

# **The Impact of COVID-19 Pandemic Information on Sectoral Stock Performance during Lockdown and New-Normal: An Evidence from Indonesia Stock Exchange**

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## **ABSTRACT**

The Indonesian economy has weakened in every sector since pandemic Covid-19. The study investigates how the stock return in the impacted and unimpacted industry reacts to death and cases information about Covid-19. Based on previous studies, behavioral changes also occur in society. Changes in consumption of mass products and also the behavior of fast-food products move in opposite directions. In addition, changes also occur in employee performance due to limitations related to activities. In addition, this study also considers the response from the Indonesian government regarding changes in people's behavior and the increase in cases related to Covid-19. The Indonesian government, in this case, implemented several policies as a response to the incident where the Indonesian government finally imposed restrictions on social activities followed by a transition period to maintain the economic cycle in Indonesia. This study shows that in both the impacted and unimpacted industries and the lockdown period and the new-normal period in the Indonesian version, information related to the Covid-19 case significantly negatively affected stock returns, while information on deaths due to Covid-19 has a negative effect that is not significant. This result suggests the practitioner considers which other information affects investment decision during the Pandemic in the future.

**Keywords:** Covid-19, Death, Pandemic, Sectoral, Stock return

**JEL Classification Codes:** G01, G10, G14, C23

## **INTRODUCTION**

Investment can be considered one of how individuals and organizations can increase or maintain their assets' value. There are several investment options or alternatives currently available in Indonesia, including investments in tangible fixed assets such as houses, land, or other properties that can increase value in the future where investment decisions are usually determined by attitudes or responses to events that have a financial impact on a company (Astuti et al., 2019). In addition to investing in physical assets, there is also an option to invest in securities (securities) traded in the Capital Market. Along with the pandemic caused by the Covid-19 case, the ability to maintain asset values and increase asset values is increasingly essential to maintain economic stability both individually and as an organization. One of the common choices for investment choices today is investing by buying and selling shares in the capital market, which is the capital market.

More profoundly, based on changes in people's behavior during the Covid-19 period in spending their money, several industrial sectors have experienced a sharp decline, including the tourism sector and the food and drink supply sector or restaurants that occurred due to government regulations through local governments which prohibit services to consumers to consume these food and beverage products

on the spot (Anh & Gan, 2020). On the other hand, the public's response to the announcement of these regulations as a result of the Covid-19 has a significant impact. There were purchases of household consumer goods on a large scale as a form of public anticipation of the long-term risks due to the impact of Covid-19 (Hall, Prayag, Fieger & Dyason, 2020). The impact of a crisis is not bound by time and place, including in the case of Covid-19, the shift in consumer behavior is often also called "panic buying" and "Hoarding" (Hall, Prayag, Fieger & Dyason, 2020). Changes in consumer behavior result from an increase in the need for certain goods where there is a limited supply of these goods so that people try to get these goods as quickly as possible (Sharma et al., 2021). In addition to these behavioral changes, other changes in people's consumption behavior also occurred where some people who previously preferred to eat at restaurants now prefer to eat food at home and cook the dishes themselves for health reasons. In other words, changes in consumption patterns should positively impact the raw material industry sector for household consumption or what is often known as consumer goods. However, some big consumer goods company adjusted they global strategy based on that reasons (Nair, Reddy, Verma & Pandey, 2021).

With this positive impact, it can be estimated that the increase in consumption of consumer goods has a positive impact on the financial performance of companies in the industrial sector. In addition to food and beverage consumption patterns currently carried out at home, the consumer goods sector is also supported by other household products such as disinfectants, whose consumption is increasing due to increasing public health and hygiene. indifference, the fast-moving food chain is one of the industries that affected by this change of behavior (Mui, Kee, Toh, Chong & Teng, 2021), where in normal circumstances, the factors that influence consumer behavior include price, convenience, taste, and nutrition (Chaurasiya et al., 2020). Concerning stock trading activities in the Indonesian Capital Market, it is common knowledge that the behavior of capital market investors in Indonesia is divided into long-term and short-term investors, where short-term investors are often referred to as traders. As we know, these traders prioritize technical analysis and market sentiment in their decision to buy or sell their stock portfolio in the capital market.

However, Indonesia is a developing economy with a fast-growing stock market that is also impacted by pandemic Covid-19. The phenomenon of Covid-19, which has become a pandemic, has had a significant effect on human patterns and behavior regarding trade, consumption, and investment. According to statistical data released by John Hopkins University on June 5, 2020, 6 million people have been infected, and 380 thousand of them have died. Global GDP by 3%, while according to the World Trade Organization, trade can decline as deep as 32%. These kinds of indicators can be used as benchmarks or see the movement of the stock index (Çelik et al., 2018). This condition provides a negative assumption among investors in the capital market, which shows an exact decline in investment rates in the sale of investment assets to be converted into cash, significantly impacting economic growth (He, Sun, Zhang & Li, 2020).

The contagious and deadly Covid-19 virus that emerged at the end of 2019 had a severe impact on the global economy, causing the affected countries to impose social restrictions on at least a third of the world's population (Anh & Gan, 2020). Based on changes in people's behavior during the Covid-19 period of spending money at this time. Various industrial sectors encountered a sharp decline, including the tourism sector and the food and drink supply or restaurant sector that arose due to government regulations (Anh & Gan, 2020). There were purchases of household consumption goods on a large scale as a form of public anticipation of the long-term risks due to the impact of Covid-19. The impact of a crisis is not bound by time and

place, including in the case of Covid-19, this shift in consumer behavior that is referred to as "panic buying" and "hoarding" (Hall, Prayag, Fieger & Dyason, 2020) and due to respond to that, the employee performance also affected (Bahagia & Putri, 2021). However, there are still some areas that continue to make rational purchases according to several studies related to panic buying due to the COVID-19 pandemic (Turambi & Wuryaningrat, 2020).

Nevertheless, A significant impact reflects the public response due to the announcement of these regulations related to Covid-19. The Indonesian government strives to maintain the country's economic turnover by imposing a transitional PSBB or what is often referred to as the New-Normal. New-Normal itself can be interpreted as a change in behavior, namely by behaving normally as before the Covid-19 case but maintaining health protocols according to the prevailing regulations (Winata, Fadelina & Basuki, 2020). In addition, fast food companies are trying to improve their services during the pandemic by providing the best service in accordance with the applicable health protocol. this is naturally done because customer satisfaction with the services provided is the key to the success of the fast food business (Husna et al., 2020). In addition to the food business sector, the tourism business sector is also one of the business sectors that have a major impact. In increasing its business during this pandemic, the tourism sector is trying hard to focus its budget on promotions in order to attract customers to come to their business as they used to do even before the pandemic (Wong et al., n.d.).

Moreover, the number of shares listed on the Indonesian stock market has increased by 772 in 2021 (Indonesia Stock Exchange, 2021). The Indonesian government focused on increasing the Indonesian stock market from frontier markets to developing markets to attract more foreign capital. Indonesia continues to improve its legal framework, offer new securities products, and improve the market environment to achieve market enhancement. As a result, the stock market has grown significantly in the last five years by making several significant breakthroughs, including the positive LQ-45 futures stock return in 2015, the establishment of an Indonesian securities control company (PEI) in 2016, installed by IDX incubator at years and relax the margins in 2017, and other renewal systems such as T + 2 in 2018 and beyond (Indonesia Stock Exchange, 2020).

However, the market experiences shock due to panic and significant economic uncertainty globally, and there are conditions in various economic sectors because some sectors are more affected than others (Alaoui Mdaghri, Raghibi, Thanh, & Oubdi, 2020). In the early days of the Pandemic, investment in the capital market did not appear to be the choice for investment. This condition was reflected in the significant reduction in the number of transactions during the Pandemic. As we know, the intensity of transactions, especially the demand for certain goods in a market, can be a determining factor for these products to experience an increase in price due to high market demand in that market. When facing a change in economic conditions, the behavior of companies in the same industry is closely related (He, Sun, Zhang & Li, 2020).

Furthermore, psychology can be a significant factor in the capital market (He, Sun, Zhang & Li, 2020). It can be concluded that Covid-19 has an impact on companies or issuers and impacts market behavior which is reflected in changes in stock prices in the capital market as a whole (He, Sun, Zhang & Li, 2020). This the research will show how the response to market sentiment, in this case, the Indonesia Stock Exchange, for information related to the growth of cases and deaths related to Covid-19 amid appeals or announcements issued by the government officially,

where these announcements can be a positive sentiment. By a particular industry or vice versa.

Financial literature has always been interested in the economic impact of various outbreaks, liquidity, and risk in the capital market during the financial crisis (Dang & Nguyen, 2020). Regarding Covid-19, stock market reaction to Covid-19 (Al-Qudah & Houcine, 2021), stock market liquidity in the lockdown in the Covid-19 global pandemic nexus in MENA countries also has been examined (Alaoui Mdaghri, Raghibi, Thanh, & Oubdi, 2020). More specifically, death cases from Covid-19 to stock return (Al-Awadhi, Alsaifi, Al-Awadhi, & Alhammadi, 2020), about Covid-19 cases in lockdown period to stock return also have been examined (Anh & Gan, 2020).

The Pandemic has had a significant impact on economic activities and has become a threat to the global financial market. Stock market return responds to a significant event (Al-Awadhi, Alsaifi, Al-Awadhi, & Alhammadi, 2020). Research about the liquidity of the stock market response to Covid-19 cases in MENA Countries has resulted in the global pandemic decreasing stock market liquidity (Alaoui Mdaghri, Raghibi, Thanh & Oubdi, 2020). By the end of March 2020, partial or complete lockdowns have been implemented in most countries worldwide. The Covid-19 outbreak has significant adverse effects on the primary stock index performance in the highest confirmed cases in six WHO regions, and the stock market reacts negatively to the increase in confirmed cases of Covid-19 (Al-Qudah & Houcine, 2021).

The Covid-19 outbreak also affected investment and business in China. As stated, the cases started in December 2019, and since then, the number of cases confirmed has been published daily. Research about death and contagious infectious Covid-19 virus on the stock market in China has resulted in a significant negative effect of both measurements on Stock across all companies included in the Hang Seng and Shanghai Stock Exchange (Al-Awadhi, Alsaifi, Al-Awadhi, & Alhammadi, 2020) but insignificant negative in Ghana (Insaiddoo et al., 2021). Vietnam has successfully responded to the Covid-19 Pandemic and rapidly developing its economy that controlled the Pandemic with a rejuvenated stock market strategy during lockdown became a great example to other countries since Vietnam's government has focused on promoting the Vietnam stock market. Research about the impact of Covid-19 on stock return in Vietnam during lockdown and pre-lockdown has negatively impacted (Anh & Gan, 2020).

New Normal is a new healthy habit for a healthy life (Winata, Fadelina & Basuki, 2020). New normal developed the most used expression since the spread of the Pandemic (Alraouf, 2021). In China, the new-normal period is a hope for the country to develop financially and economically, but the trend and change show a different result. Revenue growth experiences a sharp downward trend, and the government budget changes from surplus to short of revenue (Gao & Zhen, 2018).

While the global stock market responds to pandemic Covid-19, the Indonesian Stock Market has a specific linkage to international stock price. Research about the international stock price to Indonesia Stock Market during pre-crisis and post-crisis period results shows that the Indonesian market becomes more responsive to developed markets during the post-crisis period. Some company even doing undeclared performance to get financial support (Williams & Kayaoglu, 2020). Another study documented that an overreaction anomaly was present in the entire sector in Indonesia. However, the underreaction anomaly was not present only in the essential and chemical sectors. In China, a study about the impact of Covid-19 on the stock market across the different sectors has resulted in transportation,



mining, electricity, and environment industries significantly impacted by the Pandemic. However, the manufacturing, information, technology, education, and healthcare industries have been resilient to the Pandemic.

Despite substantial research on the impact of various outbreaks in the stock market, the effect of covid-19 is the common interest. This paper explores how Indonesia's stock market responds to Covid-19 information about confirmed and death cases during the lockdown and new-normal. The aim is to examine how investor sentiment during the Pandemic influences the stock market behavior in Indonesia during the lockdown and new-normal, which have yet to be investigated.

## **RESEARCH METHOD**

This study examines the effects of cases and death information regarding the COVID-19 Pandemic in the lockdown and New-Normal on daily stock returns of 691 listed firms on Indonesia's stock market that shorted to 89 listed firms that actively traded during the lockdown and the New-Normal periods as the sample by using a purposive sampling method. The daily stock data starts from April 10 2020, and the end date was July 24 2020, where data that has different conditions like this is expected to describe stock movements (Balke & Wohar, 2006). The stock prices and firm-specific data are from yahoo finance. Indonesia's daily number of confirmed cases was from the Indonesia Ministry of Health's website for the COVID-19 update. In total, there are 5,841 observations in the study.

Previous studies investigating the impact of the COVID-19 Pandemic on international stock market returns explain that the pandemic peak was not the start date. The disease outbreak lasted for a more extended period than any specific point in time (Al-Awadhi, Alsaifi, Al-Awadhi, & Alhammadi, 2020) and (Anh & Gan, 2020). This study adopts the panel-data regression approach, which is more suitable than classical event-study methods in empirical analysis.

The panel-data regression method can identify time-variant associations between dependent and explanatory variables and minimize the problems of estimation biases, multicollinearity, and individual heterogeneity (Anh & Gan, 2020). This study uses the regression models to evaluate the daily increase in confirmed COVID-19 cases in Indonesia's daily stock returns. The models' independent variables include daily market capitalization, market-to-book ratio, return on equity that significantly affects stock returns (Al-Awadhi, Alsaifi, Al-Awadhi, & Alhammadi, 2020; Anh & Gan, 2020).

This study generates two dummy variables in point of view of time: BF\_LOCK, which is the period during lockdown (April 10 to June 4 2020) and LOCK, which is the New-Normal period (June 5 to July 24 2020) with the same amount of daily trading days as the lockdown period for the regression analysis. Furthermore, this study generates two dummy variables in point of view of sectoral company: Impacted, which is the categorized company that got impacted by pandemic based on a previous study (mining, miscellaneous, consumer, infrastructure, and finance) and Unimpacted, which are the rest of the sectoral company that not included in impacted dummy variable. This study also uses control variables that are used to see more clearly the impact between independent and dependent variables which include market capitalization, market to book ratio, and also return on equity ratio which is also commonly used to see company profitability (Abas et al., 2020), It is hoped that these financial ratios can help describe stock movements (Dima et al., 2013). The panel-data regression models are:

$Y_{it} = \alpha + \beta_1 GCASE_{it-1} + \beta_2 MCAP_{it-1} + \beta_3 MTB_{it-1} + \beta_4 ROE_{it-1} + \beta_5 bf\_lock_{it} + \beta_6 Impacted_{it} + e$
$Y_{it} = \alpha + \beta_1 GCASE_{it-1} + \beta_2 MCAP_{it-1} + \beta_3 MTB_{it-1} + \beta_4 ROE_{it-1} + \beta_5 bf\_lock_{it} + \beta_6 Unimpacted_{it} + e$
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$Y_{it} = \alpha + \beta_1 GDEATH_{it-1} + \beta_2 MCAP_{it-1} + \beta_3 MTB_{it-1} + \beta_4 ROE_{it-1} + \beta_5 bf\_lock_{it} + \beta_6 Impacted_{it} + e$
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$Y_{it} = \alpha + \beta_1 GDEATH_{it-1} + \beta_2 MCAP_{it-1} + \beta_3 MTB_{it-1} + \beta_4 ROE_{it-1} + \beta_5 lock_{it} + \beta_6 Unimpacted_{it} + e$

**Where:**

Y	: Return on Stock <i>i</i> on day <i>t</i>
$\alpha$	: Constant
$\beta_1$ -3	: The regression coefficient of each independent variable
C19P	: The development of total positive cases of Covid-19 in Indonesia on day <i>t</i>
C19M	: The development of the total cases of Covid-19 deaths in Indonesia on day <i>t</i>
MCAP	: Market Capitalization of company <i>i</i> on day <i>t</i>
MTB	: Market-to-book-ratio of company <i>i</i> on day <i>t</i>
ROE	: Return on Equity of company <i>i</i> on day <i>t</i>
bf_lock	: dummy variable <i>i</i> on day <i>t</i> lockdown
lock	: dummy variable <i>i</i> on day <i>t</i> New-Normal
Impacted	: dummy variable <i>i</i> sectors affected on the day <i>t</i>
Unimpacted	: dummy variable <i>i</i> sector not affected on day <i>t</i>
e	: Confounding variables

This study adopts the random-effects estimation for panel-data regression models. Random-effects estimation is more advantageous than the fixed-effects model on Monte Carlo simulation results and the random-effects estimation's ability to deal with time-invariant independent variables in the models (Anh & Gan, 2020).

Based on panels above, it shows that this study considered three main differences in every panel, which are independent variable (growth case and growth death), time (during the lockdown and new-normal), and also sectoral company (impacted sectoral companies and unimpacted sectoral companies) which created panels that different from each other. Moreover, for better understanding about this. The main differences in every single panel can be shown in table 1.

**Table 1. Main differences in each panel**

Panel	Independent Variable (X)	Time (t)	Sectoral Company (i)
1	Growth Case	Lockdown	Impacted
2	Growth Case	Lockdown	Unimpacted
3	Growth Case	New-Normal	Impacted

4	Growth Case	New-Normal	Unimpacted
5	Growth Death	Lockdown	Impacted
6	Growth Death	Lockdown	Unimpacted
7	Growth Death	New-Normal	Impacted
8	Growth Death	New-Normal	Unimpacted

## RESULTS AND DISCUSSION

This study uses the panel data regression method in 98 days starting from April 10, 2020, to July 24, 2020. The data used in this study are daily data from all research variables. Following are the results of descriptive statistical analysis for these factors on company stock returns

**Table 2. Descriptive Statistics Example (N =6141)**

Construct	Min.	Max.	M.	SD.
Stock Return	-9.900.000	25.00000	0.250014	3.711155
Growth Case	1.660490	7.451073	3.105035	1.378117
Growth Death	0.917431	13.07190	2.377099	1.686806
Market Capitalization	22.85172	34.25994	30.04063	2.084769
Market to Book	0.146938	135.8773	3.848818	10.21722
Return on Equity	1.000000	9.000000	5.044944	2.561415

*Note.* M = Mean, SD = Standard Deviation.

The descriptive statistical results table 1. above shows that the number of observations in this observation is 150 data. The following is an explanation of the results of data processing for descriptive statistical analysis:

1. The variable Growth Case has a maximum value of 7.451073, a minimum value of 1.660490. The average value (mean) is 3.105035, and the standard deviation is 1.378117 with a total of 6141 data (N) observations.
2. The variable Growth Death has a maximum value of 13.07190, a minimum value of 0.917431. The average value (mean) was 2.377099, and the standard deviation was 1.686806 with a total of 6141 data (N) observations.
3. The Market capitalization variable has a maximum value of 34,25994 and a minimum of 22.85172. The average value (mean) is 30.04063, and the standard deviation is 2.084769 with a total of 6141 data (N) observations.
4. The MTB or Market to Book variable has a maximum value of 135.8773 and a minimum of 0.146938. The average value (mean) is 3.848818, and the standard deviation is 10.21722 with a total of 6141 data (N) observations.
5. The ROE or Return on Equity variable has a maximum value of 9 and a minimum value of 1. The average value (mean) is 5.044944 and the standard deviation is 2.561415 with a total of 6141 data (N) observations.

The following is a table that shows the results of testing the hypothesis from each research panel. Testing was carried out using the Eviews 11 software, where the researcher provided different dummy variables in each panel, which included:

**Table 3. Regression result in each panel**

<b>Constructs</b>	<b>Prob (F-stat)</b>	<b>Prob (t-test)</b>	<b>Coefficient</b>	<b>R-Squared</b>
X on Panel 1	0.000000***	0.0000***	-0.303535	0.014874
X on Panel 2	0.000000***	0.0000***	-0.303495	0.014881
X on Panel 3	0.000000***	0.0000***	-0.303535	0.014874
X on Panel 4	0.000000***	0.0000***	-0.303495	0.014881
X on Panel 5	0.000006***	0.7743	-0.010882	0.005576
X on Panel 6	0.000006***	0.7741	-0.010890	0.005585
X on Panel 7	0.000006***	0.7743	-0.010882	0.005576
X on Panel 8	0.000006***	0.7741	-0.010890	0.005585

Note. level of significance = \*) 10%, \*\*)5%, \*\*\*)1%

Based on the panel regression table above, we can analyse the three hypothesis tests that have been previously described, where the researcher will discuss one by one for each panel. In the F test on all panels, the p-value for the F test is lower than the significant level value (p-value < significant level), where the p-value for all panels is 0.0000 in panel one to four and 0.00006 in panel five to eight. Based on these results, it can be concluded that the independent variables together with the control variables in each panel show a very significant value. It means that it has a significant influence on the independent variables, case growth and death growth in each time classification, both during the lockdown and New-normal periods and both in the industry classified as affected or not affected.

Different from the F test, in the t-test in this study, it was found that not all panels produced significant values. A significant value of 0.000 was only found in panels 1 to 4, and panels 5 to 8 produced an insignificant t-test number. This result illustrates that only the independent variable of case growth related to Covid-19 affects stock returns for both affected and unaffected industries. Besides that, it also illustrates that both in lockdown and new-normal conditions, case growth shows significant results where non-significant results are shown by death growth. This study result is contrary to the results of previous studies related to the effect of the growth in cases of deaths due to Covid-19, which is calculated daily, which has a significant negative impact on stock returns in China. wherein this study both case growth due to covid-19 and deaths due to covid-19 gave the same result, which was a significant negative on stock returns (Al-Awadhi, Alsaifi, Al-Awadhi, & Alhammedi, 2020).

Regarding the regression results from the panel using the independent variable case growth, the results align with previous studies where the research was conducted in China (Al-Awadhi, Alsaifi, Al-Awadhi, & Alhammedi, 2020) and Vietnam (Anh & Gan, 2020). In this study, both China and Vietnam produced significantly negative results, which means that the higher the growth of cases affected by COVID-19, the lower the stock returns significantly. Based on the value of the coefficient in the table above, it can be seen that all coefficients produce negative numbers. These negative numbers show that the relationship between the independent variables, both case growth and death growth, has the opposite effect on the dependent variable: stock returns.



Furthermore, if we look at the adjusted R Squared side, we will find that all the values in table 3 show insignificant results in each panel. This result is possible because the data processed is daily data that has a high fluctuating level. The researcher tries to see the level of significance of each industry separately. The results of the regression in each industry will be seen in the following table:

**Table 4. Regression result in each sector**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Growth Case	-0.327044	0.057510	-5.686.713	0.0000
Growth Death	0.147344	0.040438	3.643.710	0.0003
Market Capitalization	0.017848	0.023824	0.749142	0.4538
Market to Book Ratio	-0.006735	0.005762	-1.168.941	0.2425
Return on Equity Ratio	-0.001685	0.097925	-0.017204	0.9863
D_BASIC_CHEMICAL	0.438073	0.317691	1.378.928	0.1680
D_CONSUMER_GOODS	0.071724	0.212889	0.336905	0.7362
D_FINANCE	0.057634	0.362468	0.159005	0.8737
D_IMPACTED	0.005762	0.087139	0.066121	0.9473
D_INFRASTRUCTURE	0.276976	0.293008	0.945287	0.3445
D_MINING	0.031275	0.355109	0.088071	0.9298
D_PROPERTY	0.008730	0.263044	0.033189	0.9735
D_TRADE	0.070950	0.452391	0.156833	0.8754
D_AGRICULTURE	0.135191	0.447816	0.301890	0.7627

Note. level of significance = \*) 10%, \*\*)5%, \*\*\*)1%

In table 4 above, we can see that there is no single sector that has a significant influence. It illustrates that each sector is not affected individually due to the cases studied, both related to death and related to Covid-19 infection daily. In this case, it can be seen that the industry is influential when viewed together. This result can also be seen in the regression results in each panel where of the three primary metrics that differentiate between each panel, namely the independent variable, time dummy variable, and sector dummy variable, only the independent variable gives the regression results that differentiate between 1 panel and other panels.

The impact of case related to COVID-19 was also carried out by several other researchers in China and Vietnam, were in these studies produced the same results from one another, namely significant negative results on stock returns based on both the development of the number of infected cases and daily death. This study also tries to see which sectors are most affected by the Covid-19 cases in Indonesia. Meanwhile, after testing based on the entry of each sector, it is seen that the regression figures show that there is no single sector that is significantly affected due to information related to COVID-19, both information on deaths and infected cases. This result is possible because all sectors in Indonesia move together, showing that most Indonesian stock market investors do not conduct industry analyses separately related to the Covid-19 case. Capital market players see the impact of this case as a whole so that the movement of buying and selling shares on the capital market in Indonesia tends to be uniform across sectors.

The uniformity of market behavior occurs in the period studied, which is during lockdown and New-Normal. This study found that in both the lockdown period and the New-Normal period, there was no significant difference between the two related to the effect of daily infected cases and deaths from COVID-19. This result is clearly seen in the results of the previous regression, where the results show that the most influential factor differentiating between the panels being studied is the factor of

cases of COVID-19 infected on a daily basis. This result is possible because the lockdown period in Indonesia is concise and not carried out in total compared to other countries. The increasing number of cases and deaths is not balanced with increasing and tightening activities in the public sphere. Even as the number of cases increases, New Normal is applied.

The government most likely does this to maintain economic movements that are too affected by the impact of contracting COVID-19. The government is trying to take countermeasures that do not entirely shut down economic activity so that in a relatively short period of time the implementation of the lockdown is changed to a new normal. The implementation of the New Normal in Indonesia is also often referred to as a transition-lockdown, which is where some activities are limited, and others are allowed on condition that the health protocol is implemented. This strategy provided a good enough breath for the sectors to resume operations after not running during the lockdown, but as a result, cases related to COVID-19 continued to increase.

In addition, all of the test results in table 4 show that each sector has the same direction, which means that the direction of the response of each sector to both cases of COVID-19 and deaths from COVID-19 is the same. The regression results show different results from previous research conducted in Vietnam and China, wherein there are always sectors that are more affected than other sectors in each of these studies. In research in Vietnam, the financial sector is the sector most affected, while in research in China, almost all sectors are separately affected by the Covid-19 case, where each sector provides a different response direction.

## **CONCLUSIONS**

This study examines the effect of COVID-19 during the lockdown and New-Normal periods on daily stock returns of 89 selected companies that have the largest market capitalization in each sector listed on the Indonesian stock market from April 10 2020, to July 24, 2020. Using the model research method panel data regression confirms that the daily growth in the number of confirmed COVID-19 cases has a significant negative impact on stock returns both during the lockdown and New-Normal periods and in both affected and non-affected industries. Nevertheless, on the other hand, related to cases of growth in deaths due to Covid-19, it has a negative effect on stock returns but is not of significant value where this is possible because information related to daily death cases is not always available and exists every day.

### **Limitation**

This study result can contribute to the economic research as general finance, financial crisis, and behavioral finance due to pandemics. As a result, this study can also help the investor make better decision-making in the pandemic era. Nevertheless, there are several limitations in this very study. Following other studies in other countries, the same pattern may occur in the future when the Indonesian government enforces the same level of regulation and strictness. In other words, when the situation in the country studied has a different lockdown policy, the results of this study cannot be used as a benchmark

### **Further Research**

The findings in this research can be a piece of additional information and illustration for both investors and regulators to make better decision-making and policies related to significant phenomena in the market for the period in the future. However, there are some implications of the research. Based on the analysis above, there are several suggestions for improvements such as:

- Further research could be considered to study some country that has a similar condition and applied similar government respond to Indonesia government at the same time
- Further research could be considered other variables that can impact company financial performance than the variable that studies in this result.
- Further research could be considered by applying variations of the period such as time-frame before, during, and after the Covid-19 pandemic outbreak to find out the profound impact on the stock market in Indonesia;
- Further research can add more supporting variables to obtain more substantial results, such as variables that can affect the stock market in macroeconomic instruments to be more accurate.

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