

THE IMPACT OF COVID-19, MARKET CAPITALIZATION, STOCK TRADING VOLUME, AND LARGE-SCALE SOCIAL RESTRICTIONS ON STOCK RETURNS

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ABSTRACT

The purpose of this research is to determine the effect of Covid-19, market capitalization, stock trading volume and large-scale social restrictions on stock returns. This research uses agriculture companies and property, real estate and building construction companies listed in Indonesian Stock Exchange from March 2, 2020 to December 31, 2020. The Covid-19 measured by growth of positive confirmed cases. The results of research in the agriculture sector show that growth of positive confirmed cases has a negative significant influence on stock return, market capitalization has no significant influence on stock return, stock trading volume and large-scale social restrictions have a positive significant influence on stock return. The results of research in the property, real estate and building construction sector show that growth of positive confirmed cases has no significant influence on stock return, market capitalization has a negative significant influence on stock return, stock trading volume and large-scale social restrictions have a positive significant influence on stock return.

Keywords: *Stock Return, Covid-19, Market Capitalization, Stock Trading Volume, Large-Scale Social Restrictions*

1. INTRODUCTION

The capital market is a meeting place for companies that need funds and investors who want to invest. The capital market is a place for buying and selling financial instruments consisting of stocks, bonds and other financial instruments. The motivation of investors in investing is the rate of return that will be obtained which is commonly called return. Investors who invest in stocks will get stock returns.

An unexpected event that is currently sweeping the world is the COVID-19 pandemic. The covid-19 virus was first discovered in the city of Wuhan, China at the end of 2019. This covid-19 virus has spread to various countries including Indonesia. The first positive confirmed case in Indonesia was found on March 2, 2020. The spread of the covid-19 virus can affect public health but can also affect the economy [1]. The stock market, which is one of the pillars of the capital market in Indonesia, has also been affected by the COVID-19 pandemic. The decline in the Composite Stock Price Index on the Indonesia Stock Exchange in April is evidence that the COVID-19 pandemic can affect stock prices so that stock returns also decline.

Market capitalization is the total value of shares owned by the company. Market capitalization is one of the factors that investors consider before making an investment. Companies with large market capitalization are usually companies that have long been established and experienced so that the company's condition is stable. This causes stock prices to tend to be stable so that stock returns are stable. Companies with small market capitalization are usually companies that are developing and have the potential to continue to

grow in the future so that the company's condition becomes unstable. This causes stock prices to fluctuate so that the resulting stock returns also fluctuate.

Stock trading volume can affect stock returns. Stock trading volume is the number of shares traded each day. A large stock trading volume indicates that a stock is favored and in demand by investors so that it will affect stock returns.

The Indonesian government's efforts to deal with the spread of the COVID-19 virus are through a policy called large-scale social restrictions. This policy limits community activities and activities in public places such as working from home and studying online.

Research by Hung, Hue and Duong [2] found that the growth of positive confirmation cases had a significant negative effect on stock returns. According to Bahrini and Filfilan [3] the growth of positive confirmation cases has no significant effect on stock returns.

Hung et al. [2] and Al-Awadhi and Alhammadi [9] in their study found that market capitalization had a significant negative effect on stock returns. Research conducted by Nguyen et al. [4] found that market capitalization has a significant positive effect on stock returns.

According to Karwitha et al. [5] found that stock trading volume has a significant positive effect on stock returns. In contrast to research by Hariyanto [10] which found that stock trading volume has a significant negative effect on stock returns.

Hung et al. [2] found that lockdown had a significant positive effect on stock returns. This is different from the research by Eleftheriou and Patsoulis [8] which found that the lockdown had a significant negative effect on stock returns. The differences in the results of previous studies that have been described above, the researchers are interested in conducting research on how the influence of the growth of positive confirmation cases, market capitalization, stock trading volume and large-scale social restrictions on stock returns.

Literature Review

Research conducted by Hung et al. [2] using the dependent variable stock return and independent variables, namely the growth of positive confirmation cases, market capitalization and lockdown. This study uses a sample of 733 companies listed on the Ho Chi Minh Stock Exchange and the Hanoi Stock Exchange in 2020. The results of this study indicate that the growth of positive confirmation cases and market capitalization has a significant negative effect on stock returns, while lockdown has a significant positive effect on stock returns.

Research conducted by Nguyen et al. [4] using the dependent variable stock return and independent variables, namely the growth of positive confirmation cases, market capitalization and lockdown. This study uses 50 samples of banking, finance and insurance companies listed on the Vietnam Stock Exchange during the period 30 January 2020 to 15 May 2020. The results of this study are the growth of positive confirmation cases has a significant negative effect on stock returns, while market capitalization and lockdown have a positive effect. significant to stock returns.

Karwitha et al. [5] conducted a study using stock returns as the dependent variable and stock trading volume as the independent variable. This study uses a sample of 64 companies in

Kenya in 2004-2016. The results of this study indicate that the volume of stock trading has a significant positive effect on stock returns.

Research conducted by Hariyanto [10] using the dependent variable stock return and independent variables, namely the volume of stock trading and market capitalization. The sample used in this study were 62 companies listed on the Indonesia Stock Exchange for the period December 2009 – May 2010 and December 2019 – May 2020. The results of this study are that stock trading volume and market capitalization have a significant negative effect on stock returns.

Our Contribution

This research was conducted with the hope of providing the following benefits: (1) Through this research, it is hoped that it can provide benefits and information to the government in dealing with the COVID-19 pandemic, which can affect the economy, especially the stock market. With this research, the government can choose and make appropriate strategies for handling the COVID-19 pandemic to increase and restore investor confidence to continue investing in stocks. (2) This research is expected to provide benefits and information to investors regarding stock returns. The information provided can help investors to see profitable investment opportunities and minimize the risk of loss during the COVID-19 pandemic. (3) Through this research, it is expected to increase knowledge and insight regarding the importance of the influence of the covid-19 pandemic, market capitalization, stock trading volume and large-scale social restrictions on stock returns.

2. BACKGROUND

Stock Return

Hanafi and Halim [11] define return as "change in value between period $t+1$ and period t plus other incomes that occur during the t period." It can be explained that the difference in stock price changes between period $t+1$ and period t can be referred to as stock returns. Returns obtained from investments can be in the form of gains or losses [12]. Jogyanto [13] states that return is the result obtained from investment". Stock return is the rate of return obtained by investors who invest in stocks. Return is one of the factors that motivate investors to invest [14]. Stock returns can be referred to as gains or losses obtained by investors who invest in stocks.

An Overview of Relations between Positive COVID-19 Confirmation Case Growth, Market Capitalization, Trading Volume, and Large-Scale Social Restrictions on Stock Returns

The growth of positive confirmed cases is the increase in the number of people who have tested positive for COVID-19 from day to day. The lack of awareness and cooperation between the community and the government has led to the uncontrolled spread and transmission of the virus so that the number of people infected is increasing. The COVID-19 pandemic not only affects human health, but also has an impact on the economy, especially in the stock market. The company's sustainability in the future is in question because it requires its employees to work from home as a way to prevent the transmission of the covid-19 virus which will affect the company's performance. Also, financial markets tend to react to a new event such as the COVID-19 pandemic that is currently engulfing various countries [15]. The COVID-19 pandemic has made investors worried about the company's sustainability, so they

responded by selling shares. Through the act of selling shares, the stock price can decrease so that the stock return also decreases. The growth of positive confirmation cases can provide a negative signal for investors regarding the small stock returns obtained.

Ha1: The growth of positive confirmation cases has a negative effect on stock returns.

Market capitalization is obtained from the closing price of the shares multiplied by the number of shares outstanding. Large companies can be characterized by a large market capitalization. According to Ibrahim and Bala [16] companies with large market capitalization have a lower risk. It is said that the risk is lower because the company's growth is stable so that it can reduce fluctuations in stock prices which will affect stock returns. Companies with a small market capitalization still have the potential to grow in the future, so the company's condition is unstable so it has a higher risk. It is said that the risk is higher because the company's growth is unstable which can make stock prices fluctuate and will affect stock returns. Market capitalization can provide a negative signal for investors regarding the small stock returns obtained.

Ha2: Market capitalization has a negative effect on stock returns.

Stock trading volume is the number of shares traded in a certain period of time. Large stock trading volume indicates that certain stocks are actively traded and become the target of investors. An increase in stock trading volume indicates an increase in demand for shares by investors so that stock returns also increase [10]. Stock trading volume can provide a positive signal for investors regarding the amount of stock returns obtained.

Ha3: Stock trading volume has a positive effect on stock returns.

In order to prevent the spread of the COVID-19 virus, the Indonesian government has implemented a large-scale social restriction policy. The Indonesian government has not implemented a lockdown like in other countries considering that the economy is also important to maintain during the COVID-19 pandemic. Through the large-scale social restrictions policy, it is expected to be able to restore the economy in Indonesia. The large-scale social restrictions policy can provide a positive signal for investors because this policy can bring positive changes to the stock market. Positive changes in the stock market will affect stock prices so that stock returns will increase.

Ha4: Large-scale social restrictions have a positive effect on stock returns.

Research Model

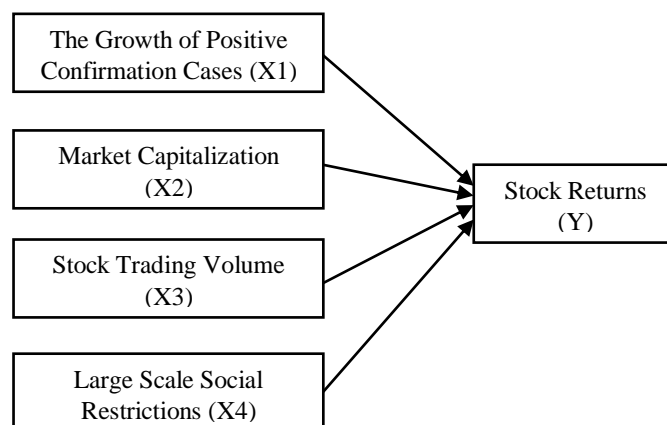


Figure 1 Research Framework

3. RESEARCH METHOD

Population and Sample

The population used in this study were companies in the agricultural sector and property, real estate and building construction sectors listed on the Indonesia Stock Exchange for the period 2 March – 31 December 2020. The sample selection technique used purposive sampling. According to Sekaran and Bougie [17] purposive sampling is a sample selection technique through predetermined criteria. The criteria used are: 1) Agricultural companies, and Property, real estate and building construction companies listed on the Indonesia Stock Exchange in the period 2 March – 31 December 2020; 2) Agricultural companies and Property, real estate and building construction companies that present stock prices, market capitalization and stock trading volumes for the period 2 March – 31 December 2020;

The number of company data in the agricultural sector is 21 companies with a research period from March 2 to December 31, 2020 so that the number of samples used in the study is 4,200 samples. In the property, real estate and building construction sectors, 89 companies used data and only 82 companies met the criteria. The total number of samples used is 16,400 samples with a research period from March 2 to December 31, 2020.

Methodology

The dependent variable is a variable that is influenced by the independent variable. The dependent variable in this study is stock returns. The independent variable is a variable that affects the dependent variable. The independent variables in this study are the growth of positive confirmation cases, market capitalization, stock trading volume and large-scale social restrictions.

The formula used in measuring stock returns is as follows:

$$R_t = \frac{P_{it} - P_{it-1}}{P_{it-1}}$$

The growth of positive confirmed cases can be measured by the following formula:

$$CASE_G_{it} = \frac{CASE_{it} - CASE_{it-1}}{CASE_{it-1}}$$

Market capitalization can be measured by the following formula: *Ln (Market capitalization)*

Stock trading volume can be measured by the following formula: *Ln (Number of Shares Traded)*

Large-scale social restrictions were measured using the following dummy variables: (0=if day t is not the day the large-scale social restrictions is implemented, 1= if day t is the day the large-scale social restrictions is implemented, 2= if day t is the day of implementation of the Transitional large scale social restrictions.

Table 1 Variable Operationalization

Variables	Measurement	Scales
Stock Returns (Y)	$R_t = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}}$	Ratio
The growth of positive confirmed cases (X1)	$CASE_G_{i,t} = \frac{CASE_{i,t} - CASE_{i,t-1}}{CASE_{i,t-1}}$	Ratio
Market capitalization (X2)	<i>Ln (Market capitalization)</i>	Ordinal
Stock trading volume (X3)	<i>Ln (Number of Shares Traded)</i>	Ordinal
Large-scale social restrictions (X4)	Dummy variables: 0 = if day t is not the day the large-scale social restrictions is implemented, 1 = if day t is the day the large-scale social restrictions is implemented, 2= if day t is the day of implementation of the Transitional large scale social restrictions.	Nominal

Estimation Method

Panel data regression will generate a different coefficient intercept and slope for each company and in different time periods. Based on Chow test, Hausman test and Lagrange, and Multiplier test that have been run, this research used the random effect model as its estimation model.

Data Analysis Method

This study uses data analysis method as follow:

Multiple Linear Regression Test

Multiple regression model is a model that has more than one independent variable. Through multiple linear regression test, it can be seen that the coefficient value of each variable is either positive or negative. This study uses multiple linear regression to determine the effect of the growth of positive confirmation cases, market capitalization, stock trading volume and large-scale social restrictions on stock returns. The following is the multiple regression model used in the study:

$$\text{RETURN} = \alpha + \beta_1 \text{COVID-19} + \beta_2 \text{CAPITALIZATION} + \beta_3 \text{VOLUME} + \beta_4 \text{LARGE-SCALE SOCIAL RESTRICTIONS} + \varepsilon$$

4. FINDINGS AND DISCUSSION

Table 2 shows the results of descriptive statistical tests in agriculture.

Table 2 Descriptive Statistics Agriculture Sector

	Return	Covid-19	Capita- lization	Volume	Large Scale Social Restriction
Mean	0.001303	0.047437	27.9319	4.966777	1.445
Median	0	0.016982	28.32978	5.637189	2
Max	0.347222	2.166667	30.79741	9.098029	2
Min	-0.169231	0	25.34963	0	0
Std Dev	0.034414	0.163946	1.458908	2.267176	0.732873
Obs	4200	4200	4200	4200	4200

Based on Table 2, it can be seen that stock returns have a mean value of 0.001303. Stock returns have a maximum value of 0.347222 and have a minimum value of -0.169231.

The growth of positive confirmed cases (covid-19) has a mean value of 0.047437. The growth of positive confirmed cases has a maximum value of 2.166667 and has a minimum value of 0.000000.

Market capitalization has a mean value of 27.93190. Market capitalization has a maximum value of 30.79741 and has a minimum value of 25.34963.

Trading volume has a mean value of 4.966777. Trading volume has a maximum value of 9.098029 and has a minimum value of 0.000000.

Large Scale Social Restriction has a mean value of 1.445000. The Large-Scale Social Restriction has a maximum value of 2.000000 and has a minimum value of 0.000000.

Table 3 Descriptive Statistics Property, Real Estate and Building Construction Sector

	Return	Covid-19	Capita- lization	Volume	Large Scale Social Restriction
Mean	0.000502	0.047437	27.64194	4.254793	1.445
Median	0	0.016982	27.60147	4.587711	2
Max	0,746575	2.166667	32.21127	9.54016	2
Min	-0.345455	0	24.19315	0	0
Std Dev	0.040088	0.163932	1.628528	2.741816	0.732808
Obs	16400	16400	16400	16400	16400

Based on Table 3, it can be seen that stock returns have a mean value of 0.000502. The stock return has a maximum value of 0.746575 and has a minimum value of -0.345455.

The growth of positive confirmed cases (Covid-19) has a mean value of 0.047437. The growth of positive confirmed cases has a maximum value of 2.166667 and has a minimum value of 0.000000.

Market capitalization has a mean value of 27.64194. Market capitalization has a maximum value of 32.21127 and has a minimum value of 24.19315.

Trading volume has a mean value of 4.254793. Trading volume has a maximum value of 9.540160 and has a minimum value of 0.000000.

Large Scale Social Restriction has a mean value of 1.445000. The large-scale social restriction has a maximum value of 2,000000 and has a minimum value of 0.000000.

Regression Result

Based on Table 4, the regression equation in agriculture is formulated as follow:

$$\text{RETURN} = 0.006571 - 0.007504\text{COVID-19} - 0.000410 \text{ CAPITALIZATION} + 0.000873\text{VOLUME} + 0.001529 \text{ LARGE SCALE SOCIAL RESTRICTIONS} + \varepsilon$$

Table 4 Agricultural Sector Multiple Linear Regression Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006571	0.010636	0.617816	0.5367
COVID_19	-0.007504	0.003431	-2.187226	0.0288
Capitalization	-0.000410	0.000393	-1.044784	0.2962
VOLUME	0.000873	0.000255	3.419500	0.0006
Large Scale Social Restrictions	0.001529	0.000775	1.973035	0.0486

The results of the agriculture sector hypothesis test based on Table 4 can be concluded as follows:

The coefficient value of the positive confirmed case growth variable (COVID-19) is -0.007504. The significance level used is 5%. The probability value is 0.0288 (< 0.05), which means that the growth of positive confirmation cases has a significant negative effect on stock returns. So, it can be concluded that Ha1 is accepted.

The market capitalization variable coefficient value is -0.000410. The significance level used is 5%. The probability value is 0.2962 (> 0.05), which means that market capitalization has no significant effect on stock returns. So, it can be concluded that Ha2 is rejected.

The coefficient value of the stock trading volume variable is 0.000873. The significance level used is 5%. The probability value is 0.0006 (< 0.05), which means that the stock trading volume has a significant positive effect on stock returns. So, it can be concluded that Ha3 is accepted.

The coefficient value of the large-scale social restriction variable is 0.001529. The significance level used is 5%. The probability value is 0.0486 (< 0.05), which means that the large-scale social restriction has a significant positive effect on stock returns. So, it can be concluded that Ha4 is accepted.

Table 5 The Result of Hypothesis Testing Agriculture Sector

Hypothesis	Coefficient	Prob	Result
Ha1	-0.007504	0.0288	Ha1 accepted
Ha2	-0.000410	0.2962	Ha2 rejected
Ha3	0.000873	0.0006	Ha3 accepted
Ha4	0.001529	0.0486	Ha4 accepted

Table 6 Property, Real Estate and Building Construction Sector Multiple Linear Regression Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007363	0.005434	1.355009	0.1754
COVID_19	-1.92E-05	0.002035	-0.009452	0.9925
Capitalization	-0.000410	0.000198	-2.069253	0.0385
VOLUME	0.000550	0.000118	4.666798	0.0000
Large Scale Social Restrictions	0.001480	0.000456	3.245077	0.0012

Based on Table 6, the regression equation is formulated as follow:

$$\text{RETURN} = 0.007363 - 0.0000192 \text{ COVID-19} - 0.000410 \text{ CAPITALIZATION} + 0.000550 \text{ VOLUME} + 0.001480 \text{ LARGE-SCALE SOCIAL RESTRICTIONS} + \varepsilon$$

The results of the hypothesis testing of the property, real estate and building construction sectors based on Table 5 can be concluded as follows:

The coefficient value of the positive confirmed case growth variable (COVID-19) is -0.0000192. The significance level used is 5%. The probability value is 0.9925 (> 0.05), which means that the growth of positive confirmation cases has no significant effect on stock returns. So, it can be concluded that Ha1 is rejected.

The market capitalization variable coefficient value is -0.000410. The significance level used is 5%. The probability value is 0.0385 (< 0.05), which means that market capitalization has a significant negative effect on stock returns. So, it can be concluded that Ha2 is accepted.

The coefficient value of the stock trading volume variable is 0.000550. The significance level used is 5%. The probability value is 0.0000 (< 0.05), which means that the stock trading

volume has a significant positive effect on stock returns. So, it can be concluded that Ha3 is accepted.

The coefficient value of the the large-scale social restriction variable is 0.001480. The significance level used is 5%. The probability value is 0.0012 (< 0.05), which means that the large-scale social restriction has a significant positive effect on stock returns. So, it can be concluded that Ha4 is accepted.

Table 7 The Result of Hypothesis Testing Property, Real Estate and Building Construction Sector

Hypothesis	Coefficient	Prob	Result
Ha1	-0.0000192	0.9925	Ha1 rejected
Ha2	-0.000410	0.0385	Ha2 accepted
Ha3	0.000550	0.0000	Ha3 accepted
Ha4	0.001480	0.0012	Ha4 accepted

Determinant Test Result

The value of the coefficient of multiple determination (Adjusted R-squared) in the agricultural sector is 0.005799. These results indicate that the growth variables of positive confirmation cases, market capitalization, stock trading volume and the large-scale social restriction can explain the stock return variable of 0.5799%, while the rest can be explained by other variables.

The value of the coefficient of multiple determination (Adjusted R-squared) in the property, real estate and building construction sectors is 0.001980. These results indicate that the growth variables of positive confirmation cases, market capitalization, stock trading volume and the large-scale social restriction can explain the stock return variable of 0.1980%, while the rest can be explained by other variables.

Discussion

The results of testing the first hypothesis in the agricultural sector show that the growth of positive confirmation cases has a significant negative effect on stock returns. These results are in line with research conducted by Hung et al. [2] and Al-Awadhi and Alhammadi [9] which found that the growth of positive confirmation cases had a significant negative effect on stock returns. Based on signalling theory, the growth of positive confirmation cases can give negative signals to investors regarding the decline in stock returns obtained. This means that the higher the growth of positive confirmation cases, the lower the stock return.

The results of testing the first hypothesis in the property, real estate and building construction sectors show that the growth of positive confirmation cases has no significant effect on stock returns. This result is in line with research by Bahrini and Filfilan [3] which found the growth of positive confirmation cases had no significant effect on stock returns but was not in line

with research by Hung et al. [2] and Al-Awadhi and Alhammad [9] which found that the growth of positive confirmation cases had a significant negative effect on stock returns. Based on the signal theory, the growth of positive confirmation cases in the property, real estate and building construction sectors cannot provide a signal to investors regarding stock returns. This is because in the digital era like now, people can use social media to find information in the property sector, so the COVID-19 pandemic condition will not hinder people who have needs in the property sector such as houses.

The results of testing the second hypothesis in the property, real estate and building construction sectors show that market capitalization has a significant negative effect on stock returns. These results are in line with research conducted by Hung et al. [2] and Al-Awadhi and Alhammad [9] which found that market capitalization has a significant negative effect on stock returns. Based on signal theory, market capitalization can provide a negative signal for investors regarding the decline in stock returns. This means that companies with large market capitalization will decrease the resulting stock returns. Companies with large capitalization have lower risk, have experience and stable growth so that stock prices tend to be stable and the resulting stock returns are also stable.

The results of testing the second hypothesis in the agricultural sector show that market capitalization has no significant negative effect on stock returns. This result is in line with research by Taslim and Wijayanto [18] which found that market capitalization does not have a significant negative effect on stock returns but is not in line with research by Hung et al. [2] and Al-Awadhi and Alhammad [9] which found that market capitalization has a significant negative effect on stock returns. Based on signal theory, market capitalization cannot provide a signal for investors regarding the stock returns obtained.

The results of testing the third hypothesis in the agricultural sector as well as property, real estate and building construction indicate that stock trading volume has a significant positive effect on stock returns. These results are in line with research conducted by Karwitha et al. [5] which found that stock trading volume has a significant positive effect on stock returns. Based on signal theory, stock trading volume can provide a positive signal for investors regarding the increase in stock returns obtained. This means that the greater the volume of stock trading, the greater the stock return.

The results of testing the fourth hypothesis in the agricultural sector as well as property, real estate and building construction indicate that large-scale social restrictions have a significant positive effect on stock returns. These results are in line with the research conducted by Hung et al. [2] and Nguyen et al. [4] which found that the lockdown had a significant positive effect on stock returns. This means that the large-scale social restriction policy that is successfully implemented will increase stock returns. Based on the signal theory, large scale social restriction can provide a positive signal for investors regarding the increase in stock returns obtained. The efforts made by the Indonesian government regarding the implementation of the large-scale social restriction policy have increased investor confidence. Through these tangible results, investors are no longer worried about economic conditions that will affect the stock returns obtained.

5. CONCLUSION

The growth of positive confirmed cases has a significant negative effect on the agricultural sector. Indonesia is an agricultural country where most of the population works as farmers.

People who work as farmers are usually relatively old, so that in conditions of the COVID-19 pandemic, parents are vulnerable to being infected with the Covid-19 virus. If the farmers are infected with COVID-19, then the impact will be on food production. The food production process that is not smooth will affect the company's performance. Declining company performance can make investors worry about declining stock prices resulting in a decrease in stock returns. Meanwhile, in the property, real estate and building construction sectors, it was found that there was no significant effect between the growth of positive confirmation cases and stock returns. This is because the public can seek information related to their needs in the property sector by utilizing social media without having to meet face-to-face with property owners to avoid the transmission of the COVID-19 virus.

Market capitalization has a significant negative effect on stock returns in the property, real estate and building construction sectors. Companies with large market capitalization have a lower risk because the company's condition is stable. Stock prices will not experience significant changes so that stock returns are also stable.

Stock trading volume has a significant positive effect on stock returns. This is because the large stock trading volume indicates that the stock is in demand and targeted by investors. Because the stock is actively traded, it will increase the stock price which will increase the stock return obtained.

Large-scale social restrictions have a significant positive effect on stock returns. This positive influence shows that the large-scale social restriction policy is successful and effective in responding to the COVID-19 pandemic. The successful implementation of the large-scale social restriction policy has increased investor confidence. So, investors will not sell their shares so that stock returns will not decrease.

The limitation of this study is the research sample used only in 2020. The sector used in this study is limited to the agricultural sector as well as property, real estate and building construction. The independent variables used are only limited to the growth of positive confirmation cases, market capitalization, stock trading volume and large-scale social restrictions.

Based on the limitations that exist in the study, the researchers provide suggestions for further research. The first suggestion is to add sectors other than the agriculture sector and the property sector, real estate and building construction, so that the results of the research can assist investors in seeing investment opportunities during the COVID-19 pandemic for all companies in Indonesia such as the manufacturing sector, the consumer goods industry sector and the infrastructure sector, utilities and transportation. The second suggestion is to increase the research period of more than one year, so that companies can make various efforts and implement strategies to maintain trading volume and stock prices during the covid-19 pandemic that affects stock returns and for investors to know the condition of the company in the long term before making decisions. investment. The third suggestion is to add other independent variables that are not used in this study such as stock trading frequency, return on assets, price to book value and debt to equity ratio with the aim of knowing how the influence of other independent variables on stock returns. The variables of stock trading frequency, return on assets, price to book value and debt to equity ratio can be used as consideration for investors before making investment decisions in stocks.

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