Stock return during Pandemic Covid 19: a comparison between Indonesia and Singapore stock market

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Abstract
The purpose of this study is to provide an overview of the stock market conditions of IDX and SGX due to the influence of COVID 19. Through a regression analysis study method to see the condition of stock returns on companies in IDX and SGX. These two countries were taken as the focus of the study considering the closeness of business relationships and the highest number of COVID 19 cases in the Southeast Asia Region. The researcher concludes that the IDX is more sensitive to the increase confirmed case of COVID 19 and the SGX is more sensitive to the increase deaths cases of COVID 19. The conclusion of this study is that the threat of COVID 19 will have a different effect on investor behavior in each country, this could be due to the influence of differences between cultural values and characteristics. Like other studies, this study also has limitations that have not carried out a fixed effect on the two countries and recommendations to increase the number of samples from other ASEAN countries to make results that can be generalized in ASEAN.

Keywords: Stock return, COVID 19, behavior

Introduction
From year to year the motivation for investing in shares in the capital market by the public is getting higher (Idris, 2021). Where Stock Return is the motivation of investors to invest in shares and at the same time is a form of reward for bold decisions in taking investment risks (Widayanti & Colline, 2017). However, in general, market conditions greatly affect stock returns. We can know from previous researchers, such as researchers with data collection from news to examine the impact of news on stock returns (Li, 2018; Heston and Sinha, 2017), then researchers from collecting data on political announcement events that cause differences in abnormal returns (Saraswati & Mustanda, 2018), researchers of the impact of major natural disasters on stock returns (Bourdeau & Kryzanowski, 2016), Furthermore, the researcher also conducted on the impact of the pandemic such as the impact of the SARS pandemic on the stock market (Nippani & Washer, 2004) and the Effect of the Ebola Pandemic on stock prices (Ichev & Marinč, 2018).
At the end of 2019 the world was shocked by the emergence of cases similar to pneumonia (inflammation of the lungs caused by a virus infection) in Wuhan, China (Lee, 2020). The disease was later named as COVID-19 by the World Health Organization. On January 30, 2020, WHO declared the COVID-19 outbreak in China to be an International Public Health Emergency associated with high risk for countries with weak health systems (World Health Organization, 2020). Then on January 23, 2020, the Government of Singapore announced the first confirmed case of COVID-19 which was also the first case outside of China (Das & Zhang, 2021) and on March 2, 2020 the Indonesian government also announced the COVID-19 pandemic with the first 2 positive cases in Indonesia (Hanum & Humaniora, 2021). The COVID-19 pandemic has hampered the world's economic growth. Based on estimates published in June 2020 by the world bank, this pandemic is expected to cause a 5.2% contraction of global GDP (World Bank, 2020).

Researchers have started researching how the pandemic outbreak affects global economic trends (Fernandes, 2020), and research into specific impacts on the economies of the strongest countries such as the United States of America (Atkenson, 2020) and China (Luo & Tsang, 2020). Then what about the countries in Asia?

Several previous studies explained that the Coronavirus (COVID-19) pandemic had a negative effect on the capital market in all companies (Al-Awadhi et al., 2020) and the asymmetry is caused by the negative impact of uncertainty about the pandemic and uncertainty affecting the stock market (Xu, 2021). The uncertainty of the COVID-19 pandemic will also have side effects that will affect the mood of investors where they will feel panic and doubt in investing (Shu, 2010; Kaplanski and Levy, 2010). The increasing number of COVID-19 cases shows an unfavorable or significant negative sign on the global economy (Jackson et al., 2020) and National (Susilawati et al., 2020).

When Indonesia first declared a confirmed case of COVID-19, there was a decline in stock prices indicative of the average value before being greater than the average value after the event and the transaction volume also showed an unfavorable sign through a significant difference in the increase in sales of company shares after the announcement of the case confirmed (Susilawati et al., 2020). The COVID-19 pandemic also had a significant impact on the weakening of the rupiah exchange rate against foreign currencies, especially the US dollar (Hastuti, 2020). However, according to (Ming et al., 2020) shows that the COVID-19 pandemic has improved air quality, which can help to increase GDP later. According to Salisu and Akanni (2020) build a global fear index and demonstrate its significance in predicting stock returns and improving forecast performance. According to Mnif, Jarboui and Mouakhar (2020) research results prove that COVID-19 has had a positive impact on the

![Figure1. Southeast Asia’s Most Prosperous Countries 2020 from Source: Legatum Institute](image)

This research will focus on Southeast Asian countries, which will be used as comparisons of countries, including: Singapore, which was named the most prosperous country in Southeast Asia and Indonesia, which was named the third most prosperous country in Southeast Asia.
efficiency of the Cryptocurrency market.

Research with 27 companies on the Indonesia Stock Exchange during the period October 2015 – September 2020, did not show a significant negative with a very weak relationship between Monday and Friday effects on stock returns (Rizqi & Ak, 2021). According to Lyke (2019) one of the asset prices that has been most affected by COVID 19 is the exchange rate. Therefore, this study will use two currencies, namely the Rupiah against the United States Dollar and the Singapore Dollar against the United States Dollar as a test sample for whether there is a significant effect on the COVID-19 situation. Gruszczynski (2020) assessed that international trade is also one of the potential victims of the current pandemic. Instead identify and analyze different possible scenarios that this pandemic will lead to. According to research from Barua (2020) as the pandemic affects world trade, it also introduces new patterns of world trade but also affects trade relations and globalization, making some economies winners and some losers.

To investigate stock returns during the Coronavirus pandemic on the Indonesia Stock Exchange – Singapore Stock Market using two measurements: (1) Total positive confirmed cases and (2) Total confirmed deaths (Al-Awadhi et al., 2020), So a hypothesis is formed as follow: H1: Is there a significant negative effect of COVID 19 on Stock Returns?

**Method**

This research uses the type of quantitative research is a process of finding knowledge that uses data in the form of numbers as a tool to analyze information about what you want to know and causal-comparative research which is a type of research that tests a hypothesis about the causal relationship of several variables. The data analysis technique used Multiple Regression, comparative study, and sub sample analysis. This study collects company data from the Indonesia Stock Exchange and Singapore Stock Market for the period January to December 2020. researchers using stata tools as a tool used in data processing. Among them are several independent variable data and control variables collected from various sources as follows:

1. COVID 19 data obtained from the website: Coronavirus Pandemic (COVID-19) - Statistics and Research - Our World in Data access on 21 october 2021
2. Exchange rate is obtained from the middle rate of Bank Indonesia (Bank Indonesia (bi.go.id)) access on 21 october 2021 and the Singapore dollar exchange rate is obtained from Monetary Authority of Singapore - Exchange Rates (mas.gov.sg) access on 21 october 2021
3. Stock Return is obtained from the formula according to Wijaya (2020) is:

\[ r = \frac{P_t - P_{t-1}}{P_{t-1}} \]

Where: \( r \) is return, \( P_t \) is closing value of day \( t \), \( P_{t-1} \) is closing value of day \( t-1 \) (previous day).

**Result and Discussion**

**Descriptive Data**

The definition of descriptive data is an effort to display data so that the data can be presented properly and interpreted easily. In this study, the data used consisted of two independent variables and one dependent variable, namely positive cases of COVID 19 (X1) and cases of death from COVID 19 (X2), and Stock Returns (Y). This study also contains several control variables in the form of trading volume, exchange rate, stock returns one day before (t-1), Monday & Friday. The total of Indonesian and Singaporean Companies are respectively: 248 companies. With a total sample of
Indonesian transactions of 65,535 with data errors of 247. And the total of samples for Singapore transactions of 65,530 with data errors of 243.

The average score of new cases of COVID 19 is 5.8654. The average value of stock returns (Return\(_t\)) is 0.0441 (Table 1). For the average value of new cases of COVID 19 in Singapore is 3.4231 and the average value of stock returns (Return\(_t\)) is 0.0025 (Table 2).

Table 1. Descriptive Data of the Indonesia Stock Exchange

| Variable            | Obs  | Mean  | Min   | Max   | Std.Dev |
|---------------------|------|-------|-------|-------|---------|
| Return\(_t\)        | 65.535 | 0.0441 | -1,0000 | 140,1200 | 1,7216   |
| New_Case\(_{t-1}\)  | 65.288 | 5.8654 | 0,0000 | 8,9750 | 3,0743   |
| New_Death\(_{t-1}\) | 65.288 | 3.1976 | 0,0000 | 5,4848 | 1,8336   |
| Volume_Trading\(_{t-1}\) | 65.288 | 8.4456 | 0,0000 | 18,9356 | 6,2724   |
| Return\(_{t-1}\)   | 65.288 | 0,0007 | -0,0833 | 0,1739 | 0,0345   |
| Exchange_Rate\(_{t-1}\) | 65.288 | 9.1115 | 0,0000 | 9,7145 | 2,0795   |
| Monday\(_t\)       | 65.288 | 0,1993 | 0,0000 | 1,0000 | 0,3995   |
| Friday\(_t\)       | 65.288 | 0,1991 | 0,0000 | 1,0000 | 0,3993   |

Variable Return\(_t\) is winsorized at 1% and 99%

Table 2. Descriptive Data of Singapore Stock Market

| Variable            | Obs  | Mean  | Min   | Max   | Std.Dev |
|---------------------|------|-------|-------|-------|---------|
| Return\(_t\)        | 65.530 | 0,0025 | -1,0000 | 19,0000 | 0,1177   |
| New_Case\(_{t-1}\)  | 65.287 | 3.4231 | 0,0000 | 7,2626 | 3,4231   |
| New_Death\(_{t-1}\) | 65.287 | 0,0054 | 0,0000 | 0,6931 | 0,0607   |
| Volume_Trading\(_{t-1}\) | 65.287 | 7,2620 | 0,0000 | 20,7280 | 7,2620   |
| Return\(_{t-1}\)   | 65.287 | 0,0006 | -0,1908 | 0,1739 | 0,0345   |
| Exchange_Rate\(_{t-1}\) | 65.287 | 1.3255 | 0,0000 | 1,4523 | 0,2693   |
| Monday\(_t\)       | 65.287 | 0,1990 | 0,0000 | 1,0000 | 0,3993   |
| Friday\(_t\)       | 65.287 | 0,1991 | 0,0000 | 1,0000 | 0,3993   |

Variable Return\(_{t-1}\) and Exchange_Rate\(_{t-1}\) are winsorized at 1% and 99%

**Singapore Data**

Based on the table 5 (appendix) shows insignificant results when there is an increase of confirmed positive of COVID-19 on stock returns in the Singapore stock market. However, the table 6 (appendix) shows a significant negative result in the increase cases of death on stock returns with the coefficient value showing the number -0.0051 and significant negative is -2.06.

**Robustness Test**

**Robustness Test I: Impact New Cases in Indonesia Stock Exchange.**

The purpose of this test is to prove that there is no error if the input is not valid. This test was carried out on the data
collection process of 33% of the total data. The test results on the table 7 (appendix) show a significant negative result is -2.17 and a coefficient value is -0.0100.

**Robustness Test II: Impact New Death in Singapore Stock Market**

The purpose of this test is to prove that there is no error if the input is not valid. This test was carried out on the data collection process of 33% of the total data. The test results on the table 8 (appendix) show a significant negative result is -2.14 and a coefficient value is -0.0102.

**Result Comparison of Indonesia & Singapore**

Each country has its own uniqueness and characteristics. This is something natural and very reasonable. Although the world looks increasingly narrow and unified by technological advances from the effects of globalization. However, differences and diversity will still exist, starting from cultural values that will determine how a person speaks, what is said, how to convey messages, and how to interpret messages (Luthfia, 2014).

The table 9 (appendix) shows that the increase positive cases of COVID-19 in Indonesia showed a significant negative in stock returns, while in Singapore did not show a significant negative in stock returns. We can see this in terms of the increase in the number of positive COVID-19 cases in Indonesia by 47% of the total cases in Southeast Asia (1,343,146) and the number of positive COVID-19 cases in Singapore by 4% of the total cases in Southeast Asia. This figure is very much different. So, it cannot be avoided that investors will be wary and anxious on the Indonesia Stock Exchange.

However, the following table 10 (appendix) shows that the increase in death cases in the Singapore stock market experienced a significant negative impact on stock returns, but the Indonesian Stock Exchange did not experience a significant effect on stock returns. This shows the level of concern that exploded in Singapore investors where confidence in the implementation of everyday health protocols is waning. However, the total number of deaths was 29 cases in Singapore and 19,111 deaths cases in Indonesia. This may be in accordance with the news of how Singaporean judge society in Singapore itself which tends to be "Kiasi" which means fear of death (Casandra, 2018).

In the Robustness test table at 33% below, it shows that stock returns on the Indonesia Stock Exchange show a significant negative in the increase in positive COVID-19 cases, while the Singapore stock market shows a significant negative in the increase in COVID-19 deaths. Therefore, the researcher considers that IDX is more sensitive to increase of confirmed cases of COVID-19 and SGX is more sensitive to increase death cases of COVID-19. This is in accordance with survey research identifying differences in the value system in each country (national values) by Hofstede & Hofstede (2005) where one of the results of the level of uncertainty avoidance shows that Indonesia's score is 48 and Singapore's score is 8. This score shows that Indonesia has a higher level of anxiety in facing the uncertainty of new things, while Singapore has a lower level of anxiety in dealing with the uncertainty of new things. But in other side, Singaporean are famous for the word "kiasi" by the Singaporean themselves which means fear of death where according to online news reports parents will tell their children to lie in order to avoid sports lessons just because there have been cases of death in physical training in sports lessons at school. (Koh, 2014).

From the results of the comparison between two countries, we see that there is a different significant in stock returns which Indonesia stock exchange was more sensitive by confirmed case COVID-19 and Singapore stock market was more
sensitive by death case COVID 19. Actually, this is in line with the previous researcher showed different results, where some researchers who showed impact significant negative (Al-Awadhi et al., 2020) in COVID 19 and some showed a significant positive in COVID 19 (Ming et al., 2020). This difference could help us realize in more detail and depth the influence of covid 19 on stock market conditions. The results of this study will contribute to revealing how the behavior of domestic and foreign investors in responding to the COVID-19 pandemic and what is the effect of the COVID-19 pandemic on stock market conditions. The two countries must focus on each significant impact so that they can maintain stability in stock returns.

Conclusion

Each country has a different character and culture. This difference and diversity is a natural and reasonable thing in each country. Even with technological advances that will give effect to globalization in every citizen so that it narrows differences and unites the concept of togetherness, namely one citizen of the world. However, according to researchers, differences and diversity will still exist. Where will affect how to receive messages, process messages and convey messages. Preliminary research considers that COVID 19 has a positive effect and there is also a negative effect on the respective company sector. Therefore, according to the results of the regression analysis and 33% robustness, the researcher concludes that the Indonesia Stock Exchange is more sensitive to the increase in confirmed case of COVID 19 and the Singapore Stock Market is more sensitive to the increase deaths cases of COVID 19. This could be due to differences in culture and characteristics. each investor in each country so that there can be differences in investment decision making. Like other studies, this study also has limitations that have not carried out a fixed effect on the two countries and recommendations to increase the number of samples from other ASEAN countries to make results that can be generalized in ASEAN.

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## Appendix

### Table 3. Data Regression Test Results of Confirmed cases COVID 19 at IDX

|          | (1)        | (2)        | (3)        | (4)        | (5)        | (6)        | (7)        |
|----------|------------|------------|------------|------------|------------|------------|------------|
| New_Case | -0.0110*   | -0.0110*   | -0.0109*   | -0.0107*   | -0.0094*   | -0.0107*   | -0.0088*   |
|          | (-2.38)    | (-2.38)    | (-2.35)    | (-2.33)    | (-2.16)    | (-2.29)    | (-2.06)    |
| Volume   | 0.0002     |            |            |            |            |            |            |
|          | (0.19)     |            |            |            |            |            |            |
| Return   | 0.2973     |            |            |            |            | 0.2935     |
|          | (0.81)     |            |            |            | (0.80)     |            |            |
| Exchange | 0.0020*    |            |            |            |            | 0.0021     |
|          | (1.70)     |            |            |            | (1.01)     |            |            |
| Monday   |            |            |            |            |            | 0.0373*    |
|          |            |            |            |            |            | (1.66)     |            |
| Friday   |            |            |            |            |            | (0.02)     |
|          |            |            |            |            |            | (0.01)     |
| Constant | 0.0377     | 0.0358     | 0.0379     | 0.0192     | 0.0307     | 0.0406     |
|          | (1.46)     | (1.15)     | (1.45)     | (0.74)     | (1.15)     | (1.53)     |
| Control  |            |            |            |            |            |            |            |
| Month-FE | YES        | YES        | YES        | YES        | YES        | YES        |
| Obs.     | 65,288     | 65,288     | 65,288     | 65,288     | 65,288     | 65,288     |
| Adj. R²  | 0.0001     | 0.0001     | 0.0001     | 0.0001     | 0.0002     | 0.0001     |

Where Return is the dependent variable and New_Case is the independent variable. Superscripts * represent the level of significance.

### Table 4. Data Regression Test Results of Death COVID 19 at IDX

|          | (1)        | (2)        | (3)        | (4)        | (5)        | (6)        | (7)        |
|----------|------------|------------|------------|------------|------------|------------|------------|
| New_Death| -0.0144*   | -0.0143*   | -0.0140*   | -0.0140*   | -0.0107    | -0.0138*   | -0.0098    |
|          | (-2.00)    | (-2.00)    | (-1.94)    | (-1.98)    | (-1.52)    | (-1.89)    | (-1.42)    |
| Volume   | 0.0002     |            |            |            |            |            |            |
|          | (0.19)     |            |            |            |            |            |            |
| Return   | 0.2959     |            |            |            |            | 0.2927     |
|          | (0.81)     |            |            |            | (0.80)     |            |            |
| Exchange | 0.0021*    |            |            |            |            | 0.0022     |
|          | (1.75)     |            |            |            | (1.03)     |            |            |
| Monday   |            |            |            |            |            | 0.0383*    |
|          | (1.72)     |            |            |            | (1.64)     |            |            |
| Friday   |            |            |            |            |            | (0.02)     |
|          |            |            |            |            |            | (0.01)     |
| Constant | 0.0377     | 0.0358     | 0.0379     | 0.0189     | 0.0308     | 0.0406     |
|          | (1.46)     | (1.15)     | (1.45)     | (0.73)     | (1.15)     | (1.53)     |
| Control  |            |            |            |            |            |            |            |
| Month-FE | YES        | YES        | YES        | YES        | YES        | YES        |
| Obs.     | 65,288     | 65,288     | 65,288     | 65,288     | 65,288     | 65,288     |
| Adj. R²  | 0.0001     | 0.0001     | 0.0001     | 0.0001     | 0.0002     | 0.0001     | 0.0001     |

Where Return is the dependent variable and New_Death is the independent variable. Superscripts * represent the level of significance.

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### Table 5. Data Regression Test Results of Confirmed cases COVID 19 at SGX

|                  | (1)       | (2)       | (3)       | (4)      | (5)     | (6)       | (7)     |
|------------------|-----------|-----------|-----------|----------|---------|-----------|---------|
| **New_Case<sub>t-1</sub>** | -0.0008*  | -0.0008*  | -0.0008*  | -0.0008* | -0.0006 | -0.0008*  | -0.0006 |
|                  | (-1.79)   | (-1.77)   | (-1.78)   | (-1.77)  | (-1.45) | (-1.77)   | (-1.38) |
| **Volume_Trading<sub>t-1</sub>** | 0.0002*   | (2.24)    |           |          |         |           |         |
| **Return<sub>t-1</sub>** | -0.0285*  |           |           |          |         | -0.0289*  |         |
|                  | (-1.79)   |           |           |          |         | (-1.81)   |         |
| **Exchange_Rate<sub>t-1</sub>** | 0.0010    |           |           |          |         | 0.0003    |         |
|                  |           |           |           |          |         | (0.80)    | (0.16)  |
| **Monday<sub>t</sub>** | 0.0024**  |           |           |          |         | 0.0023**  |         |
|                  | (2.97)    |           |           |          |         | (2.88)    |         |
| **Friday<sub>t</sub>** |           |           |           |          |         | (0.00)    | (0.00)  |
| **Constant**     | 0.0018*   | 0.0006    | 0.0018*   | 0.0006   | 0.0014  | 0.0020*   | 0.0000  |
|                  | (1.81)    | (0.55)    | (1.82)    | (0.36)   | (1.34)  | (1.91)    | (-0.01) |
| Control for;     | YES       | YES       | YES       | YES      | YES     | YES       | YES     |
| Month-FE         | Obs.      | 65,282    | 65,282    | 65,282   | 65,282  | 65,282    | 65,282  |
| Adj. R<sup>2</sup> | 0.0009    | 0.0010    | 0.0010    | 0.0009   | 0.0009  | 0.0009    | 0.0011  |

Where Return<sub>t</sub> is the dependent variable and New_Case<sub>t-1</sub> is the independent variable. Superscripts * represent the level of significance

### Table 6. Data Regression Test Results of Death COVID 19 in SGX

|                  | (1)       | (2)       | (3)       | (4)      | (5)     | (6)       | (7)     |
|------------------|-----------|-----------|-----------|----------|---------|-----------|---------|
| **New_Death<sub>t-1</sub>** | -0.0035  | -0.0037  | -0.0035  | -0.0037  | -0.0048* | -0.0039  | -0.0051* |
|                  | (-1.45)   | (-1.51)   | (-1.46)   | (-1.53)  | (-1.94) | (-1.57)   | (-2.06) |
| **Volume_Trading<sub>t-1</sub>** | 0.0002*   | (2.25)    |           |          |         |           |         |
| **Return<sub>t-1</sub>** | -0.0286*  |           |           |          |         | -0.0289*  |         |
|                  | (-1.79)   |           |           |          |         | (-1.81)   |         |
| **Exchange_Rate<sub>t-1</sub>** | 0.0011    |           |           |          |         | 0.0004    |         |
|                  |           |           |           |          |         | (0.89)    | (0.22)  |
| **Monday<sub>t</sub>** | 0.0026**  |           |           |          |         | 0.0025**  |         |
|                  | (3.19)    |           |           |          |         | (3.17)    |         |
| **Friday<sub>t</sub>** |           |           |           |          |         | 0.0013    | -0.0005 |
| **Constant**     | 0.0017*   | 0.0005    | 0.0017*   | 0.0004   | 0.0013  | 0.0020*   | -0.0003 |
|                  | (1.72)    | (0.46)    | (1.74)    | (0.24)   | (1.23)  | (1.86)    | (-0.11) |
| Control for;     | YES       | YES       | YES       | YES      | YES     | YES       | YES     |
| Month-FE         | Obs.      | 65,282    | 65,282    | 65,282   | 65,282  | 65,282    | 65,282  |
| Adj. R<sup>2</sup> | 0.0009    | 0.0009    | 0.0010    | 0.0008   | 0.0009  | 0.0009    | 0.0011  |

Where Return<sub>t</sub> is the dependent variable and New_Death<sub>t-1</sub> is the independent variable. Superscripts * represent the level of significance
Table 7. Subsample New Case Indonesia analysis

|                  | (1)         | (2)         | (3)         | (4)         | (5)         | (6)         | (7)         |
|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| New_Case_{t-1}   | -0.0115*    | -0.0112*    | -0.0114*    | -0.0111*    | -0.0101*    | -0.0115*    | -0.0100*    |
|                  | (-2.38)     | (-2.33)     | (-2.33)     | (-2.30)     | (-2.28)     | (-2.17)     |             |
| Volume_Trading_{t-1} | 0.0021     |             |             |             |             |             |             |
|                  |             |             |             |             |             |             |             |
| Return_{t-1}     | 0.2593      |             |             |             |             |             |             |
|                  | (1.16)      |             |             |             |             |             |             |
| Exchange_Rate_{t-1} | 0.0022     |             |             |             |             |             |             |
|                  | (1.17)      |             |             |             |             |             |             |
| Monday_{t}       | 0.0472      |             |             |             |             |             |             |
|                  | (1.40)      |             |             |             |             |             |             |
| Friday_{t}       | 0.0002      |             |             |             |             |             |             |
|                  | (0.01)      |             |             |             |             |             |             |
| Constant         | 0.0425**    | 0.0251      | 0.0430**    | 0.0215      | 0.0273*     | 0.0425**    | -0.0017     |
|                  | (2.70)      | (1.28)      | (2.74)      | (1.04)      | (1.87)      | (2.70)      | (-0.08)     |

Control for:
- Month-FE: YES  YES  YES  YES  YES  YES  YES
- Obs.: 36,282  36,282  36,282  36,282  36,282  36,282  36,282
- Adj. R²: 0.0001  0.0001  0.0001  0.0001  0.0002  0.0001  0.0002

Where Return_{t} is the dependent variable and New_Case_{t-1} is the independent variable. Superscripts * represent the level of significance.

Table 8. Subsample New Death Singapore Analysis

|                  | (1)         | (2)         | (3)         | (4)         | (5)         | (6)         | (7)         |
|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| New_Death_{t-1}  | -0.0046     | -0.0048     | -0.0048     | -0.0050     | -0.0099*    | -0.0059     | -0.0102*    |
|                  | (-1.00)     | (-1.03)     | (-1.03)     | (-1.07)     | (-2.06)     | (-1.28)     | (-2.14)     |
| Volume_Trading_{t-1} | 0.0002**   |             |             |             |             |             |             |
|                  | (3.85)      |             |             |             |             |             |             |
| Return_{t-1}     | -0.0192     |             |             |             |             | -0.0191     |             |
|                  | (-0.93)     |             |             |             |             | (-0.93)     |             |
| Exchange_Rate_{t-1} | 0.0036*    |             |             |             |             | 0.0017      |             |
|                  | (1.90)      |             |             |             |             | (0.88)      |             |
| Monday_{t}       | 0.0042**    |             |             |             |             | 0.0034**    |             |
|                  | (4.45)      |             |             |             |             | (3.45)      |             |
| Friday_{t}       |             |             |             |             |             | 0.0046**    | 0.0036**    |
|                  |             |             |             |             |             | (-4.65)     | (-3.53)     |
| Constant         | 0.0017*     | 0.0000      | 0.0017*     | -0.0027     | 0.0010      | 0.0026*     | -0.0019     |
|                  | (1.72)      | (0.02)      | (1.73)      | (-1.07)     | (0.93)      | (2.48)      | (-0.72)     |

Control for:
- Month-FE: YES  YES  YES  YES  YES  YES  YES
- Obs.: 43,432  43,432  43,432  43,432  43,432  43,432  43,432
- Adj. R²: 0.0023  0.0027  0.0025  0.0024  0.0028  0.0029  0.0035

Where Return_{t} is the dependent variable and New_Death_{t-1} is the independent variable. Superscripts * represent the level of significance.
### Table 9. Comparison New Cases of COVID 19 at IDX-SGX

|            | INDONESIA    | SINGAPORE   |
|------------|--------------|-------------|
| New_Case   | -0.0088*     | -0.0006     |
|            | (-2.06)      | (-1.38)     |
| Volume_Trading | -0.0000     | 0.0002*     |
|            | (-0.01)      | (2.11)      |
| Return     | 0.2935       | -0.0289*    |
|            | (0.80)       | (-1.81)     |
| Exchange_Rate | 0.0021      | 0.0003      |
|            | (1.01)       | (0.16)      |
| Monday     | 0.0373*      | 0.0023**    |
|            | (1.66)       | (2.88)      |
| Friday     | (0.01)       | (0.00)      |
|            | (-0.35)      | (-0.28)     |
| Constant   | 0.0128       | -0.0000     |
|            | (0.43)       | (-0.01)     |

Control for:
- Month-FE: YES, YES
- Obs.: 65,288, 65,282
- Adj. R²: 0.0002, 0.0011

Where Return \( t \) is the dependent variable and New_Case \( t-1 \) is the independent variable. Superscripts * represent the level of significance.

### Table 10. Comparison New Death of COVID 19 at IDX-SGX

|            | INDONESIA    | SINGAPORE   |
|------------|--------------|-------------|
| New_Death  | -0.0098      | -0.0051*    |
|            | (-1.42)      | (-2.06)     |
| Volume_Trading | -0.0000     | 0.0002*     |
|            | (-0.01)      | (2.11)      |
| Return     | 0.2927       | -0.0289*    |
|            | (0.80)       | (-1.81)     |
| Exchange_Rate | 0.0022      | 0.0004      |
|            | (1.03)       | (0.22)      |
| Monday     | 0.04         | 0.0025**    |
|            | (1.64)       | (3.17)      |
| Friday     | (0.01)       | -0.0005     |
|            | (-0.35)      | (-0.29)     |
| Constant   | 0.0124       | -0.0003     |
|            | (0.42)       | (-0.11)     |

Control for:
- Month-FE: YES, YES
- Obs.: 65,288, 65,282
- Adj. R²: 0.0001, 0.0011

Where Return \( t \) is the dependent variable and New_Death \( t-1 \) is the independent variable. Superscripts * represent the level of significance.