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# The Effect of Coronavirus Disease (Covid19) Positive Cases on Indonesia's Gold Price

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### ABSTRACT

In 2020, the world was shaken by the presence of the COVID-19 pandemic, which resulted in various sectors, such as financial markets, rupiah exchange rates and commodities. This study aims to determine the effects of Daily Positive Cases of COVID-19 on Indonesia's Gold Prices. The period used in this research is eight months, starting from 13th March 2020 to 13th November 2020. This type of research is based on associative research using a quantitative approach. The sample in this study was obtained from the official website of the Task Force for Handling COVID-19 and Precious Metals, amounting to 238. The data analysis technique used was regression analysis. The research showed that the daily positive cases of COVID-19 have a positive impact on Gold Prices in Indonesia. This is supported by the regression coefficient value of 16.944 and a significance value of  $0.00 < 0.05$ . The coefficient of determination is 0.549. It shows the magnitude of the influence of the variable is 54.9%, while the rest is explained by other variables outside of this study.

### ABSTRAK

Pada tahun 2020, dunia diguncangkan dengan keberadaan pandemi COVID-19 yang mengakibatkan berbagai macam sektor seperti pasar keuangan, nilai tukar rupiah dan komoditas. Penelitian ini mempunyai tujuan untuk mengetahui pengaruh Kasus Positif Harian COVID-19 terhadap Harga Emas di Indonesia. Periode yang digunakan dalam penelitian ini adalah delapan bulan, yaitu mulai dari tanggal 13 Maret 2020 sampai dengan tanggal 13 November 2020. Jenis penelitian ini merupakan penelitian asosiatif dengan menggunakan pendekatan kuantitatif. Sampel dalam penelitian ini diperoleh dari situs resmi Satuan Tugas Penanganan COVID-19 dan Logam Mulia yang berjumlah 238. Teknik analisis data yang digunakan adalah statistik deskriptif, uji asumsi klasik dan analisis regresi sederhana. Berdasarkan hasil penelitian, penelitian ini menunjukkan bahwa Kasus Positif Harian COVID-19 berdampak positif terhadap Harga Emas di Indonesia. Hal ini dibuktikan dengan nilai koefisien regresi sebesar 16,944 dan nilai signifikansi sebesar  $0,00 < 0,05$ . Nilai koefisien determinasi yaitu sebesar 0,549. Hal ini menunjukkan besarnya pengaruh variabel adalah sebesar 54,9% sedangkan sisanya dijelaskan oleh variabel lain di luar penelitian ini.

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## 1. Introduction

In 2020, the world economy was shaken again by the emergence of a virus outbreak called Coronavirus or COVID-19, according to the World Health Organization (WHO). The Coronavirus causes panic and concern among the public, government, and business sectors. The government and the people are trying to take precautions to slow the spread of this virus by implementing a work-from-home (WFH) system, closing tourist attractions and educational institutions, postponing and cancelling large agendas, reducing public transportation modes to imposing large-scale social restrictions (PSBB) in various regions with high case rates (Djalante et al., 2020).

The COVID-19 outbreak has had a severe impact on almost all countries in the world, including Indonesia. The effect of the COVID-19 pandemic does not only affect one area but also involves all ongoing activities such as the movement of the Composite Stock Price Index (IHSG), the Rupiah Exchange Rate against the USD, the World Gold Prices, and Investment. Investment is one aspect of concern amid the spread of COVID-19. The various restrictions each country imposes will impact economic sustainability and investment in a country.

One of the impacts of the COVID-19 pandemic that is being felt is the uncertain economic conditions, it causes people to be more careful in investing (Abdelrhim et al., 2020). Gold is considered a safe investment, so it becomes a choice for many people. Gold investment is considered a safe haven with several advantages: it is easy to cash in and trade (Apergis, 2016). Gold is one of the important commodities in the international business (Singh & Sharma, 2018). Gold has a long history of being used as a store of value and a medium of exchange. It has been traded and valued for thousands of years and is accepted as a form of payment in many cultures worldwide (Baranova et al., 2020). This gives gold a certain degree of stability and reliability that is not necessarily present in other investments (Białkowski et al., 2015).

Gold is an alternative investment method because it is a risk-free (Islam et al., 2020). Since the spread of COVID-19 in Indonesia, the price of gold has slowly experienced an upward trend. However, the cost of gold can also experience price fluctuations caused by various factors. For this reason, people who want to invest must pay attention to the factors that affect the price of gold to get future benefits. Factors that can impact the price of gold are inflation, dollar exchange rates, interest rates, central bank instability, the global crisis, and other factors (Mezghani & Boujelbène, 2018).

Since the first case of COVID-19 was revealed to the public on March 2nd, 2020, the price of gold has rapidly increased. In early March 2020, the cost of gold touched the level of Rp. 776,000 per gram and then in a few days later decreased (logammulia.com access in March 5<sup>th</sup>, 2020). However, towards the end of March 2020, the price of gold rose again to the level of Rp. 835,000 per gram. After a few months, the price of gold broke through to the level of Rp. 900,000 per gram on July 28th, 2020. With the increase in COVID-19 cases every day, the price of gold experienced an upward trend to reach the level of Rp. 964,000 per gram on August 7th, 2020. This increase was also followed by the world gold price, which set a new record, particularly on July 27th, 2020; the gold price reached the \$ 1,944 per ounce level since 2011, which previously reached the level of \$ 1,921 per ounce. Gold prices have increased by 28% from January 1st to August 14th, 2020 (Motta, 2020).

Several studies suggest that economic and natural events influence the price of gold. When the financial crisis occurred in the United States, it caused turmoil in the gold market. Gold is considered a safe haven even when the stock market generates negative returns (Baur & Lucey, 2010). This has increased gold demand due to higher investor interest (Apergis, 2016). Goodell, (2020) presents in his literature on the implications faced by the economy caused by natural disasters, nuclear war, climate change, local disasters, and highlights the COVID-19 pandemic, which has caused unprecedented economic problems and states that this pandemic includes the scale of its impact on the financial sector and other sectors. This was also conveyed by Bekaert et al., (2011) namely that economic and political factors have caused several financial crises in the last few decades, causing a surge in volatility in financial markets. Therefore, the gold market faces price fluctuations and high volatility causing investors to be more interested in learning and knowing market condition.

Research conducted by Lamouchi & Badkook (2020), analyses whether there is a change in the price of gold amid international events, including the stock market crash in 1987, the Gulf War 1, the collapse of the WTC building in 2001 due to terrorist attacks, and the COVID-19 pandemic. This

research results indicate that international events and the COVID-19 pandemic have positively influenced the Gold Price. In addition, research conducted by [Yousef & Shehadeh, \(2020\)](#), analysed whether there was an impact of the COVID-19 case on Gold based on data obtained from 2012 to 2020. The results of this study prove that there is a positive correlation between COVID-19 cases and Gold prices.

[Gharib et al., \(2021\)](#) explained that Gold prices experienced a relatively high bubble in February and March 2020. This was due to the decline in oil prices and the global stock market, which was affected by the spread of COVID-19, so investors shifted their assets towards safer assets, particularly gold. Governments and central banks worldwide implemented unprecedented stimulus measures to support their economies, leading to inflation and currency devaluation concerns. Gold, a physical asset with intrinsic value, was seen as a way to hedge against these risks.

Gold has always been considered an important investment ([O'Connor et al., 2015](#); [Worthington & Pahlavani, 2007](#)). The price of gold rises in a fluctuating economy because it is regarded as a safe haven ([Akhtaruzzaman et al., 2021](#)). The future economic effects of the pandemic are not yet predictable. In this situation, gold prices worldwide have risen sharply since the pandemic's beginning, and their prices have destroyed major stocks, including the S&P 500 and the Dow Jones ([Sumer & Ozorhon, 2020](#)). This also happened with Indonesian stock prices, and the cost of gold was inversely proportional. It has become a crucial phenomenon to investigate.

Furthermore, this study aims to determine the effects of Daily Positive Cases of COVID-19 on Indonesia's Gold Prices. The data in this research is from 13th March 2020 to 13th November 2020. Data were analyzed using linear regression to determine whether there is a relationship between the daily positive COVID-19 and the gold price in Indonesia. The research showed that daily cases positive COVID-19 positively impacted the gold price.

The price of gold is an important concern for investors and policymakers who make decisions based on financial markets and the global economy. Understanding the volatility of the gold market is important in analyzing the current and future state of the worldwide market ([Mazur et al., 2021](#)). Furthermore, the study can contribute to the existing literature on the impact of pandemics on financial markets and commodity prices, particularly in emerging markets such as Indonesia. Therefore, it is interesting to conduct an analysis of the impact of the COVID-19 pandemic on gold price movements in Indonesia, which is projected as a long-term investment.

## 2. Literature Review

### 2.1. Signaling Theory

Signaling theory is closely related to asymmetry information between management and outside parties interested in company information. Signals are given from management to interested parties to provide guidance on the condition of a company in order to assess the prospects of a company. Spence first introduced the signaling theory in his research entitled Job Market Signaling. [Spence \(1973\)](#), expresses that a signal gives an indicator or information and the sender (the owner of the information) tries to provide pieces of relevant information that the recipient can use. The receiving party will then adjust its behaviour according to its understanding of the signal. signaling theory is a company's management behaviour in providing guidance to investors regarding management's views on the company's prospects for the future ([Anggraeni, 2015](#)).

According to [Jogiyanto \(2013\)](#), information published as an announcement will provide a signal for investors in making investment decisions. When the data is announced, market participants first interpret and analyze the data as a good signal (good news) or as a bad signal (bad news). If the information announcement is a good signal for investors, there will be a change in abnormal returns, where the abnormal return will increase. In contrast, if the information announcement is a wrong signal for investors, there will be a change in abnormal return, where the abnormal return will decrease.

Therefore, in this research, the main goal is to know whether the information given by the government about the increase of COVID-19 positive cases impacts the gold price and whether it affects investors' decision-making. The high demand for gold during the pandemic can also signal the economic and geopolitical risks that investors perceive. The pandemic has caused widespread

economic disruption and uncertainty, leading to concerns about inflation, currency devaluation, and other threats. The demand for gold during this time can be interpreted as a signal that investors seek to hedge against these risks by investing in a safe-haven asset.

## 2.2. Global Gold Price

According to the World Health Organization (WHO), severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), better known as the Coronavirus, is a new type of virus that is transmitted to humans. This virus can be transmitted to anyone, regardless of age or gender, from children, adolescents, and adults to the elderly. Coronavirus or severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) attacks the human respiratory system. With the COVID-19 pandemic, several countries implemented policies to impose a system lockdown to slow the spread of the virus. The government has implemented a Large-Scale Social Restriction (PSBB) system to prevent this virus in Indonesia.

Gold is a type of precious metal that can be used for transactions. Gold can be used as a financial standard or as a medium of exchange and is received worldwide. Gold has soft, corrosion-resistant properties and is easily exposed so that it can be formed into various kinds of jewellery. Gold is a world commodity exchange in the monetary and financial sectors. Gold is a precious metal considered a commodity and a monetary asset. It acts as a source of wealth, a unit of value and a medium of exchange (Goodman, 2016). Gokmenoglu & Fazlollahi (2015), traditionally, gold has been an indicator of future inflation, acted as a hedge against inflation, has an important asset in portfolio allocation, and has shown its role in crises. Besides, gold was considered a solid, safe haven asset during the 1998 monetary crisis and the global recession in 2008 (Baur & Lucey, 2010).

Some factors affecting gold prices, these commodity markets are vulnerable to not only the law of demand and supply, macroeconomic variables (exchange rates and inflation, etc.), and political events, but also to pandemic factor (Ichev & Marinč, 2018). The gold market also grew globally due to the growth of its economic indicators (Salisu et al., 2021). Mensi et al.(2020), explained that the factors that affect the price of gold are, (i) inflation rising more than predictors, and the inflation rate will usually influence economic policy across countries. The predicted inflation rate in per cent form will be used as a reference for determining the interest rate in the country; (ii) financial crisis, the monetary crisis that occurred in 1998 and 2008 are considered economic chaos and panic. This factor can make the gold price suddenly jumps out of control; (iii) a significant increase in oil prices; when the world oil price rises significantly, the cost of gold also increases. If these invasions continue, world oil prices will inevitably increase; (iv) gold demand, gold prices will continue to rise if world gold demand continues to grow inversely to the existing gold supply; (v) global political condition, economic uncertainty is the result of high world political conditions caused by tensions between countries. The price of gold is also affected due to this factor; (vi) exchange rates, the weakening of rates of the US Dollar exchange rate could push up the world gold prices. When interest rates rise, there is much effort to keep money on deposit rather than gold which does not generate interest. This will put pressure on the gold price. Conversely, when interest rates fall, the cost of gold will rise.

## 2.3. The Effect of Daily Positive Cases of Covid-19 Gold Price

The impact caused by COVID-19 has been crucial since the first cases were discovered in China, a significant centre for investment in Asia. Researchers believe that COVID-19 and SARS come from the same family, but the two viruses' impact differs greatly. The COVID-19 incident has rocked the global economy and financial markets. Measures such as social distancing and regional lockdowns impact business entities, and some have even gone out of business. Losses due to COVID-19 have also affected global stock markets, the Rupiah exchange rate, and the price of gold.

According to Bhima Yudhistira from the Institute for Development of Economics and Finance (INDEF), the global gold price has increased due to market panic caused by COVID-19. Since the first case was discovered, people have switched to safer assets or safe havens, namely gold, and avoid risky assets, such as volatile currencies and stock assets. The impact of the COVID-19 pandemic and the central bank's reaction has implications for the gold industry.

Several studies suggest that economic and natural events influence the price of gold. When the financial crisis occurred in the United States, it caused turmoil in the gold market. Gold is considered a safe haven even when the stock market generates negative returns (Baur & Lucey, 2010). Research conducted by Yousef and Shehadeh (2020), analyzed whether there was an impact of the COVID-19 case on Gold based on data obtained from 2012 to 2020. The results of this study prove that there is a positive correlation between COVID-19 cases and Gold prices. It was also found that COVID-19 impacted the Gold Price in a study by Gharib et al., (2020). In this study, the results obtained were that the Gold Price experienced a relatively high bubble in February and March 2020. This was due to the decline in oil prices and the global stock market, which was affected by the spread of COVID-19, so investors shifted their assets towards safer assets, particularly gold. It can be concluded that the COVID-19 pandemic has affected the price of gold, which has increased significantly. Based on the explanation above, this research conducted the hypothesis:

H1: Daily positive cases of COVID-19 positively affect the movements of gold prices in Indonesia.



**Figure 1.** Research Framework

### 3. Research Method

This study uses a quantitative approach using the associative method to analyze the influence of COVID-19 against the Movement of Gold Prices in Indonesia. Quantitative research, according to Sekaran & Bougie (2016), is a scientific method whose data is in the form of numbers or numbers that can be processed and analyzed using mathematical and statistical calculations. Hair Jr et al., (2018), explained that associative research aims to determine the relationship between two or more variables. In this study, the relationship used is a casual relationship. A casual relationship is a relationship that has cause and effect. Therefore, the casual relationship is a relationship that consists of independent variables (variables that affect) and dependent variables (Hair Jr et al., 2018). This study aims to determine the influence of COVID-19-positive cases on the gold price in Indonesia.

This research was conducted in Indonesia involving COVID-19-positive cases and gold prices in Indonesia. The timeframe of this research started from March 13th, 2020, to November 13th, 2020. This is an event study investigation. The population and sample used in this study are the number of daily positive cases or patients infected with COVID-19 and the Gold Price in Indonesia.

The data used in this study are secondary data based on historical data obtained from the COVID-19 response team's official publication from the government of the Republic of Indonesia and from the official website of precious metals [logammulia.com](http://logammulia.com) in Indonesia. The method of analysis used in this research is simple linear regression analysis. This regression analysis aims to determine whether there is a relationship between the independent variable and the dependent variable. This analysis used a computer-assisted program with the SPSS Statistics program (Pallant, 2010).

### 4. Research Results and Discussion

The following is a summary of the results of a simple linear regression analysis test:

**Table 1.** Coefficient Result

Variable	Regression Coefficient	t count	Sig.	t table
Constant	911931,570			
COVID-19	28,798	16,944	0,000	1,970
R Square: 0,549				

The statistical t test for the COVID-19 variable shows that the calculated t count value is 16.944 and the t table value is 1.970. If the two t values are compared, the estimated t count value is greater than the t table value. Meanwhile, the significance value is 0.000, which is less than 0.05. So it can be concluded that COVID-19 positively affects the Gold Price in Indonesia.

## Discussion

The COVID-19 pandemic has had a negative impact on various sectors, especially in the economic sector. When the world was hit by the emergence of the COVID-19 pandemic in 2020, economic activity could not run normally, causing uncertain economic prospects in the future. The world economy is hampered, the IHSG has decreased, the exchange rate has weakened, and companies are forced to close. Such situations and conditions worry investors about the economic uncertainty of investing in risky assets and the accelerating spread of COVID-19.

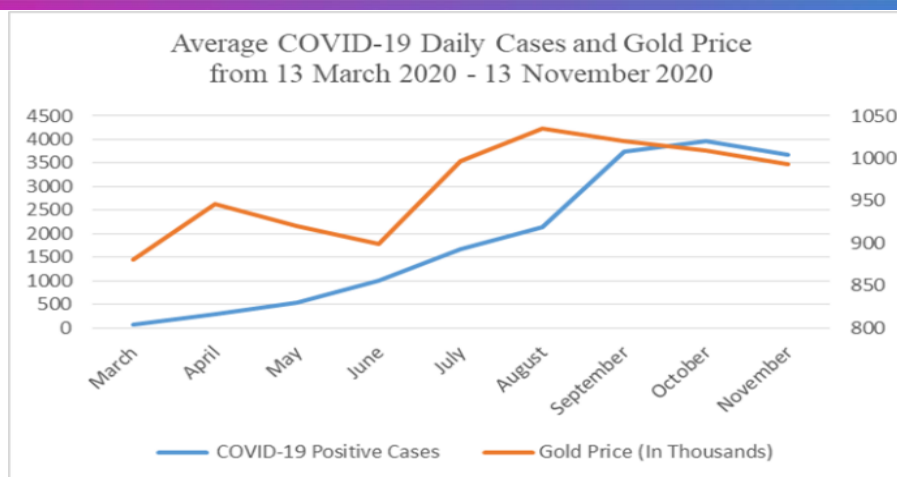
Investors do not want to lose money, so their funds are invested in other assets. Investors typically seek to maximize their returns while minimizing their risks. By spreading their investments across different asset classes, investors can reduce their exposure to any one asset and minimize their risk of losing money. Diversification can also help investors achieve a balance between risk and return. Different asset classes have varying levels of risk and return potential, and by diversifying across these asset classes, investors can potentially increase their overall returns while reducing their risk.

Initially, investors hoped the economy would recover quickly once the lockdown was lifted and companies resumed operations. As a result, many investors began buying high-quality, undervalued stocks. However, as time passed, hopes of a short-term recovery diminished, and investors started looking for safe havens for their funds. Since gold is considered the perfect protector against inflation and economic turmoil, the demand for gold increases (Mensi et al., 2020).

One reason for this is that gold has historically retained its value and purchasing power, even in times of economic crisis. Unlike paper currency, which can be affected by inflation and currency devaluation, gold is a physical asset with intrinsic value. This means that its value is not tied to any particular currency or government, which makes it a reliable store of value in times of economic turmoil.

According to Juan Carlos, head of research at the World Gold Council, the price of gold has spiked due to the COVID-19 pandemic panic. Therefore, investors shift their assets to safer ones, namely gold, increasing the demand for gold. Investors seek to invest in assets that offer the potential for high returns while minimizing their risks.

Assets considered safe havens have not been easily affected by turmoil in financial markets. When the gold price increases, the buyback price increases, giving investors profits. Gold buyback prices are the prices at which buyers are willing to purchase gold from sellers. When the price of gold increases, the buyback price also tends to increase, since buyers are willing to pay more for the metal due to its increased value. As a result, investors who have previously purchased gold at a lower price may be able to sell their gold for a profit if they choose to do so.



**Figure 2.** COVID-19 Daily Cases and Gold Price

The figure above compares the positive daily cases of COVID-19 compared to the price of gold in the period March 13th, 2020, to November 13th, 2020. Based on the figure above, it can be seen that the increase in gold prices began to occur when the first COVID-19 cases were announced in Indonesia and experienced a rise in daily cases. The price of gold reached its highest point on August 7th, 2020, at IDR 1,065,000 per gram.

The results of this study are supported by the results of research conducted by [Yousef and Shehadeh \(2020\)](#) and Wee Chian Koh and John Baffes (worldbank.org), which states that COVID-19 affects the price of gold because of the higher number of cases affected by COVID-19 caused an unstable world economic condition; therefore, investors took steps to invest in safe and harmless assets, namely safe-haven assets such as gold. In addition, according to research conducted by [Lamouchi and Badkook \(2020\)](#), it is stated that the price of gold tends to increase in the event of economic uncertainty, bad news or the capital market experiences a negative trend. This is evidenced by the research results, in which the Gold Price experienced an upward trend during the stock crash, the first Gulf War, the attack on the WTC in 2001, and the most recent COVID-19 pandemic. Investors prefer to invest in safe-haven assets such as gold.

## 5. Conclusions

This study aims to determine the effect of COVID-19-positive cases on Indonesia's gold prices. The COVID-19 pandemic has such a negative impact on various sectors, causing panic and concern among the public. This also results in uncertainty about the future. Therefore, people, especially investors and potential investors, divert their funds to safer, more reliable assets such as gold. On the contrary, there are still limitations in this study; first, the period only covers a certain period, so we cannot see as a whole whether, in the long term, the gold price will continue to experience an upward trend along with the addition of positive cases of COVID-19 or not. COVID-19 are only based on cases in Indonesia, not global ones. Second, information regarding the price of gold per day varies, which can lead to inaccurate gold prices.

Future research related to this topic may consist of some points. The period of research should cover more than eight months. Therefore, we could see and understand more as a whole whether in the long term, the gold price will continue to experience an upward trend along with the addition of positive cases of COVID-19 or not. Cases of COVID-19 data should consider using global data instead of the data of only one country. The results of this study can provide information about the impact of COVID-19 on precious metals commodities, especially gold prices. Investors should be careful when investing during global situations and conditions that have yet to find a point of certainty. In addition, we should also consider other factors that affect economic conditions in order to make the right decisions in investing. The state of the global economy can significantly impact the price of gold, as investors may turn to safe-haven assets like gold during times of economic uncertainty.

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