MOVEMENT ANALYSIS GOLD PRICE DURING COVID-19 YEARS 2020 - 2021

Anita Permatasari Universitas Katolik Darma Cendika <u>anita.permatasari@ukdc.ac.id</u>

Nia Yuniarsih

Universitas Katolik Darma Cendika nia.yuniarsih@ukdc.ac.id

ABSTRACT

Gold is a type of investment instrument that can be used as an alternative choice for investors and can be used as one of the portfolio diversification strategies. One of the considerations in investment activities in the capital market is the rate of return of the investment instrument. The ups and downs of gold price movements in this study are influenced by three factors, namely the rupiah exchange rate against the USD, inflation and the Indonesian Interest Rate (SBI), which we now know better as BI 7-day. The BI rate or BI 7-day has a function as a suppressor of the inflation rate so that economic conditions are maintained. The research design is in the form of quantitative research using secondary data while the research design used is a causal design and uses a Static tical Package for Social Sciences (SPSS) for data processing. The results of the first study show that there is an influence between the Rupiah exchange rate and the USD affecting the movement of gold during Covid-19 in 2020-2021. The results of the second study show that there is an influence between inflation affecting the movement of gold during Covid -19 in 2020-2021. The results of the third study show that there is no influence between BI 7-day on the movement of gold during Covid-19 in 2020-2021.

Keywords: exchange rate, inflation, bi 7-day, gold, covid-19

INTRODUCTION

The Covid-19 outbreak first appeared in December 2019 and only entered Indonesia on 2 March 2020 (https://id.wikipedia.org). The spread of the Covid- 19 outbreak made the world for the first time go into lockdown. The lockdown can be the main cause of financial distress, Singh (2020). The effect of lockdown also has a considerable impact where the capital market can quickly respond negatively to this information and will cause uncertainty and capital market performance will decrease, Abdelrhim et al. (2020). Covid-19 will have a negative influence, this is because investors have to make choices where to stay in the capital market or they have to leave the capital market to secure their assets (panic selling) and invest in other instruments such as gold or, Nurmasari (2020) suggests that.

Gold is one type of investment instrument that can be used as an alternative choice for investors and can be used as a portfolio diversification strategy. One of the considerations in investment activities in the capital market is the rate of return of the investment instrument. According to data from the International Monetary Fund (2019), in December 2019 the data shows that gold investment promises a return from its price change over the past year of 18.43%. The price of gold is a parameter for calculating gold returns so it is necessary to pay attention to its movements as a consideration for making investment decisions. In this study, the author chose a gold price reference using the gold spot price or the world gold spot price. This price can be understood as the price of 1 troy ounce of gold in US dollars.

The ups and downs of gold price movements in this study were influenced by three factors. The first factor is the exchange rate of the Rupiah against the USD. High fluctuations in foreign exchange rates can encourage investors to take advantage of the moment by buying foreign exchange. The second factor is inflation. Inflation is an event when goods increase as a result of a decrease in the value of a currency. One of the reasons why the value of a currency drops is the printing of new money by the state. Gold is believed to always be able to secure purchasing power, meaning that gold will rise, at least equal to the inflation rate within a certain time. The third factor is the Indonesian interest rate (SBI) which we now know better as the BI 7-day. The BI rate or BI 7-day has a function as a suppressor of the inflation rate so that economic conditions are maintained. The development of unreasonable interest rates can directly disrupt the development of banking. High interest rates on the one hand will increase people's desire to save or invest in gold, so the amount of bank funds will increase.

The formulation of the problem in the study is as follows:

- Does the exchange rate of the Rupiah against the USD affect the movement of gold during the year Covid-19 in 2020-2021?
- 2. Does inflation affect the movement of gold during Covid-19 in 2020-2021?
- 3. Does interest rate (SBI) affect the movement of gold during Covid-19 2020-2021?

This study was conducted with the aim of testing and analysing:

 To analyse the effect of the Rupiah to USD exchange rate on gold movement during Covid-19 in 2020-2021?

- 2. To analyse the effect of inflation on gold movement during Covid-19 2020-2021?
- 3. To analyse the effect of 7-day BI on gold movement during Covid-19 year 2020-2021?

LITERATURE REVIEW

Exchange Rate (Urs)

Exchange rate is the price of one unit of currency in another unit of currency, (Ruhendi and Arifin, 2003). Exchange rates are determined by the foreign exchange market, which is the market in which different currencies are traded, (Samuelson and Nordhaus, 2011: 305). The exchange rate can also be interpreted as the price level that the residents of the two countries agree to trade, (Mankiw, 2003). The most commonly used exchange rate is the middle rate of the USD against the rupiah. This is due to its stable value and is the most widely used currency by the Indonesian people.

Inflation

Inflation is a generalised and continuous rise in the prices of goods (Rahardja and Manurung, 2008:165). High inflation has the effect of reducing people's purchasing power. The increase in inflation should be offset by the availability of sufficient commodities and followed by an increase in income levels greater than the inflation rate, so that economic problems can be avoided, (Harsono and Worokinasih, 2018).

Bank Indonesia Interest Rate (SBI)

Samuelson and Nordhaus (2011), interest rates are the price paid for the use of money. The interest rate is the price of using money for a certain period of time (Boediono, 2014: 76). Bank Indonesia Interest Rate (BI Rate) is a policy rate that reflects the stance of monetary policy set by Bank Indonesia and announced to the public (Bank Indonesia: 2008).

Gold Price

Gold is one of the world's commodities that has been used as a means of payment, (Gumilang et. al., 2014: 3). The gold standard used in this study is the London market gold standard price or better known as the London Gold Fixing.

Conceptual Framework



Source: Researcher

Previous Research

- 1. Tufail and Botool (2013) with results showing a positive and significant relationshipbetween gold prices and inflation, where a one per cent increase in gold prices leads to a 0.33 per cent increase in inflation.
- 2. Sindhu (2013) with research results that show a negative influence between the USDollar and the price of gold. Crude oil prices are positively correlated with gold prices.Inflation has a positive effect on gold prices, namely an increase in inflation will increase the price of gold as well.
- 3. Wicaksono (2016) with the results of research that shows that the inflation variable has a positive and significant effect on gold prices by 3.68%. The Rupiah exchange ratevariable against the USD has a positive and significant effect on gold prices by 0.87%. (3) The BI rate variable has a negative and significant effect on gold prices by 21.8%. (4) Inflation, dollar exchange rate and BI rate variables simultaneously affect the price of gold.

RESEARCH HYPOTHESIS

The Effect of Exchange Rates on Gold Movement During Covid -1 9 2020 -2021 The foreign exchange rate shows the comparison between the price of a particular country's currency and the currency of another country. The higher the fluctuation of foreign exchange rates will be able to encourage investors to take advantage of it, namely by buying foreign exchange. If

investors expect a devaluation in a country, they will tend to shift their investment into gold (Santosa, 2009). This happens because when gold in US dollars falls, at the same time, the US dollar against the rupiah tends to strengthen.

Based on the description above, a hypothesis can be formulated:

Hypothesis 1: Exchange rate has a positive effect on gold movement during Covid-19 2020-2021.

The Effect of Inflation on Gold Movement During Covid -1 9 Year 2020 - 2021

Gold is a precious metal that is in high demand by many people. This gold price also follows the flow of inflation. High inflation will increase the price of gold or it can be said that high inflation will increase the price of gold. The opposite condition when inflation decreases, gold also decreases. The price of gold in Indonesia is unique. This is because the price of gold in Indonesia has a tendency to always rise and the value is not too significant if the price drops. Based on the description above, a hypothesis can be formulated:

Hypothesis 2: Inflation has a positive effect on gold movement during Covid-19 in 2020- 2021. *The Effect of Indonesia's Interest Rate on Gold Movement During Covid-1 9 Years 2020-*2021

According to Bank Indonesia, the BI rate or BI 7-day is a set monetary policy interest rate that reflects the stance of monetary policy set by Bank Indonesia and announced to the public. The interest rate or BI rate is an indication of the short-term interest rate that Bank Indonesia wants in an effort to achieve the inflation target. Unreasonable interest rate developments can directly disrupt banking development. High interest rates will increase people's desire to save or invest in gold so that the amount of banking funds will increase. Based on the description above, a hypothesis can be formulated:

Hypothesis 3: 7-day BI has a positive effect on gold movement during Covid-19 2020-2021.

RESEARCH METHODS

Research Design

The research design is quantitative research using secondary data while the research design used is a causal design and uses the Statistical Package for Social Sciences (SPSS) for data processing.

Data and Samples

The data used in this study are secondary data in the form of financial data recorded at Bank Indonesia from 2020 to 2021 obtained from www.bi.go.id.

Research Variables

There are two types of variables in this study, namely exogenous variables and endogenous variables. These variables are:

- 1. The independent (exogenous) variables used in this study are the Rupiah exchange rate against the USD (KURS), inflation, interest rates (SBI).
- 2. The dependent variable (endogenous) in this study is gold.

Operational Definition and Measurement of Variables

1. Exchange Rate (COURSE)

The exchange rate in this study uses the Rupiah exchange rate against the USD. The Rupiah to USD exchange rate in this study uses the Bank Indonesia middle rate obtained from Bank Indonesia during the 2020-2021 period.

2. Interest Rate (BI 7-day)

Interest rates in this study use BI 7-day data obtained from Bank Indonesia during the 2020-2021 period.

3. Inflation

Inflation in this study uses the inflation rate in Indonesia obtained from Bank Indonesia during the 2020-2021 period.

4. World gold price (GOLD)

The world gold price in this study uses data on gold prices in the London market obtained from Kitco during the 2020-2021 period.

Data Collection Procedure

The data obtained in this study is documentation, where the internal data obtained from the documentation of the object under study consists of financial reports and annual reports for 2 years from 2020 to 2021.

Data Analysis Technique

The data analysis techniques in this study are as follows:

- 1. Conduct a theoretical and deductive review of the research model.
- 2. Describes the research model. The following is the basic model and equation model used in this study as follows:

GOLDit=a0+BKURS+BINFLATION+BBI7-DAY+eit

Where:

 β KURS = Rupiah to USD exchange rate

 β INFLATION = Inflation

 β BI 7-DAY = interest rate price

 β GOLD = gold price

- 3. Perform data analysis.
- 4. Conducting econometric analyses in this study using the Statistical Package for Social Sciences (SPSS).

RESULTS OF RESEARCH AND DISCUSSION

The following is the descriptive statistics of this study, where the data can be seen in table 1. Table 1 lists information about the minimum, maximum, mean and standard deviation of the exchange rate, inflation, BI 7-day, and gold variables. Table 1 also shows that the sample in this study is twenty-four same

	Ν	Minimum	Maximum	Mean	Std. Deviation
COURSE	24	13662.0000	16367.0000	14485.083333	503.1050471
INFLATION	24	.1320	.2980	.178500	.0518065
BI7DAY	24	.0043	.5500	.058094	.1050768
GOLD	24	690499.5700	927153.9000	830325.046250	51677.5069228
Valid N (listwise)	24				

Table 1 Descriptive Statistics

Source: SPSS, processed by researchers

Table 2 is a model feasibility test (F test), where it can be seen in table 2 that the value of the F test is 9.536 with a significance of zero percent (0%). These results state that this research model is said to be feasible and can be continued to the next stage.

Table 2 Model Feasibility

ANOVA ^a							
Mode		Sum of Squares	df	Mean Square	F	Sig.	
	Regression	36150707505.071	3	12050235835.024	9.536	000ь	
1	Residuals	25272281095.435	20	1263614054.772			
	Total	61422988600.506	23				

a. Dependent Variable: GOLD

b. Predictors: (Constant), BI7DAY, COURSE, INFLATION

Source: SPSS, processed by the researcher

In table 3 is the R Square (R2) test, where the value of R2 in this study is 52.7%. This value reflects that the movement of gold prices in this study is 52.7% influenced by the exchange rate, inflation, BI 7 -day variables and the remaining value of 47.3% is influenced by other variables not examined in this study.

Table 3.R Square Test

Model	R	R Square	Adjusted R Square	Std.	Error	of	theEstimate
1	. ^{767a}	.589	.527	35547.3494760			

a. Predictors: (Constant), BI7DAY, COURSE, INFLA SI

Source: SPSS, processed by the researcher

Table 4 is the result of the t test. The first result shows that the unstandardised coefficient beta value of the exchange rate is 57.102 with a significance value of 0.5% or less than 5%, so these results state that there is an influence between the Rupiah exchange rate against the USD on the movement of gold during Covid-19 in 2020-2021. This is because the USD currency value has a considerable influence on the movement of gold prices in the market. The opposite condition if the USD currency value decreases, the price of gold will also decrease. This research is in line with research conducted by Wicaksono (2016) and this research is not in line with research conducted by Sindhu (2013).

The second result shows that the unstandardised coefficient beta value of inflation is - 567166.218 with a significance value of 0.5% or less than 5%, so these results indicate that there is an influence between inflation on the movement of gold during Covid-19 in 2020- 2021. This is in line with research conducted by Tufail and Botool (2013) which states that inflation affects the movement of gold. This is because inflation can strengthen the price of gold in the market. The price of gold will be stable if inflation conditions in a country do not occur, so that these conditions will cause a decrease in the price of gold or the price of gold does not experience significant development.

The third result in this study shows that the unstandardised coefficient beta value of BI7-day is -82528.622 with a significance value of 36.7% or more than 5%, so these results indicate that there is no influence between BI 7-day on gold movement during Covid-19 in 2020-2021. This is not in line with research conducted by Wicaksono (2016). This is because the price of gold does not gold prices are too dependent and not correlated to the BI 7 -day interest rate but the price of gold is correlated to certain economic conditions that are able to reduce or increase interest rates which will ultimately affect the movement of gold prices. The decline in interest rates makes gold investment itself and ultimately have an impact on the increase in gold prices. The opposite condition if the price of interest rates increases then gold investment will decrease.

Table 4 Test t Coefficients ^a								
Model		Unstandardised	Coefficients	Standardised Coefficients	t	Sig.		
		В	Std. Error	Beta				
1	(Constant)	109235.655	250880.529		.435	.668		
	COURSE	57.102	18.190	.556	3.139	.005		
	INFLATIO N	-	181497.664	569	-3.125	.005		
		567166.218						
	BI7DAY	-82528.622	89356.370	168	924	.367		

a. Dependent Variable: GOLD

Source: SPSS, processed by the researcher

CONCLUSIONS

- 1. There is an influence between the Rupiah exchange rate against the USD affecting the movement of gold during Covid-19 in 2020-2021.
- There is an influence between inflation affecting the movement of gold during Covid-19 2020-2021.
- 3. There is no influence between 7-day BI and gold movement during Covid-19 2020-2021.

ADVICE

- 1. Research Further research using variables other variables such a production gold production, demand from the jewellery industry and the world geopolitical situation.
- 2. Future research can extend the research time or it can also be with comparing the period before the Covid-19 outbreak and after the outbreak Covid-19.
- 3. Future research should pay more attention to the phenomenon that occurs in a country towards gold purchases.

BIBLIOGRAPHY

Abdelrhim, M., Elsayed, A., Mohamed, M., & Farouh, M. (2020). Investment Opportunities in The Time Of (COVID 19) Spread: The Case of Cryptocurrencies and Metals Markets. SSRN Electronic Journal, pp. 1 - 19. Bank Indonesia, 2008, www.bi.go.id

- Boediono, 2014, Synopsis Series of Introduction to Economics No. 2 Macroeconomics, Yogyakarta: BPFE-Yogyakarta
- Gumilang, Reshinta Candra, et al. 2014. The Effect of Macroeconomic Variables, Gold Prices and World Oil Prices on the Composite Stock Price Index (Study on the Indonesia Stock Exchange for the Period 2009-2013. Journal of Administration. Vol.14, pp. 1 -9.
- Harsono, Ardelia Rezki, andWorokinasi h, Saparila. 2018. The Effect of Inflation, Interest Rates, and Rupiah Exchange Rates on the Composite Stock Index (Study on the Indonesia Stock Exchange for the Period 2013-2017). Journal of Business Administration (JAB). 6(2). pp 102 -110.
- IMF Anual Report, 2019, Our Connected Word, pp. 1-90. www.imf.org/AR2019.
- Mankiw, N. G. (2018). Principles of Macroeconomics Eight Edition. Boston: Cengage Learning.
- Nurmasari, I. (2020). The Impact of Covid-19 on Changes in Stock Prices and Transaction Volume (Case Study at PT. Ramayana Lestari Sentosa, Tbk.). Journal of SEKURITAS (Stocks, Economics, Finance and Investment), Long Term Covid 19 Against the Indonesian Stock Market 9 3 (3), pp 230.
- Rahardja, Prathama and Manurung, Mandala. 2008. Introduction to Economics (Microeconomics & Macroeconomics). Third Edition. Institute of FE Publishers UI. Jakarta.
- Ruhendi and Arifin, J. 2003. The Impact of Changes in the Rupiah Exchange Rate and the Dow Jones Stock Price Index on the New York Stock Exchange on the Jakarta Stock Exchange Stock Price Index. Wahana. Vol. 6 (1).
- Samuelson, Paul A and D. Nordhaus William. 2001. Microeconomics, Translation. PT Media Global Edukasi. Jakarta.
- Sindhu, 2013, A study on impact of select factors on the price of Gold, India: School of Management Studies, Jawaharlal Nehru Tech nological University Hyderabad.