

**ANALYSIS OF MARKET REACTIONS BEFORE AND AFTER THE ANNOUNCEMENT OF THE COVID 19 VIRUS PANDEMIC**

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**Abstract:**

this study will test the market reaction seen from the JCI on the announcement of the Covid 19 Virus Pandemic on the Indonesia Stock Exchange. This study uses secondary data, namely composite stock price index from companies listed on the Indonesia Stock Exchange (IDX) in 2020. This study uses an event study to analyze the movements that occur in the JCI from day to day with an event period of 10 days. The population used in this study was composite stock price index data on the 5 days before the announcement and 5 days after the announcement. The data analysis technique used to test the hypothesis in this study was the statistical analysis of Paired Sample T-test. This test tool is part of the comparative hypothesis test or comparison test. From the results it can be concluded 1) There is a difference in composite stock price index data before and after the announcement of the COVID-19 pandemic on 12 March 2020, 2) The announcement of the COVID-19 pandemic has an effect on the differences in the JCI before the announcement and after the announcement of the COVID-19 Pandemic.

**Keywords:**

Pandemic Covid-19, Market Reactions, investment decisions, Indonesia Stock Exchange



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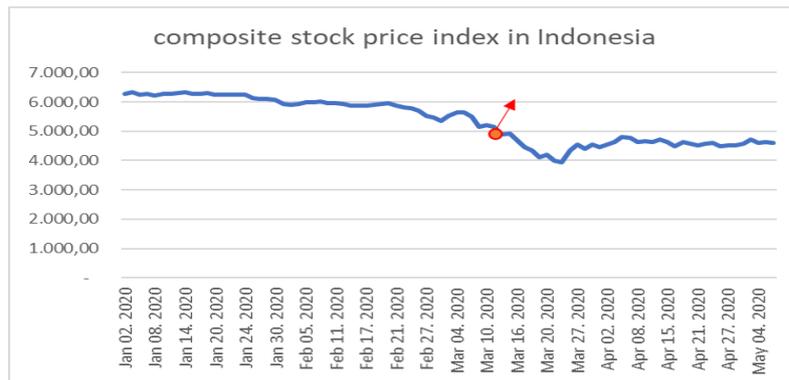
**INTRODUCTION**

The capital market in Indonesia, namely the Indonesia Stock Exchange, is a means for companies to increase the need for long-term funds by selling shares or issuing bonds to attract sellers and buyers. The capital market is called liquid if the seller can sell and buy securities quickly and is said to be efficient if the price of these securities accurately reflects the company's value.

The price reflects a mutual agreement between all market participants about the value of such assets based on available information (Mazur & Vega, 2020). If relevant new information enters the market related to an asset, it will be used to analyze and interpret the value of the asset (Xiong, et.al., 2020). Conditions that can affect the ups and downs of stock prices are, macro-economic conditions, systematic risks, sudden change of directors, performance, company policies, microeconomic conditions and also conditions of market psychological effects (Fahmi, 2012:276).

A market reacts to information to achieve a new balance price is important (Atmadja & Saputra, 2018). Because the information will result in price changes, so the return also changes (Khanthavit, 2020), investor perception changes and investment decision making also changes (Saputra, et.al., 2020). To find out the reaction to an information will be examined with the study of events (Gherghina, 2020). Event studies are studies that study market reactions to an event whose information is published as an announcement, so that this study event can be used to test the content of information from an announcement and can also be used to test the efficiency of a semi-strong form of market (Sharma, 2020), especially information on macroeconomic conditions (Saputra, et.al., 2019). Macro-economics explains the economic changes that affect many communities, companies, and markets.

Director General Tedros Adhanom Ghebreyesus at a press conference held on Wednesday (3/12/2020) declared the coronavirus a global pandemic after the number of infections worldwide reached more than 121,000 (Utomo, 2020). The World Economic Forum (WEF) considers the spread of coronavirus (Covid-19) to begin to show the economic impact on the world. In Indonesia, this information received a response from investors, seen on the Indonesia Stock Exchange showing a decrease in the value of the Composite Stock Price Index.



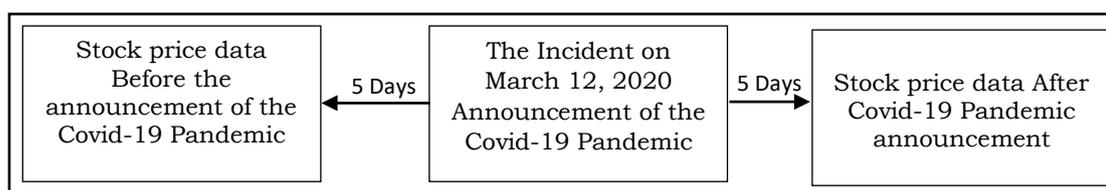
**Figure 1. Composite Stock Price**

Given that the event is global and shows the economic impact on the world, it can be used as one of the Market Reaction Analysis for information that may be needed by investors as the basis for making investment decisions. Based on this, this research will test the market reaction seen from JCI on the announcement of the Covid 19 Virus Pandemic on the Indonesia Stock Exchange.

**Signal Theory** is one of the foundations and becomes the most important part of the company's financial management sector. This theory was discovered by Spence in 1973 which was later redeveloped in 2002. This theory involves two parties namely management as a signal giver and investors as the recipient of signals from the company. Spence (1973) stated in his theory that management will seek to provide useful information to investors. Giving a signal or signal from management to this investor will help investors in taking policy. Signalling Theory encourages economic factors from one business unit to disclose one incident voluntarily. M&A activity has informative value for investors so it will influence investment decisions in the form of changes in share prices due to increased or decreased transactions (Spence, 1973). Management is the party that best understands the conditions that occur in the company. Management is obliged to convey signals in the form of information related to the condition of the company to investors (Fitriyana, 2017). Signals in the form of information from this company are usually in the form of published financial statements or other records owned by the company (Baker, et.al., 2020). The share price and total shares traded are information cues that management provides to investors (Zhang, et.al., 2020).

**METHOD**

This study uses secondary data namely JCI from companies listed on the Indonesia Stock Exchange (IDX) in 2020. composite stock price index data obtained from yahoo finance and other historical reports in IDX can be accessed on the [www.idx.co.id](http://www.idx.co.id). In this study, we used Event study to analyze the movement that occurred in JCI from day to day with an event period (Saputra, et.al., 2019) of 11 days. The timing of this study is the determination of the status of the covid-19 pandemic, namely  $t=0$ . The event window period is divided into two consisting of the first  $t=5$  (5 days before the announcement of the covid-19 pandemic) and the second  $t=5$  (five days after the announcement of the covid-19 pandemic). Determination of the period of event window is based on previous studies and to avoid confounding effect or mixed information. In addition, because the IDX working day lasts for 5 days more details will be presented in figure 2 of the Stock Price Index study event before and after the announcement of the covid 19 pandemic.



**Figure 2 study event before and after the announcement of the covid 19 pandemic.**

The population used in this study is JCI data on the 5 days before the announcement and 5 days after the announcement ([www.idx.co.id](http://www.idx.co.id)) The selection of samples using saturated samples is using all data on the population The data analysis technique used to test the hypothesis in this study is statistical analysis of Paired Sample T-test. This test tool is part of a comparative hypothesis test or comparison test. This test aims to find out if there is an average difference of two samples (two groups) that are paired or related in this case is the INDEX HARGA SAHAM GABUNGAN data of companies registered in the IDX before and after the announcement of the covid 19 pandemic was announced on March 12, 2020. Guidelines for decision making in this Paired sample T-test, according to Santoso (2014: 265) is If the value of Sig. (2-tailed) < 0.05, then the hypothesis is accepted, If the value of Sig. (2-tailed) > 0.05, then the hypothesis is rejected

**RESULTS AND DISCUSSION**

Based on the output table in table 1 of the Data Normality Test known value of df (derajad freedom) for the group before the announcement is 5 and after the announcement is 5 according to santoso (2014: 191) the number of df results is less than 50 then the decision making using shapiro wilk technique to detect normality of data in the study is already said to be appropriate. Then from the output is known sig value. for the group prior to the announcement of 0.200 and the sig and sig value of the group after the announcement of 0.976. Because the significant value above 0.05, it can be concluded that the data in this study has been distributed normally. So that the requirements to conduct a Paired Sample T-test have been met.

**Table 1 Data Normality Test**

|                             | Group                   | Kolmogorov-Smirnov <sup>a</sup> |       | Shapiro-Wilk |       |
|-----------------------------|-------------------------|---------------------------------|-------|--------------|-------|
|                             |                         | df                              | Sig.  | df           | Sig.  |
| Composite stock price index | Before the announcement | 5                               | 0,200 | 5            | 0,200 |
|                             | After the announcement  | 5                               | 0,200 | 5            | 0,976 |

Sumber : Smart PLS, 2020

In this study hypothesized will be tested several stages, namely the first difference in the composite stock price index data of companies listed on the IDX before and after the announcement of the covid 19 pandemic will be tested whether the announcement of the covid 19 virus pandemic affects the difference in the composite share price index before the announcement with after the announcement of the Covid 19 Virus Pandemic (Michail & Melas, 2020).

In the output presented in table 2 Paired Samples Statistics is shown a summary of descriptive statistical results from the two samples studied namely composite share price index before and after the announcement of the covid 19 pandemic. Because the value of the composite share price index at the time before 5329 < after 4498, then it can be concluded that descriptive way there is a difference in the average composite share price index before and after the announcement of the covid 19 pandemic (Lopatta, et.al., 2020). To see if the difference is significant true real or not, it will be seen the value of the test results paired samples correlations (Rahman, et.al., 2020). Based on the output result of table 3 shows the results of correlation test or relationship between the two data or variable relationship of composite share price index before and after. Because the value of sig 0.036 < 0.05, it can be concluded that there is a relationship between the composite share price index before and after the announcement of the covid 19 pandemic.

**Table 2. Output Paired Samples Statistics**

|        |        | Mean       | N | Std. Deviation | Std. Error Mean |
|--------|--------|------------|---|----------------|-----------------|
| Pair 1 | Before | 5.329,6820 | 5 | 225,57183      | 100,87879       |
|        | After  | 4.498,2140 | 5 | 311,72311      | 139,40681       |

**Table 3. Paired Samples Correlations**

|        |                | N | Correlation | Sig.  |
|--------|----------------|---|-------------|-------|
| Pair 1 | Before & After | 5 | 0,903       | 0,036 |

Based on spss output 25 in attachment, known Sig value. (2-tailed) is 0.000 < 0.005, then the hypothesis is accepted. So it can be concluded that there is an average difference between the composite share price index before the announcement and after the announcement of covid 19 as a pandemic which means the announcement of the covid 19 virus pandemic affects the difference in the composite share price index before the announcement with after the announcement of the Covid 19 Virus Pandemic (Haroon & Risvi, 2020). the composite share price index looks set to decline When the announcement of covid 19 was announced on March 12, 2020 as a pandemic by the World Organisation for Animal Health WHO. After the announcement, many countries conducted lockdown systems and some social restrictions to break the chain of transmission of the covid 19 virus (Zaremba, et.al., 2020). This caused many companies to have to close while some even closed and went bankrupt (Saputra, et.al., 2019). According to the report, investors reacted, as seen in the composite share price index, which was declared a pandemic by the World Organisation for Animal Health (WHO)

**CONCLUSIONS**

Based on the results that have been submitted, the conclusion of this study is there are differences in the composite stock price index data before and after the announcement of the covid 19 pandemic on March 12, 2020 and the announcement of the covid 19 virus pandemic affects the difference in the composite share price index before the announcement with the after-announcement of the Covid 19 Virus Pandemic. The findings and conclusions of this research have limitations that can later become the material of improvement in the next research. Based on the conclusions, this study can provide suggestions as follows

In this study has not tested how big the impact of the announcement of covid 19 as a pandemic on the composite stock price index (composite stock price index). In the next researchers can develop this research again by conducting tests to find out how big the impact of the announcement of covid 19 as a pandemic on the composite stock price index, Advice for companies, governments and information media in order to inform about covid 19 is done carefully, because this announcement will be responded by the market where in this study looks covid announcement causes a significant difference to changes in the composite stock price index

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