

1. The average stock return of the IDX30 index after the announcement of the Covid-19 pandemic in Indonesia has decreased, but there is no difference from the average stock return of companies listed on the IDX30 index before and after the announcement of the Covid-19 pandemic. This is due to very strong market confidence and expectations that companies included in this index are better able to deal with difficult situations such as the Covid-19 pandemic situation.
2. There is a difference in the liquidity of the IDX30 index shares before and after the announcement of the Covid-19 pandemic in Indonesia which was marked by an increase

in Trading Volume Activity (TVA) after the announcement of the Covid-19 pandemic in Indonesia.

3. After the announcement of the Covid-19 pandemic in Indonesia, there was a difference in the volatility of the IDX30 stock price before and after the announcement due to the panic of some investors about the Covid-19 outbreak, so they sold their shares.

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