

UDC 332

## **ANALYSIS OF DIFFERENCES IN STOCK RETURN BEFORE AND DURING THE COVID-19 PANDEMIC OF COMPANIES IN THE INDONESIA STOCK EXCHANGE**

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### **ABSTRACT**

This research is a quantitative research and focuses on companies listed on the Indonesia Stock Exchange. The purpose of this study was to determine the difference in stock returns a year before and during the Covid-19 pandemic in companies on the Indonesia Stock Exchange. The method used in this research is an event study and the data source used is secondary data in the period from March 2019 to March 2021. Data were analyzed using the Mann-Whitney U Test non-parametric difference test. The results of the research analysis show that there are differences in stock returns a year before and during the Covid-19 pandemic in companies on the Indonesia Stock Exchange. This research also illustrates that the stock return of the mining sector is the stock with the highest return value before and during the Covid-19 pandemic compared to other companies on the Indonesia Stock Exchange.

### **KEY WORDS**

Stock returns, Covid-19 pandemic, event studies, capital market.

Covid-19 or Corona Virus Disease is a new virus that attacks the human respiratory system and was first discovered in Wuhan, China at the end of 2019. On March 9, 2020, WHO (World Health Organization) officially determined that Covid-19 could be categorized as a pandemic. This is because the virus has spread more widely throughout the world. The impact is not only on the health sector, but also on various aspects of life including economic aspects so that this pandemic has the opportunity to open the doors of recession in various countries. The IMF (International Monetary Fund) stated that the Covid-19 pandemic has turned into a global economic and financial crisis, even worse than the global financial crisis in 2008 ([www.kompas.com](http://www.kompas.com)).

The first confirmation of the Covid-19 case in Indonesia occurred on March 2, 2020. The increasing number of Covid-19 cases has caused a number of countries including Indonesia to implement strict restrictions (social distancing) to break the chain of virus spread. The Indonesian government has repeatedly issued policies regarding restrictions on the mobility of citizens during the Covid-19 pandemic. This policy has had an impact on the sluggishness of several economic activities. The impact was not only felt on the Money Market, but also extended to the Capital Market which was also hit quite significantly.

Stock Price Index worldwide decreased drastically as well as the Composite Stock Price Index (IHSG) in Indonesia also experienced a sharp decline and touched its lowest level of Rp 3,911.71. The Financial Services Authority (OJK) and the Indonesia Stock Exchange issued several policies to maintain market conditions so as not to continue to decline, such as reducing 1.5 hours of trading on the stock exchange from normal trading hours that have been in effect since March 30, 2020 and implementing a policy of temporarily halting trading for 30 minutes in the event of a 5% decrease in intraday trading. During the period March to December 2020, OJK has issued 35 capital market policies that focus on three things, namely: (1) relaxation for the industry; (2) controlling volatility and maintaining the stability of the capital market and financial system, among others by prohibiting short selling for a while and allowing issuers to buy back shares without going through the GMS; as well as (3) ease of licensing and submission of documents and reporting ([www.ojk.go.id](http://www.ojk.go.id)).

Information regarding the policies implemented by the Government and the current situation during the pandemic, triggered a market reaction because it raised concerns from

investors. Moreover, relatively many companies experienced a decline in performance, including posting losses. The reaction of the capital market to an event that contains information can be measured by using returns as the value of price changes. Based on the description above, it can be seen that the announcement of the confirmation of the first Covid-19 case in Indonesia is an event with important information content because it affects fluctuations in company shares that occur in the capital market as a form of market reaction.

Traditional economic and financial theory shows that investment in stocks, especially stock prices, is closely related to the economy of a country (Saputra, 2021). Research on market reactions was conducted by Bash (2020) who has researched stock exchanges from 30 different countries. The results of this study indicate that the Covid-19 pandemic has made stock market reactions from various countries have negative reactions. Emergency events in the capital market often affect investor behavior and sentiment, which in turn has an impact on stock prices. Event study is a process of observing stock movements in the capital market to determine the effect of investor's returns on a particular event whether there is an abnormal return or not (Hartono, 2017).

Several previous studies that examined the effect of certain emergency events on stock abnormal returns stated inconsistent results. Subrata et al. (2020) examining abnormal returns at the time of the announcement of a world health emergency by WHO on LQ-45 stocks found the results that these events had a significant effect on abnormal returns. However, in Dini's (2020) research which analyzed the impact before and after the Covid-19 event, the results stated that abnormal returns were not significantly affected by the Covid-19 pandemic in Indonesia.

Based on the phenomena and gap research described above, the researchers are interested in conducting research with a more in-depth discussion of the nine corporate sectors listed on the Indonesia Stock Exchange regarding the differences in stock returns before and during the Covid-19 pandemic. The formulation of the problem in this study is whether there are differences in stock returns a year before and during the Covid-19 pandemic in companies on the Indonesia Stock Exchange?

## LITERATURE REVIEW

### Signaling Theory

Signaling theory (Husnan, 2005) says that a policy taken by issuers, governments, or investors in principle gives a signal or sign to the market about future trends or trends. Signaling theory is a theory that explains to external parties that can be used to reduce information asymmetry. Signals from circulating information can influence the actions taken by investors. Investor reactions are reflected in stock prices and trading volumes surrounding the release of the information. An event study can be used to determine whether there is an investor reaction related to the information signals provided by the company.

### Event Study

An event study is a study that studies the market reaction to an event whose information is published as an announcement. If the announcement contains information, it is expected that the market will react when the announcement is received by the market. The market reaction is indicated by a change in the price of the security concerned. This reaction can be measured by using returns as the value of price changes or by using abnormal returns. If abnormal returns are used, it can be said that an announcement that contains information will provide abnormal returns to the market. Conversely, those that do not contain information do not provide abnormal returns to the market. Not causing abnormal returns can mean investors do not react, because investor's reactions to the new information are indicated by the abnormal returns.

### Market Efficiency

Markowitz (1952) shows the relationship between investor confidence and choice in the context of choosing a portfolio that has a smaller or minimum risk expectation or expectation.

Fama (1970, 1998) defines an efficient market as a market that provides perfect stock price information for investors. From this explanation, it can be concluded that an efficient capital market explains the phenomenon of the Covid-19 pandemic, where stock returns are positively correlated with systematic risk. This means that the less information the company provides to investors regarding its stock returns, the less interested investors will be to invest their capital in the company. The existence of the Covid-19 pandemic has further strengthened the existence of systematic risk, so that investors will be risk averse (Budiarso et al., 2020).

### **Stock returns**

Return is the result obtained from the investment. There are 2 types of returns, namely realized returns and expected returns. The 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. While the expected return is the return used for investment decision making. This return is important compared to historical returns because the expected return is the expected return on the investment made.

Based on the explanation above, the hypothesis is formulated:

H<sub>1</sub>: there is a difference in stock returns a year before and during the Covid-19 pandemic in companies on the Indonesia Stock Exchange

## **METHODS OF RESEARCH**

### **Research design**

This type of research is quantitative research with event study. Event Study is a study that studies the market reaction to an event whose information is published as an announcement. The event study in this study took the moment when the announcement of the first case of Covid-19 in Indonesia, which was on March 2, 2020. The location of the study was carried out on the Indonesia Stock Exchange (IDX).

### **Data and Data Collection Methods**

The type of data used in this study is secondary data with documentation techniques, by tracing historical data through [www.idx.co.id](http://www.idx.co.id) and [www.yahoo.finance.com](http://www.yahoo.finance.com). Analysis of the difference in stock returns will be carried out on nine company sectors listed on the IDX, including agriculture, mining, basic and chemical industries, various industries, consumer goods, property and real estate, transportation and infrastructure, finance, and trade in services and investment.

Researchers will analyze the difference in stock returns before and during the Covid-19 pandemic by taking a period of one year. Secondary data to analyze differences in stock returns is stock return data for one year before the Covid-19 pandemic (2 March 2019-2 March 2020) and one year stock returns during the Covid-19 pandemic (2 March 2020-2 March 2021).

### **Population and Sample**

The population in this study are companies listed on the IDX. Sampling in this study was conducted using purposive sampling technique. The criteria that will be sampled in this study are as follows: (1) Companies listed on the IDX; (2) Stock price data at closing is known.

### **Data analysis technique**

This study uses a ratio scale with a comparative hypothesis method of two independent samples. To test the comparative hypothesis of two independent samples, the researcher used the Independent sample t-test method and the normality test using the Shapiro-Wilk test. The data is said to be normally distributed if the significance value of the Shapiro-Wilk test is 0.05 or more, if the significance value is less than 0.05 then the data can be said to be not normally distributed. Independent sample t-test was used to test the difference between

two independent sample means, to see if there were significant differences between variables (Urdan, 2011). Based on the reference of Terrell (2012), the researcher used the value of  $\alpha = 0.05$ .

Before testing the hypothesis, the researcher will test the homogeneity of the data. The researcher compared the value of  $\alpha = 0.05$  with Levene's p test. If the p value is greater than  $\alpha = 0.05$ , then the data to be used is equal variances assumed data (data is homogeneous), and vice versa if the p value is smaller than  $\alpha = 0.05$ , the data used is equal variances not assumed (data is not homogeneous). The criteria in this study is if p sig.two-tailed is smaller than  $\alpha = 0.05$ , then H0 is rejected and H1 is accepted (Terrell, 2012).

## RESULTS AND DISCUSSION

### Descriptive Statistical Analysis Results

Descriptive statistics provide an overview of the characteristics of the value of a variable under study. Descriptive statistics are presented to provide information about the characteristics of research variables consisting of the number of observations, minimum values, maximum values, and average values. Descriptive statistics on stock returns a year before and during the Covid-19 pandemic in companies on the Indonesia Stock Exchange can be seen in Table 1 below.

Table 1 – Descriptive Statistics Test Results

Sector	Period	N	Min	Max	Mean
Agriculture	Before the Pandemic	23	-0,07723	0,02730	-0,0271651
	During the Pandemic	23	-0,04296	0,07941	0,0255162
Mining	Before the Pandemic	37	-0,21183	0,15377	-0,0087643
	During the Pandemic	37	-0,08553	0,25608	0,0597523
Basic and Chemical Industry	Before the Pandemic	75	-0,11431	0,26953	-0,0271619
	During the Pandemic	75	-0,09593	0,17911	0,0449741
Various Industries	Before the Pandemic	47	-0,13439	0,11945	-0,0221921
	During the Pandemic	47	-0,21110	0,12562	0,0182996
Consumer Goods	Before the Pandemic	49	-0,16156	0,18019	-0,0194730
	During the Pandemic	49	-0,11830	0,27704	0,0356975
Property and Real Estate	Before the Pandemic	68	-0,14749	0,10186	-0,0285452
	During the Pandemic	68	-0,09932	0,15676	0,0304269
Transport and Infrastructure	Before the Pandemic	69	-0,13202	0,04466	-0,0258225
	During the Pandemic	69	-0,07102	0,30745	0,0490366
Finance	Before the Pandemic	86	-0,16725	0,06933	-0,0167404
	During the Pandemic	86	-0,05558	0,31985	0,0548230
Service Trading and Investment	Before the Pandemic	151	-0,13156	0,43522	-0,0128266
	During the Pandemic	151	-0,13873	0,87364	0,0332805

Source: Data processed, 2021.

Table 1 illustrates that stock returns in the agricultural sector before the Covid-19 pandemic had the lowest value of -0.07723 and the highest value of 0.02730 while the average value was -0.0271651. The lowest stock return in the agricultural sector before the Covid-19 pandemic occurred in PT Andira Agro Tbk. Meanwhile, the highest stock return in the agricultural sector before the Covid-19 pandemic occurred at PT Estika Tata Tiara Tbk. Stock returns in the agricultural sector during the Covid-19 pandemic had the lowest value of -0.04296 and the highest value of 0.07941 while the average value was 0.0255162. The lowest stock return in the agricultural sector during the Covid-19 pandemic occurred at PT Estika Tata Tiara Tbk, while the highest stock return in the agricultural sector during the Covid-19 pandemic occurred at PT Salim Ivomas Pratama Tbk.

The stock return of the mining sector before the Covid-19 pandemic had the lowest value of -0.2183 and the highest value of 0.15377 while the average value was -0.0087643. The lowest stock return in the mining sector before the Covid-19 pandemic occurred in PT. Samindo Resources Tbk, while the highest stock return in the mining sector before the Covid-19 pandemic occurred in the company PT. Delta Dunia Makmur Tbk. The stock return

of the mining sector during the Covid-19 pandemic had the lowest value of -0.08553 and the highest value of 0.25608 while the average value was 0.0597523. The lowest stock return in the mining sector during the Covid-19 pandemic occurred in PT. Atlas Resources Tbk while the highest stock returns in the mining sector during the Covid-19 pandemic occurred in the company PT. Alfa Energi Investama Tbk.

The stock return of the basic and chemical industry sectors before the Covid-19 pandemic had the lowest value of -0.11431 and the highest value of 0.26953 while the average value was -0.0271619. The lowest stock returns in the basic and chemical industry sectors before the Covid-19 pandemic occurred in the company PT. Plate Timah Nusantara Tbk. Meanwhile, the stock returns of the basic and chemical industry sectors were the highest before the Covid-19 pandemic occurred in PT. Pelangi Indah Canindo Tbk. The stock returns of the basic and chemical industry sectors during the Covid-19 pandemic had the lowest value of -0.09593 and the highest value of 0.17911 while the average value was 0.0449741. The lowest stock returns in the basic and chemical industry sectors during the Covid-19 pandemic occurred in the company PT. Singaraja Putra, while the highest stock returns in the basic and chemical industry sectors during the Covid-19 pandemic occurred in the company PT. Lotte Chemical Titan Tbk.

Stock returns in the various industrial sectors before the Covid-19 pandemic had the lowest value of -0.13439 and the highest value of 0.11945 while the average value was -0.0221921. The lowest stock returns in the various industrial sectors before the Covid-19 pandemic occurred at PT Indomobil Sukses Internasional Tbk. Meanwhile, the highest stock returns in the various industrial sectors before the Covid-19 pandemic occurred in the company PT. Trisula Textile Industries Tbk. Stock returns in the various industrial sectors during the Covid-19 pandemic had the lowest value of -0.21110 and the highest value of 0.12562 while the average value was 0.0182996. The lowest stock returns of the various industrial sectors during the Covid-19 pandemic occurred in the company PT Selamat Sempurna Tbk. Meanwhile, the highest stock returns in the various industrial sectors during the Covid-19 pandemic occurred at PT Indomobil Sukses Internasional Tbk.

The stock return of the consumer goods sector before the Covid-19 pandemic had the lowest value of -0.16156 and the highest value of 0.18019 while the average value was -0.0194730. The lowest stock return in the consumer goods sector before the Covid-19 pandemic occurred at PT Prima Cakrawala Abadi Tbk. Meanwhile, the highest stock return in the consumer goods sector before the Covid-19 pandemic occurred at PT Indonesian Tobacco Tbk. The stock return of the consumer goods sector during the Covid-19 pandemic had the lowest value of -0.11830 and the highest value of 0.27704 while the average value was 0.0356975. The lowest stock return in the consumer goods sector during the Covid-19 pandemic occurred at PT Indonesian Tobacco Tbk. Meanwhile, the highest stock return in the consumer goods sector during the Covid-19 pandemic occurred in the company PT. Wismilak Inti Makmur Tbk.

The stock return of the property and real estate sectors before the Covid-19 pandemic had the lowest value of -0.14749 and the highest value of 0.10186 while the average value was -0.0285452. The lowest property and real estate stock returns before the Covid-19 pandemic occurred in PT Totalindo Eka Persada Tbk. Meanwhile, the highest stock returns in the property and real estate sectors before the Covid-19 pandemic occurred in PT Propertindo Mulia Investama Tbk. The stock return of the property and real estate sectors during the Covid-19 pandemic had the lowest value of -0.09932 and the highest value of 0.15676 while the average value was 0.0304269. The lowest property and real estate sector stock returns during the Covid-19 pandemic occurred at PT Urban Jakarta Propertindo Tbk. Meanwhile, the highest stock returns in the property and real estate sectors during the Covid-19 pandemic occurred in PT Acset Indonusa Tbk.

The stock return of the transportation and infrastructure sector before the Covid-19 pandemic had the lowest value of -0.13202 and the highest value of 0.04466 while the average value was -0.0258225. The lowest stock return in the transportation and infrastructure sectors before the Covid-19 pandemic occurred at PT Terregra Asia Energy Tbk. Meanwhile, the highest stock return in the transportation and infrastructure sectors

before the Covid-19 pandemic occurred in the company PT. Jasnita Telekomindo Tbk. The stock return of the transportation and infrastructure sector during the Covid-19 pandemic had the lowest value of -0.07102 and the highest value of 0.30745 while the average value was 0.0490366. The lowest stock returns in the transportation and infrastructure sector during the Covid-19 pandemic occurred in PT. Pelayaran Tamarin Samudra Tbk. Meanwhile, the highest stock returns in the transportation and infrastructure sectors during the Covid-19 pandemic occurred in PT. Maming Six Sembilan Mineral Tbk.

The stock return of the financial sector before the Covid-19 pandemic had the lowest value of -0.16725 and the highest value of 0.06933 while the average value was -0.0167404. The lowest stock return in the financial sector before the Covid-19 pandemic occurred at PT Pool Advista Finance Tbk. Meanwhile, the highest stock return in the financial sector before the Covid-19 pandemic occurred in PT. Verena Multi Finance Tbk. Stock returns in the financial sector during the Covid-19 pandemic had the lowest value of -0.05558 and the highest value of 0.31985 while the average value was 0.0548230. The lowest financial sector stock returns during the Covid-19 pandemic occurred in PT. Bank Mayapada International Tbk. Meanwhile, the highest stock return in the financial sector during the Covid-19 pandemic occurred at PT Bank Allo Indonesia Tbk.

Stock returns in the trading and investment services sectors before the Covid-19 pandemic had the lowest value of -0.13156 and the highest value of 0.43522 while the average value was -0.0128266. The lowest stock return in the trade and investment services sector before the Covid-19 pandemic occurred at PT Yelooo Integra Datanet Tbk. Meanwhile, the highest stock returns in the trade and investment services sectors before the Covid-19 pandemic occurred in PT Media Nusantara Citra Tbk. Stock returns in the trade and investment services sectors during the Covid-19 pandemic had the lowest value of -0.13873 and the highest value of 0.87364 while the average value was 0.0332805. The lowest stock returns in the trade and investment services sector during the Covid-19 pandemic occurred at PT Menteng Heritage Realty Tbk. Meanwhile, the highest stock returns in the trade and investment services sector during the Covid-19 pandemic occurred at PT Media Nusantara Citra Tbk.

### Normality Test Results

The normality test of the data in this study used the Shapiro-Wilk method. Population data is said to be normally distributed if the results of data processing show a Sig value greater than the level of significance used (5%). The results of the normality test of stock returns a year before and during the Covid-19 pandemic for companies on the Indonesia Stock Exchange can be seen in table 2.

Table 2 – Shapiro-Wilk Normality Test Results

Sector	Period	Sig.	Information
Agriculture	Before the Pandemic	0,996	Normal Distribution
	During the Pandemic	0,275	Normal Distribution
Mining	Before the Pandemic	0,362	Normal Distribution
	During the Pandemic	0,106	Normal Distribution
Basic and Chemical Industry	Before the Pandemic	0,000	Abnormal Distribution
	During the Pandemic	0,069	Normal Distribution
Various Industries	Before the Pandemic	0,034	Abnormal Distribution
	During the Pandemic	0,001	Abnormal Distribution
Consumer Goods	Before the Pandemic	0,001	Abnormal Distribution
	During the Pandemic	0,000	Abnormal Distribution
Property and Real Estate	Before the Pandemic	0,850	Normal Distribution
	During the Pandemic	0,000	Abnormal Distribution
Transport and Infrastructure	Before the Pandemic	0,146	Normal Distribution
	During the Pandemic	0,000	Abnormal Distribution
Finance	Before the Pandemic	0,010	Abnormal Distribution
	During the Pandemic	0,000	Abnormal Distribution
Service Trading and Investment	Before the Pandemic	0,000	Abnormal Distribution
	During the Pandemic	0,000	Abnormal Distribution

Source: Data processed, 2021.

Based on Table 2, the The significance value of stock return of the agricultural sector before the Covid-19 pandemic was 0.996, which was greater than 0.05, so the data was classified as normally distributed. Next is the The significance value of stock return of the agricultural sector during the Covid-19 pandemic was 0.275, greater than 0.05, so the data is classified as normally distributed.

The significance value of stock return of the mining sector before the Covid-19 pandemic was 0.362, greater than 0.05, so the data is classified as normally distributed. Next is the The significance value of stock return of the mining sector during the Covid-19 pandemic was 0.106, greater than 0.05, so the data is classified as normally distributed.

The significance value of stock return of the basic and chemical industry sectors before the Covid-19 pandemic was 0.000, smaller than 0.05, so the data is classified as having an abnormal distribution. Next is the The significance value of stock return of the basic and chemical industry sectors during the Covid-19 pandemic was 0.069 greater than 0.05, so the data is classified as normally distributed.

The significance value of stock return of the various industrial sectors before the Covid-19 pandemic was 0.034 which was smaller than 0.05, so the data was classified as having an abnormal distribution. Next is the The significance value of stock return of the various industrial sectors during the Covid-19 pandemic was 0.001 smaller than 0.05, so the data is classified as abnormally distributed.

The significance value of stock return of the consumer goods sector before the Covid-19 pandemic was 0.001 smaller than 0.05, so the data is classified as abnormally distributed. Next is the The significance value of stock return of the consumer goods sector during the Covid-19 pandemic was 0.000, smaller than 0.05, so the data was classified as having an abnormal distribution.

The significance value of stock return of the property and real estate sectors before the Covid-19 pandemic was 0.850, which was greater than 0.05, so the data is classified as normally distributed. Next is the The significance value of stock return of the property and real estate sectors during the Covid-19 pandemic was 0.000 smaller than 0.05, so the data is classified as abnormally distributed.

The significance value of stock return of the transportation and infrastructure sector before the Covid-19 pandemic was 0.146, greater than 0.05, so the data is classified as normally distributed. Next is the The significance value of stock return of the transportation and infrastructure sector during the Covid-19 pandemic was 0.000, smaller than 0.05, so the data was classified as having an abnormal distribution.

The significance value of stock return of the financial sector before the Covid-19 pandemic was 0.010 smaller than 0.05, so the data is classified as abnormally distributed. Next is the The significance value of stock return of the financial sector during the Covid-19 pandemic was 0.000, smaller than 0.05, so the data was classified as having an abnormal distribution.

The significance value of stock returns in the service trade and investment sectors before the Covid-19 pandemic was 0.000, smaller than 0.05, so the data is classified as having an abnormal distribution. Furthermore, the significance value of stock returns in the service trade and investment sectors during the Covid-19 pandemic is 0.000, which is smaller than 0.05, so the data is classified as having an abnormal distribution.

### **Hypothesis testing**

The Mann-Whitney U Test of Non-Parametric Differences This test is used to test two independent samples from two different population groups. The existence of an abnormal distribution of the results of the normality test of stock return data a year before and during the Covid-19 pandemic became the basis for the decision to choose the Mann-Whitney U Test Nonparametric Test. The sample is said to have a difference if the significance value or Sig. (2-tailed) < 0.05. The results of the Non-Parametric Mann-Whitney U test of stock returns a year before and during the Covid-19 pandemic in companies on the Indonesia Stock Exchange can be seen in Table 3.

Table 3 – Mann-Whitney U Test Non-Parametric Difference Test Results

Company Stock Return	Asymp. Sig. (2-tailed)	Information
Agriculture	0,000	There is a difference
Mining	0,000	There is a difference
Basic and Chemical Industry	0,000	There is a difference
Various Industries	0,000	There is a difference
Consumer Goods	0,000	There is a difference
Property and Real Estate	0,000	There is a difference
Transport and Infrastructure	0,000	There is a difference
Finance	0,000	There is a difference
Service Trading and Investment	0,000	There is a difference

*Source: Data processed, 2021.*

Table 3 above shows that the Asymp Sig (2-tailed) value of 0.000 is smaller than the sig of 0.05, so the first hypothesis (H1) is accepted. The Asymp Sig (2-tailed) value of 0.000 is even evenly distributed across nine sectors of the company's shares listed on the Indonesia Stock Exchange. These results prove that there are differences in stock returns a year before and during the Covid-19 pandemic in companies on the Indonesia Stock Exchange.

### **DISCUSSION OF RESULTS**

The results of the non-parametric Mann-Whitney U test in Table 3 show that the Asymp Sig (2-tailed) value of 0.000 is smaller than the sig of 0.05, so H1 is accepted. These results prove that there are differences in stock returns a year before and during the Covid-19 pandemic in companies on the Indonesia Stock Exchange. These results are in line with the hypothesis proposed in this study.

The results of other studies that are in accordance with this study are Diansari, et al. (2021) who conducted research on the analysis of differences in stock returns of transportation companies before and during Covid-19 in Indonesia. This study found that there were significant differences regarding stock returns of transportation companies during the Covid-19 pandemic compared to before the Covid-19 pandemic in Indonesia.

Based on the results of the descriptive statistical test in Table 1, it can also be illustrated that a year before the Covid-19 pandemic, the property and real estate sectors showed the lowest average returns and the mining sector showed the highest average returns. Furthermore, a year during the Covid-19 pandemic, the various industry sectors showed the lowest returns and the mining sector showed the highest average returns compared to other corporate sectors listed on the Indonesia Stock Exchange. These results are expected to provide consideration to investors in deciding which companies to invest in the Indonesia Stock Exchange.

The events of the Covid-19 national announcement in Indonesia contain strong information, giving rise to differences in stock returns before and after the Covid-19 national announcement in Indonesia. In the investment world, all information related to the capital market is very important because the information will be used as a reference in making decisions. The events of the national announcement of Covid-19 in Indonesia were concluded by investors as bad news that gave negative sentiments to investors in making investment decisions in the capital market.

This negative sentiment causes investors to flee capital and causes excessive stock offerings. The investment decision was triggered by investors who were worried about the spread of the Covid-19 virus, which was rapidly spreading throughout the world, especially to Indonesia, and could have negative impacts on the economy. The spread of the Covid-19 virus has made the global stock market move very wildly or with very high volatility, which means that the impact of the Covid-19 virus on the capital market is quite serious (Burhanuddin and Abdi, 2020 in Sari, et al., 2021).

Over time, in the midst of the ongoing Covid-19 pandemic, the capital market has

gradually begun to rise from adversity. However, support and cooperation from various parties is needed in restoring the situation and condition of the capital market so that it can be excited again. This support can be provided by the Government by trying to create a conducive situation through policies that are able to support the development of the capital market in Indonesia. The role of the company is also very much needed to prevent fluctuating stock prices during the Covid-19 pandemic. Companies can try to improve performance and improve their image in the community so that they can be trusted as a safe and profitable investment destination.

## CONCLUSION

Based on the results of the research described above, it shows that there are differences in stock returns a year before and during the Covid-19 pandemic in companies on the Indonesia Stock Exchange. This study also illustrates that a year before the Covid-19 pandemic, the property and real estate sectors showed the lowest average returns and the mining sector showed the highest average returns. Furthermore, a year during the Covid-19 pandemic, the various industry sectors showed the lowest returns and the mining sector showed the highest average returns compared to other corporate sectors listed on the Indonesia Stock Exchange.

Research on differences in stock returns before and during the Covid-19 pandemic by further researchers is expected to encourage the emergence of better similar research. The suggestions that can be given are as follows: Investors should conduct an in-depth analysis to determine the right company to invest in. Because the results of the study illustrate that mining sector stocks are the stocks with the highest return values before and during the Covid-19 pandemic, these sector stocks can be taken into consideration when determining stock investments. Companies should have a good strategy to prevent fluctuating stock prices during the Covid-19 pandemic. For example, by improving performance and providing a good image for the company so that public opinion is formed to believe in the company and be willing to buy shares of the company. The regulator is expected to create a conducive situation by issuing policies that are able to support the development of the capital market in Indonesia. The observation period in the study can be carried out in the short term (one month) and long term (one year) so that it can describe the difference in returns more specifically.

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