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## **The influence of national cultures on the response of the stock market of countries with the first case of COVID-19 infection**

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**Abstract**--This research was conducted during the COVID-19 pandemic which began to become epidemic in several countries in early 2020. This study aims to determine whether the level of individualism and uncertainty avoidance of a country has an effect on Cumulative Abnormal Stock Market Return (CASMR) and Abnormal Stock Market Volatility (AVOLA). The results of this study will show whether the level of individualism and uncertainty avoidance of a country will affect CASMR and AVOLA by using the control variable the level of population density per square kilometer and economic growth with the proxy for growth of Gross Domestic Products (GDP). The results of this study can be useful for stakeholders in issuing regulations to maintain stock market stability by looking at investor behavior that describes market behavior. The sample selection in this study used purposive sampling method. The population in this study is the stock market in each country affected by the COVID-19 pandemic. The sample in this study was 53 stock markets in each country. To test the relationship between variables, this study uses multiple regression analysis. This study uses signalling theory in formulating hypotheses that lead to the results of research analysis. The results showed that the level of individualism in each country had a negative effect on CASMR. The results also show that the level of individualism has no negative effect on AVOLA. In addition, the

results of the study also show that uncertainty avoidance has no negative effect on CASMR and AVOLA.

**Keywords**---market uncertainty, market behavior, abnormal return, COVID-19.

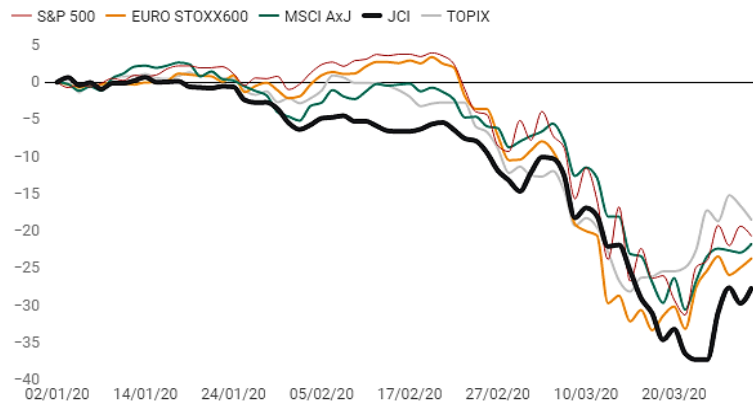
## Introduction

Since China confirmed pneumonia in Wuhan, China on December 31, 2019 as a new corona virus and has caused many human deaths in various parts of the world. Therefore, March 11, 2020, the World Health Organization decided that COVID-19 was a pandemic (Arnani, 2020). In addition to causing human deaths in various countries, the COVID-19 pandemic has also caused damage to the global economy. This is indicated by a prediction from the International Monetary Fund (IMF) which explains that it will be minus 4.9% by the end of 2020 (Sugianto, 2020).

Every country in the world has responded to the economic crisis as a result of the COVID-19 pandemic by issuing different policies. For example, the Indonesian government responded to COVID-19 by not doing a lockdown, while several other countries implemented a lockdown policy to respond to the COVID-19 pandemic. With this policy, it resulted in the rise and fall of the Composite Stock Price Index (IHSG) which indicated that the composite stock price was increasingly fluctuating (Halisa et al., 2020). This also happens in several countries in the world, but with different volatility and fluctuations in stock prices.

The volatility of stock prices in different countries will affect the performance of the global stock market. Citradi (2020) provides a graphic overview of the performance of the global stock market for the first quarter of 2020 in Figure 1. Figure 1 shows that in the first quarter of 2020, the S&P 500 index experienced a minus of 20.7%, the Euro STOXX600 decreased by 23.7%, MSCI Asia ex Japan (MSCI AxJ) experienced a decline of 21.8% and TOPIX experienced a decline of 21.8%. correction of 18.5% (Citradi, 2020). In addition, Citradi (2020) explained that the Indonesian Composite Stock Price Index (JCI) experienced a 27.95% correction in the first quarter of 2020.

With the different volatility differences in each country raises a question what makes the difference in investor response to stock market conditions. In this case, the authors suspect that cultural differences have an important role that causes differences in the volatility of the stock price index in each country. In addition, the impact of the COVID-19 pandemic has caused fluctuations in the CASMR with different levels of fluctuation in each country. Other literature shows that culture impacts investor behavior directly and not only through indirect channels such as legal and regulatory frameworks (Anderson et al., 2011).



Source: Citradi (2020)

Figure 1. Global Stock Market Performance Q120

According to Hofstede (2001) there are six dimensions of national culture, but this research focuses on two dimensions, namely individualism and uncertainty avoidance. In this case, individualism measures the degree to which most members of society prefer a loose social structure and each individual takes care of themselves, while uncertainty avoidance measures the level of society's tolerance for uncertainty. The use of individualism and uncertainty avoidance as independent variables in testing the influence of culture on stock market responses because these two cultural dimensions affect investors' financial decision making. This study refers to the research conducted by Perez et al. (2021), Uddin et al. (2021), and Al-Qudah & Houcine (2021), with the aim of knowing whether national culture has a negative influence on CASMR and AVOLA.

### Theoretical Framework and Hypotheses Formulation

Organizations always send signals with the aim of reducing information asymmetry among stakeholders and to inform the public regarding their image, intentions, behavior and performance (Karaman et al., 2020). Bae et al. (2018) explains that signaling theory is related to the need for organizations to provide information to stakeholders and the market by providing signals related to the company's commitment to the community. In this study, the sender of the signal is the party who sends data related to the individualism index and uncertainty avoidance in each country, the signal recipients in this study are investors and the signals in this study are the individualism and uncertainty avoidance index. The existence of these signals will affect the behavior of investors in a country's stock market which can have an impact on the CASMR and AVOLA of a country's stock market during the COVID-19 pandemic.

In addition, this study uses a control variable to increase accuracy and avoid bias. The results of the study have the effect of the level of individualism and uncertainty avoidance (independent variable) on CASMR and AVOLA (dependent variable). The control variables used in this research consist of the level of population density per square kilometer and economic growth as a proxy for the

growth of Gross Domestic Products (GDP). The use of population density per square kilometer and economic growth as a proxy for Gross Domestic Products (GDP) growth follows the research of Perez et al. (2021). Perez et al. (2021) use population density per square kilometer to describe a country's potential level of COVID-19 spread and Gross Domestic Product (GDP) growth which describes a country's economic growth.

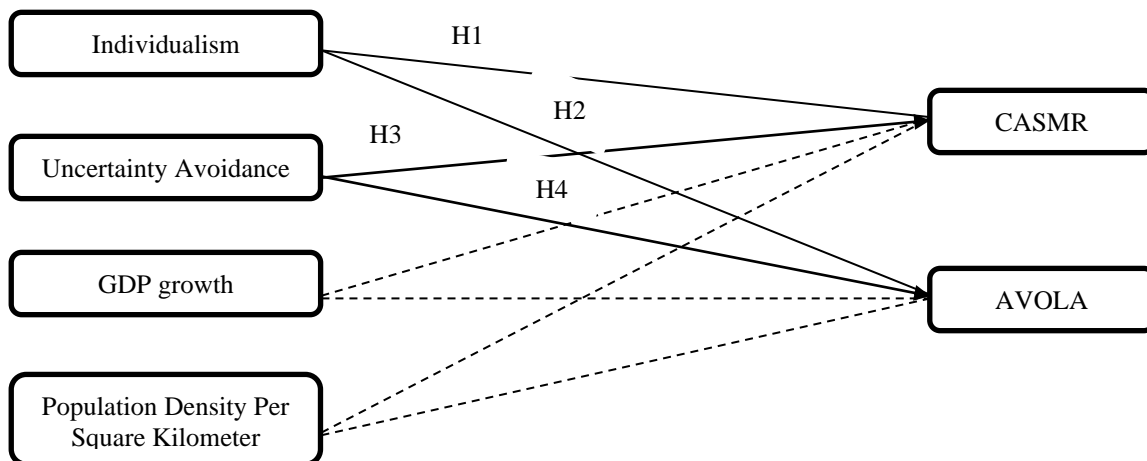


Figure 2. Framework

### The Effect of Individualism on CASMR and AVOLA

During the COVID-19 pandemic, several researchers examined the relationship between the COVID-19 pandemic and the stock market that could influence investors in making investment decisions. Several previous studies have found that the response to COVID-19 is influenced by fear and ignorance. For example, Gormsen & Kojien (2020) explains that the decline in stock prices that exceeds the expected decline indicates the presence of other factors.

In signaling theory, it is explained that individualism is a signal sent by stakeholders to investors that reflects stock market conditions related to CASMR and AVOLA during the COVID-19 pandemic. Therefore, stakeholders must be able to manage information signals related to individualism in the country concerned by issuing effective and efficient policies in handling the COVID-19 pandemic so that the negative impact on stock market conditions can be reduced.

Perez et al. (2021) explained that individualism is closely related to being overconfident, optimistic and too focused on self-attribution. Too much focus on self-attribution results when there is new public information in the stock market, investors only partially adjust to the new information and it takes a long time to accept the whole new information (Dou et al., 2016). Moreover, in the study of Cao et al. (2020) show that individualistic countries have independent economic agents, have a high level of confidence in risk tolerance. This affects investors' expectations in their country's stock market. Therefore, investors from individualistic countries will not react to the announcement of the first case of

COVID-19 causing a smaller negative impact on the stock market than countries that have a low level of individualism as a result of COVID-19.

On the other hand, Daniel et al. (1998) and Odean (1998) explain that high self-confidence and optimism are associated with overreaction to an event. Statman et al. (2006) and Chui et al. (2010) argue that excessive individualism is associated with high trade and volatility. Liu (2019) also explains that due to high self-confidence, investors in individualist countries will tend to react more strongly, both in terms of size and volatility. Overreaction to an event can cause a negative effect on abnormal returns and volatility.

From these differences of opinion, in formulating the hypothesis this research refers to the research of Perez et al. (2021). In the study of Perez et al. (2021) show that countries with low levels of individualism have large decreases and volatility for CASMR and AVOLA during the announcement of the first confirmation of COVID-19 infection.

**H1.** The level of individualism of a country has a negative effect on CASMR around the announcement of the first COVID-19 infection case.

**H2.** The level of individualism of a country has a negative effect on AVOLA around the announcement of the first COVID-19 infection case

### **The Effect of Uncertainty Avoidance on CASMR and AVOLA**

One of the national cultures that can influence investor responses when a crisis occurs is the level of uncertainty avoidance (Perez et al., 2021). This is because the level of uncertainty avoidance can affect investor behavior in taking and managing risk in the stock market. In signaling theory, it is explained that uncertainty avoidance is a signal sent by stakeholders to investors that reflects stock market conditions related to CASMR and AVOLA during the COVID-19 pandemic. Therefore, stakeholders must be able to manage these signals by making effective and efficient policies in handling the COVID-19 pandemic so that they can reduce the negative impact on stock market conditions.

According to Chui & Kwok (2009) in their study, it shows that countries with high uncertainty avoidance have a tendency to consume higher insurance than countries with lower levels of uncertainty avoidance. In addition, Inklaar & Yang (2012) found that investors in countries that have a high level of uncertainty avoidance, investors in those countries will tend to reduce their investments in risky stock markets. Therefore, when the COVID-19 pandemic occurs, it is possible for a larger decline in stock prices to occur as a result of an overreaction to uncertainty.

On the other hand, Barberis et al. (1998) explained that investors in countries that have a high level of uncertainty avoidance will behave according to the structure, law and other institutional frameworks so that they tend not to respond to a new event. This can happen because conservative investors will tend to be slow in updating their investment model when there is new information. Dou et al. (2016) also explain that investors in countries that have high levels of uncertainty avoidance tend to be slow in incorporating earnings announcements

into generating higher income. This will indicate that investors in countries with high levels of uncertainty avoidance will be less responsive to the announcement of the first COVID-19 infection case, thus having lower abnormal returns and volatility.

From these differences of opinion, in formulating the hypothesis this research refers to the research of Perez et al. (2021). In the study of Perez et al. (2021) show that countries with high levels of uncertainty avoidance experience large declines and volatility for CASMR and AVOLA during the announcement of the first confirmation of COVID-19 infection.

**H3.** The level of uncertainty avoidance of a country has a negative effect on CASMR around the announcement of the first COVID-19 infection case.

**H4.** The level of uncertainty avoidance of a country has a negative effect on AVOLA around the announcement of the first COVID-19 infection case.

## Research Methods

### Research variable

The independent variables in this study are the level of individualism and uncertainty avoidance in each country. Meanwhile, the dependent variables in this study were CASMR and AVOLA. This study also uses economic growth as a proxy for GDP growth and population density per square kilometer as control variables.

### Variable Operational Definition

The stock market CASMR in each country sampled in this study is measured by the formula:

$$CASMR = \frac{\sum Abnormal\ Return}{N}$$

Where:

N = Event window observation abnormal return

AVOLA stock market in each country sampled in this study is calculated by the standard deviation of the CASMR. So that the stock market AVOLA measurement formula in each country sampled in this study is as follows:

$$\text{Standard Deviation} = \sqrt{\frac{\sum_{t=i}^N (X_i - \text{Average } X)^2}{N}}$$

Where:

N = Event window observation abnormal return

Average X = Average Value X

$X_i$  = X Nilai value

t = Time

Population density per square kilometer is the mid-year population divided by land area in square kilometers (World Bank, 2021). In (World Bank, 2021) it is explained that the definition of population is based on the de facto definition of population, while land area is the total area of a country, excluding underwater areas, national claims on the contingent zone shelf, and exclusive economic zones.

In this study, the economic growth of each country uses the following formula:

$$\text{GDP growth} = \frac{\text{GDP}_t - \text{GDP}_{t-1}}{\text{GDP}_{t-1}} \times 100\%$$

### **Sampling Method**

The population in this study is the stock market in every country listed on Bloomberg. This research uses purposive sampling method in selecting the sample to be studied. Purposive sampling is a sample selection method where researchers take research samples based on predetermined criteria (Space, 2014). The criteria for selecting the sample are as follows:

- a. Stock markets in every country experiencing the COVID-19 pandemic.
- b. Stock markets in every country that announced the first cases of COVID-19 infection until March 11, 2020.
- c. The stock market in each country that meets the completeness of the data for the research variable.

From these criteria, 53 stock markets in each country were sampled in this study. To observe stock price movements, this study uses the event window [-2,+30].

### **Data Types and Sources**

This study uses secondary data types. This study uses data from CASMR, AVOLA, the economic growth of each country with the proxy for Gross Domestic Products (GDP) growth, the level of population density per square kilometer, the level of individualism, and the level of uncertainty avoidance in each country available in bloomberg, world bank data, worldometer coronavirus cases or other reliable data sources. For the level of individualism and uncertainty avoidance of each country, this study uses research data from Hofstede (2001).

### **Data analysis method**

This study uses the following analytical methods:

- a. Different test T-test with related samples.
- b. Multiple regression analysis.

## Research Results and Discussion

### Definition of Research Object

By purposive sampling method, obtained a sample of 61 countries that have stock markets in accordance with predetermined criteria from the total population of stock markets in each country in the world. The explanation regarding the sample selection is explained in the table below.

Table 1. Number and Characteristics of Sample Selection

No.	Information	Amount
1	Countries with stock markets.	175
2	Countries that have stock markets, but did not announce cases of COVID-19 infection until March 11, 2020	(112)
3	Stock markets in every country that announced cases of COVID-19 infection until March 11, 2020, but did not meet the completeness of the data for the research variable	(2)
4	Outliers	(8)
Number of research samples		53

Source: Secondary Data (Processed In 2022)

### T-test Difference Test With Related Samples

To find out whether there is a difference in the average CASMR and AVOLA before and after the announcement of the first COVID-19 infection case, this study used a different T-test with related samples. The results of the calculation of the different T-test with related samples will show the significance value of each variable being tested. Therefore, whether or not there is a difference in the average CASMR and AVOLA before and after the announcement of cases of COVID-19 infection will be known.

In this study using a significance value of 10% or 0.10. With this significance value, it is expected that the research results will have a confidence value above 90%. In the calculation of the T-test difference test using the event window [-2, +30] at the announcement of the first COVID-19 infection for 2020 and with the same event window for the year before the announcement of the first COVID-19 infection. For the calculation results from the test the difference between the T-test and related samples is shown in table 2.

Table 2. T-test Differences with Related Samples

Paired Samples Statistics		
		Sig. (2 Tailed)
Pair 1	CASMR 2019-CASMR 2020	0,000
Pair 2	AVOLA 2019-AVOLA 2020	0,234

Source: Secondary Data (Processed In 2022)



From table 2 it can be concluded that the CASMR values before and after the announcement of the infection of the first COVID-19 case had significant differences. The significant difference is indicated by the p value of 0.000 or below 0.10. This is indicated by the average CASMR value before the announcement of the first COVID-19 infection was 12.7915% and the CASMR average when the first COVID-19 infection was announced was -9.2525%. From the average CASMR value, it can be concluded that the CASMR before and after the announcement of the first COVID-19 infection case there is a significant difference where the CASMR average value after the announcement of the first COVID-19 infection is more likely to be negative and before the announcement of the first COVID-19 infection. 19 are more likely to be positive.

As for the AVOLA value before and after the COVID-19 announcement, there was a difference but not significant because the p value was 0.234 or above 0.10. This is indicated by the average AVOLA value before the announcement of the first COVID-19 infection of 11.5909% and the average AVOLA value after the announcement of the first COVID-19 infection of 2.5689%. From the average AVOLA value, it can be concluded that there was a difference between AVOLA before and after the announcement of the first case of COVID-19 infection, but the difference was not significant.

### Hypothesis testing

In testing the hypothesis using regression analysis. In regression analysis will show the coefficient of each independent variable by predicting the dependent variable in an equation. Therefore, the relationship between the dependent and independent variables can be known. In this study using a significance value of 10% or 0.10. With this significance value, it is expected that the research results will have a confidence value above 90%. The results of hypothesis testing with multiple regression analysis are listed in table 3.

Table 3. Variable Descriptive Statistical Data

Hypothesis	Value of Sig.	Results
H1: The level of individualism of a country has a negative effect on CASMR around the announcement of the first COVID-19 infection case.	0,018	Accepted
H2: The level of individualism of a country has a negative effect on AVOLA around the announcement of the first COVID-19 infection case.	0,285	Rejected
H3: The level of uncertainty avoidance of a country has a negative effect on CASMR around the announcement of the first COVID-19 infection case.	0,549	Rejected
H4: The level of uncertainty avoidance of a country has a negative effect on AVOLA around the announcement of the first	0,217	Rejected

Hypothesis	Value of Sig.	Results
COVID-19 infection case.		

Source: Secondary Data (Processed In 2022)

From hypothesis testing with multiple regression analysis contained in table 3, it can be concluded that the first hypothesis is accepted because the significance value of the first hypothesis is below 0.10, while the second, third and fourth hypotheses are rejected because the significance value is above 0.10.

### Interpretation of Results

#### **Hypothesis 1: The level of individualism of a country has a negative effect on CASMR around the announcement of the first COVID-19 infection case**

The level of individualism of a country has a negative influence on CASMR around the announcement of the first COVID-19 infection case. The negative effect is indicated by the significance value of the test results with multiple regression analysis of 0.007 below 0.10. This shows that countries with low levels of individualism will have large CASMR because they are affected by the COVID-19 pandemic. So, it can be concluded that the level of individualism of a country has a negative influence on CASMR during the announcement of the first COVID-19 infection case in the country concerned.

Signaling theory explains that the level of individualism of a country is a signal from stakeholders that can be used as an indication of the impact of the COVID-19 pandemic on the stock market in the country concerned. This is indicated by the high CASMR for countries that have a low level of individualism and a low CASMR for countries that have a high level of individualism. This can happen because investors in countries that have low individualism levels will tend to respond strongly to the announcement of the first COVID-19 infection case. This strong response can be in the form of selling the shares owned, causing a larger share offering than the demand for shares, causing a high stock price decline.

The results of testing the first hypothesis show that the level of individualism of a country has a negative effect on CASMR, supported by the results of research from Perez et al. (2021). In his research, Perez et al. (2021) used a sample of 63 countries and in their research explained that the level of individualism of a country had a negative influence on CASMR during the announcement of the first case of COVID-19.

#### **Hypothesis 2: A country's level of individualism has a negative effect on AVOLA around the announcement of the first COVID-19 infection case**

The level of individualism of a country does not have a negative effect on AVOLA around the announcement of the first COVID-19 infection case. These results are indicated by the significance value of the test results with multiple regression analysis of 0.436, far above 0.10. This shows that countries that have low or high levels of individualism will not have a negative influence on the AVOLA value as a result of being affected by the COVID-19 pandemic. Signaling theory explains that

the level of individualism of a country is a signal from stakeholders that can be used as an indication of the impact of the COVID-19 pandemic on the stock market in the country concerned.

The results of testing the second hypothesis that the level of individualism of a country does not have a negative effect on AVOLA is related to the results of research conducted by Daniel et al. (1998). In his research, Daniel et al. (1998) explained that overconfidence and overly optimistic can be associated with overreaction to an event. In another study, Liu (2019) explained that due to overconfidence, investors in individualistic countries will respond more strongly to volatility until the announcement of the first COVID-19 infection case in the country concerned. This can lead to high AVOLA in the capital market.

It is shown that investors in individualist countries will tend to be confident by holding on to their shares or even buying more shares because they believe that the shares held or bought will have a good performance. But in fact, the stocks they own have poor performance and they investors in individualist countries will correct the information and they will even sell the shares to reduce the losses that will be received. This condition will cause high AVOLA on the stock market in individualist countries. From the results of testing the second hypothesis in this study, the results of research from Liu (2019) and Daniel et al. (1998) it can be concluded that the level of individualism of a country does not have a negative effect on AVOLA during the announcement of the first COVID-19 infection case in the country concerned.

### **Hypothesis 3: The Uncertainty Avoidance of a Country has a Negative Impact on CASMR Around the Announcement of the First Case of COVID-19 Infection**

The level of uncertainty avoidance of a country does not have a negative influence on CASMR around the announcement of the first COVID-19 infection case. These results are indicated by the significance value of the test results with multiple regression analysis of 0.547, far above 0.10. This shows that the level of uncertainty avoidance will not have a negative effect on the CASMR value as a result of being affected by the COVID-19 pandemic. Signaling theory explains that the level of uncertainty avoidance of a country is a signal from stakeholders that can be used as an indication of the impact of the COVID-19 pandemic on the stock market in the country concerned.

In this study, the results of testing the third hypothesis which show the level of uncertainty avoidance of a country does not have a negative effect on CASMR are related to the results of the study of Barberis et al. (1998). In his research, Barberis et al. (1998) explained that high conservatism tends to be less reactive to new information because conservative investors are slow to update their investment model when there is new information. In addition, this can happen because countries that have a high level of uncertainty avoidance will have a strong social dependence on social structures, laws and other institutional frameworks, causing an individual or investor to think more conservatively and think less flexibly. With this slow reaction, the stock market price will remain stable and the abnormal return will be small. From testing the third hypothesis

and research results from Barberis et al. (1998) it can be concluded that the level of uncertainty avoidance of a country does not have a negative effect on CASMR during the announcement of the first COVID-19 infection case in the country concerned.

#### **Hypothesis 4: The Uncertainty Avoidance of a Country has a Negative Impact on AVOLA Around the Announcement of the First Case of COVID-19 Infection**

The level of uncertainty avoidance of a country does not have a negative influence on AVOLA around the announcement of the first COVID-19 infection case. These results are indicated by the significance value of the test results with multiple regression analysis of 0.169, far above 0.10. This shows that countries that have low or high levels of uncertainty avoidance will not have a negative effect on the AVOLA value as a result of being affected by the COVID-19 pandemic. Signaling theory explains that the level of uncertainty avoidance of a country is a signal from stakeholders that can be used as an indication of the impact of the COVID-19 pandemic on the stock market in the country concerned.

In this study, the results of testing the fourth hypothesis which show the level of uncertainty avoidance of a country does not have a negative effect on AVOLA are related to the results of Dou et al. (2016). In his research, Dou et al. (2016) explained that investors in countries that have high levels of uncertainty avoidance will be slow to combine income announcements to earn income in great momentum. This shows that investors in countries with high levels of uncertainty avoidance will respond slowly to new events so that there will be no effect on AVOLA when the announcement of the first case of COVID-19 infection occurs. From hypothesis testing and research results from Dou et al. (2016) it can be concluded that the level of uncertainty avoidance of a country does not have a negative effect on AVOLA during the confirmation of the first COVID-19 infection case in the country concerned.

#### **Conclusion**

The COVID-19 pandemic that has hit the world since the beginning of 2020 has caused many casualties and destroyed economies around the world. Most of the impacts of the COVID-19 pandemic on a country's economy and financial markets are negative. With this background, this study aims to determine the extent of investor reactions to the COVID-19 pandemic when the country detects the first case of the COVID-19 pandemic in that country, and whether investors' reactions vary from country to country due to cultural differences. This study uses stock market samples in every country in the world that reported the first case of COVID-19 infection until March 11, 2021. The sample in this study used 53 stock markets in each country using the purposive sampling method for sampling.

The results of this study indicate that the level of individualism of a country has a negative influence on CASMR around the announcement of the first COVID-19 infection case related to the research of Perez et al. (2021), the level of individualism of a country has no negative effect on AVOLA around the

announcement of the first case of COVID-19 infection related to the study of Daniel et al. (1998) and Liu (2019), the level of uncertainty avoidance of a country has no negative effect on CASMR around the announcement of the first COVID-19 infection case in relation to the study of Barberis et al. (1998), and a country's level of uncertainty avoidance does not negatively affect AVOLA around the announcement of the first COVID-19 infection case, according to the research of Dou et al. (2016).

The research that the author has done has several limitations or shortcomings so that the results of this study require some improvements. The limitations or shortcomings are that this research only looks at investors' reactions to the COVID-19 pandemic at the onset of infection without looking at the developments of the COVID-19 pandemic the next day which can lead to various waves of infection and cause a greater impact on the stock market, apart from that in this study. using two control variables in testing hypotheses one to four, none of which has a significant effect, and the independent variable only has an average of being able to explain the CASMR and AVOLA values below 20%, while the remaining 80% is caused by other conditions.

Therefore, the authors suggest for future research to add research samples with the same criteria so that the research results can provide a more representative picture of conditions in each country, increase the sample observation time so that investors can see the reactions of investors on the developments of the COVID-19 pandemic and not only at the time of the first infection announced by the country concerned, and choosing the right control and independent variables so as to be able to explain the CASMR and AVOLA values well.

## References

- Al-Qudah, A. A., & Houcine, A. (2021). Stock Markets' Reaction To COVID-19: Evidence from the Six WHO Regions. *Journal of Economic Studies*, 49(2), 274–289.
- Anderson, C. W., Fedenia, M., Hirschey, M., & Skiba, H. (2011). Cultural Influences on Home Bias and International Diversification by Institutional Investors. *Journal of Banking and Finance*, 35(4), 916–934.
- Arnani, M. (kompas.com, 2020). *Timeline Wabah Virus Corona, Terdeteksi Pada Desember 2019 Hingga Jadi Pandemi Global*. Available: <https://www.kompas.com/tren/read/2020/03/12/113008565/timeline-wabah-virus-corona-terdeteksi-pada-desember-2019-hingga-jadi?page=all>.
- Bae, S. M., Masud, M. A. K., & Kim, J. D. (2018). A Cross-Country Investigation of Corporate Governance and Corporate Sustainability Disclosure: A Signaling Theory Perspective. *Sustainability (Switzerland)*, 10(8), 2611.
- Barberis, N., Shleifer, A., & Vishny, R. (1998). A Model of Investor Sentiment. *Journal of Financial Economics*, 49(3), 307–343.
- Cao, Z., El Ghouli, S., Guedhami, O., & Kwok, C. (2020). National Culture and The Choice of Exchange Rate Regime. *Journal of International Money and Finance*, 101, 102091.
- Chui, A. C. W., & Kwok, C. C. Y. (2009). Cultural Practices and Life Insurance Consumption: An International Analysis Using GLOBE Scores. *Journal of Multinational Financial Management*, 19(4), 273–290.

- Chui, A. C. W., Titman, S., & Wei, K. C. J. (2010). Individualism and Momentum Around the World. *Journal of Finance*, 65, 361–392.
- Citradi, T. (cnbcindonesia.com, 2020). *Kuartal I: Bursa RI Guncang & Ditinggal Asing, IHSG Drop 28%*. Available: <https://www.cnbcindonesia.com/market/20200401145148-17-149085/kuartal-i-bursa-ri-guncang-ditinggal-asing-ihs-g-drop-28>.
- Daniel, K., Hirshleifer, D., & Subrahmanyam, A. (1998). Investor Psychology and Security Market Under and Overreactions. *The Journal of Finance*, 53(6), 47.
- Dou, P. Y., Truong, C., & Veeraraghavan, M. (2016). Individualism, Uncertainty Avoidance, And Earnings Momentum in International Markets. *Contemporary Accounting Research*, 33(2), 33.
- Gormsen, N. J., & Kojien, R. S. J. (2020). Coronavirus: Impact on Stock Prices and Growth Expectations. *The Review of Asset Pricing Studies*, 10(September), 574–597.
- Halisa, N. N., & Annisa, S. (2020). Pengaruh Covid-19, Nilai Tukar Rupiah dan Indeks Harga Saham Gabungan Asing Terhadap Indeks Harga Saham Gabungan Indonesia (IHSG). *Jurnal Manajemen Dan Organisasi*, 11(3), 170–178.
- Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions, And Organizations Across Nations*. New York: Sage publications.
- Inklaar, R., & Yang, J. (2012). The Impact of Financial Crises and Tolerance for Uncertainty. *Journal of Development Economics*, 97(2), 466–480.
- Karaman, A. S., Kilic, M., & Uyar, A. (2020). Green Logistics Performance and Sustainability Reporting Practices of the Logistics Sector: The Moderating Effect of Corporate Governance. *Journal of Cleaner Production*, 258, 120718.
- Khidoyatova, M. R., Kayumov, U. K., Inoyatova, F. K., Fozilov, K. G., Khamidullaeva, G. A., & Eshpulatov, A. S. (2022). Clinical status of patients with coronary artery disease post COVID-19. *International Journal of Health & Medical Sciences*, 5(1), 137–144. <https://doi.org/10.21744/ijhms.v5n1.1858>
- Liu, W. han. (2019). National Culture Effects on Stock Market Volatility Level. *Empirical Economics*, 57(4), 1229–1253.
- Odean, T. (1998). Volume, Volatility, Price, And Profit When All Traders Are Above Average. *Journal of Finance*, 53, 1887–1934.
- Perez, A. F., Gilbert, A., Indriawan, I., & Nguyen, N. H. (2021). COVID-19 Pandemic and Stock Market Response: A Culture Effect. *Journal of Behavioral and Experimental Finance*, 29, 100454.
- Space, W. L. (2014). International Standard Classification of Occupations (ISCO). *Encyclopedia of Quality of Life and Well-Being Research*, 3336–3336.
- Statman, M., Thorley, S., & Vorkink, K. (2006). Investor Overconfidence and Trading Volume. *Review Finance Study*, 19(4), 1513–1565.
- Sugianto, D. (detik.com, 2020). *Proyeksi Ekonomi Global yang Bikin Jokowi Ngeri*. Available: <https://finance.detik.com/berita-ekonomi-bisnis/d-5088329/proyeksi-ekonomi-global-yang-bikin-jokowi-neri>.
- Suryasa, I. W., Rodriguez-Gámez, M., & Koldoris, T. (2021). The COVID-19 pandemic. *International Journal of Health Sciences*, 5(2), vi–ix. <https://doi.org/10.53730/ijhs.v5n2.2937>
- Suryasa, I. W., Rodríguez-Gámez, M., & Koldoris, T. (2022). Post-pandemic health and its sustainability: Educational situation. *International Journal of Health Sciences*, 6(1), i–v. <https://doi.org/10.53730/ijhs.v6n1.5949>

- Uddin, M., Chowdhury, A., Anderson, K., & Chaudhuri, K. (2021). The Effect of COVID -19 Pandemic on Global Stock Market Volatility: Can Economic Strength Help to Manage the Uncertainty? *Journal of Business Research*, 128(June 2020), 31–44.
- World Bank. (2021). *Environment Social and Governance (ESG) Data/DataBank*. Worldbank.Org.