

The effect of the gold index and NIKKEI on the Indonesian market index

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ABSTRACT

Gold and NIKKEI are two important market mechanisms and can directly affect the market in Indonesia. The Covid-19 pandemic has had an adverse impact on the world economy and one of them is Indonesia. This study observes the period from June 2021 to May 2022. This study finds that in the period June to December 2021 the gold index is negative and significant on the JCI although NIKKEI has quite a positive effect. Reversely, in the period of January to May 2022, the gold index has a positive effect on the JCI movement, but not on NIKKEI.

Keywords: IHSG; NIKKEI; Gold; Covid-19

JEL Classification: F14; G15; G41

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1. Introduction

Gold is one of the important commodities that can affect stock price movements. This is because gold is an alternative investment that tends to be safe and risk-free. Gold is available in various forms, such as bars, coins, and jewelry. Globally, gold prices will generally follow the increase in the value of the currencies of the countries included in the G-7. The higher the foreign currency makes the higher the price of gold. The price of gold is also usually proportional to the direction of inflation, where the higher the inflation, the higher the increase in the price of gold and often exceeds the increase in inflation itself. Another market mechanism is the NIKKEI or the stock market index for the Tokyo Stock Exchange (Tokyo Stock Exchange or TSE for short). In Indonesia, the value used to measure the performance

of shares listed on a stock exchange is the Composite Index or IHSG.

Technically, the IHSG movement was caused by the movement of all stock prices listed on the stock exchange. Since the beginning of 2020, the world economy has been suppressed by the Covid-19 pandemic, including Indonesia. Febriyanti (2020), Martaliah et al. (2020), Midesia (2020), Octavera and Rahadi (2021), and Putranto (2021) reported that the Covid-19 pandemic had a very bad impact on the Indonesian economy, including the stock market. Until the end of May 2022, the economic impact caused by the pandemic tends to still be felt, especially in the movement of the IHSG, NIKKEI, and gold. Figure 1 presents the movement of the IHSG, NIKKEI, and gold indices in the period June 2021 to May 2022.

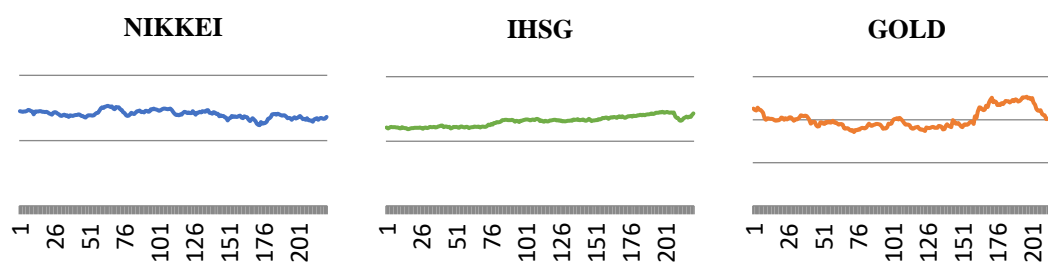


Figure 1. The trend of IHSG, NIKKEI, and gold

The IHSG movement tends to increase from June 2021 to May 31, 2022, and vice versa, the NIKKEI index tends to be stable in this period. If seen, gold prices tend to fluctuate and increase even though they tend to decrease towards the end of May 2022. The pattern of the NIKKEI and gold indexes shows that there is a tendency to be related to the IHSG movement. The purpose of this study was to analyze whether there was an effect between the NIKKEI index and gold on the IHSG during the Covid-19 pandemic.

2. Literature review

2.1. Capital market concept

The capital market is a market for long-term financial instruments in the form of bonds and stocks (Sujana, 2017; Fadilla, 2018). Hartini (2016) explains that the capital market plays an important role for the state which functions as follows: (1) a means of collecting public funds which are then channeled to productive activities; (2) sources of financing for business and national development interests; (3) creating business and employment opportunities; (4) increase efficiency in the allocation of production resources; (5) strengthening the mechanism of the financial market and monetary system; (6) keep interest rates stable; and (7) alternative investment for investors. Furthermore, Hartini (2016) also explains that the capital market can play an active role as follows: (1) a vehicle for efficient fund allocation; (2) investment alternatives; (3) provides opportunities for

investors to invest in healthy issuers with good prospects; (4) professional and transparent corporate governance; and (5) triggering national economic growth.

2.2. Hypothesis development

2.2.1. Relationship between gold index and IHSG

There is some evidence that explains the impact of the world gold index on market indices in Indonesia. Sarwindah et al. (2022) find that gold prices had a significant negative effect on stock price volatility, especially in retail companies during the Covid-19 pandemic for the period April 2020 to June 2021. This result indicates that the market index in Indonesia also experienced a negative impact due to an increase in world gold prices. On the other hand, Zifi and Arfan (2021) prove that gold prices have a positive and significant effect on the IHSG in the period 2016-2018. Other evidence from Faraga et al. (2017) proved that the world gold price had no significant effect on the IHSG in the period January 2000 to January 2013. Consistently, Basit (2020) shows that the world gold price has insignificantly affect the IHSG in the period 2016-2019.

H1: gold index significant to IHSG

2.2.2. Relationship between NIKKEI and IHSG

The empirical evidence shows that there are gaps in the findings of the relationship between NIKKEI and IHSG. Wicaksono and Yasa (2017) proved that

NIKKEI had a negative effect on the IHSG in the period January 2010 to December 2015. Supporting these results, Roofica and Pertiwi (2021) also found that NIKKEI had a negative effect on the IHSG in the period January 2015 to December 2019. Bakhtiar and Purwani (2021) also found that NIKKEI had a negative effect on the IHSG for 60 months in the period of 2014-2018. Putra et al. (2021) find that NIKKEI had no significant effect on the IHSG in the period of 2017-2019.

H2: NIKKEI significant to IHSG

3. Research method

The data for this study are the gold index, NIKKEI, and IHSG in the period from June 2021 to May 2022 with a sample of 221 observation data. This study takes data from the gold index, NIKKEI, and IHSG from Yahoo Finance. For the purpose of testing the hypothesis, this study uses a multinomial regression test where the IHSG has been categorized with a value of 0 for period of June to December 2021 and a value of 1 for

January to May 2022. The equation model of this study is as follows.

$$IHSG = \alpha + \beta.Gold + \beta.NIKKEI + \varepsilon$$

In the equation model used, the level of confidence in the hypothesis testing used is 5%.

4. Result and discussion

Table 1 shows that the gold index, NIKKEI, and IHSG have average of 20.28, 28062.39, and 6538.38, respectively. Descriptive statistics also show that only NIKKEI has a negative skewness which indicates that the movement of this index is dominated by relatively low prices. On the other hand, the gold index and the IHSG have positive skewness which indicates that the indexes of the two markets are dominated by fairly high values. The kurtosis of the three indices shows a negative value which indicates that the peak of the abnormal distribution is not so high.

Table 1. Descriptive statistics

	GOLD	NIKKEI	IHSG
N	221	221	221
Mean	20.28	28062.39	6538.38
Median	19.78	28029.57	6602.21
Mode	18.14	24717.53	6078.57
Skewness	0.86	-0.23	0.06
Kurtosis	-0.37	-0.15	-1.10
Minimum	17.13	24717.53	5939.47
Maximum	25.34	30670.10	7276.19

Before testing the hypothesis, it is necessary to test the fit of the regression model. Table 2 shows that the results of the goodness of fit test provide a deviance significance level above 0.05 or insignificant. Based on these results, it can be concluded that the regression model is fit and can be continued for hypothesis testing.

Table 2. Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	317.745	218	0.000
Deviance	134.097	218	1.000

Table 3 presents the results of hypothesis testing using multinomial regression. The test result on the impact of the gold index on the IHSG shows a significance level below 0.05. This result indicates that the gold index has a significant impact on the IHSG so the H1

of this study cannot be rejected. Specifically, this result also indicates that the gold index has a positive impact on the IHSG in the period of January to May 2022 and vice versa has a negative impact in the period of June to December 2021. The results of this study for the period of June to December 2021 consistently support Sarwindah et al. (2022) especially in cases during the Covid-19 pandemic. In addition, the result of this study for period of January to May 2022 consistently support the finding of Zifi and Arfan (2021) where the gold prices have a positive and significant effect on the IHSG. The result of the analysis also shows that this study has inconsistency with evidence of Faraga et al. (2017) and Basit (2020).

The results of the analysis show that NIKKEI has a significant impact on the IHSG where the significance level obtained is below 0.05. These results led to this study accepting H2. Specifically, this study finds that NIKKEI has a negative impact on the IHSG in the period of January to May 2022 and vice versa has a positive impact in the period of June to December 2021. Based on these results, this study consistently supports the results of Wicaksono and Yasa (2017), Roofica and Pertiwi (2021), and Bakhtiar and Purwani (2021) especially in the period from January to May 2022. Empirically, this study also shows inconsistencies with the findings of Putra et al. (2021).

Table 3. Multinomial regression

	Coeff.	Std. Error	Sig.	Exp(B)
Intercept	52.053	10.065	0.000	
GOLD	0.465	0.121	0.000	1.592
NIKKEI	-0.002	0.000	0.000	0.998

Dependent variable is IHSG. The reference category is 0. The IHSG is categorized as follows: 0 for period of June to December 2021 and 1 for period of January to May 2022. The Pseudo R-Square are: (1) Cox and Snell 0.520; (2) Nagelkerke 0.704; and (3) McFadden 0.547

5. Conclusion

The COVID-19 pandemic has devastating impact on the world economy including Indonesia. This study provides evidence that the gold index and NIKKEI have significant effect on the IHSG. In period June to December 2021, the gold index is indicated to have negative effect on the Indonesian market, and on the other hand, NIKKEI has positive effect. During January to May 2022, the opposite condition is that the gold index has a positive effect on the IHSG movement, and vice versa, NIKKEI has negative impact on the IHSG. The results indicate that there is special reaction from investors to the Covid-19 pandemic which causes them to have special consideration for investment decisions.

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