

Inflation, Interest Rate, Exchange Rate, Oil Price, And Composite Stock Price Index During The Covid Pandemic 2019-2021

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Abstract

*Capital market action accept been impacted by the deterioration in Indonesia's economy, as shown by the decline in the Composite Equity Price Index (IHSG), Pratama, 2020. Including economic decline (inflation, interest rate, exchange rate and oil price). This study was conducted to analyze inflation, interest rates, different exchange rates, oil prices, gold prices and the Composite Stock Market Index (IHSG). The data used is secondary data. The composite stock index data against 2018 to 2021 abide collected in 36 samples and the apparatus used as every analysis tool is SPSS. The results of this study show that inflation, interest rates, foreign exchange rates and the price of oil all have a significant impact on the composite stock advertise index. **Keywords:** Inflation, Interest Rate, Exchange Rate, Oil Price, Composite Stock Price Index.*

INTRODUCTION

The stock index is an indicator of every evolution of stock cost which is one of the guidelines for investors to invest in the capital market. Through IHSG, investors can see if market conditions are rising or falling to inform their investment strategy. Macroeconomic factors have had an enormous impact and the existence of the crisis has led to high inflation, big interest rates and a weakening of the exchange rate. this affected the price of the composite stock advertise index, best to a bankruptcy of the Indonesian capital market (Kartikaningsih et al., 2020). This was complicated by the Covid-19 outbreak in 2020. The Covid-19 virus fixed the price of the Jakarta Composite Index.

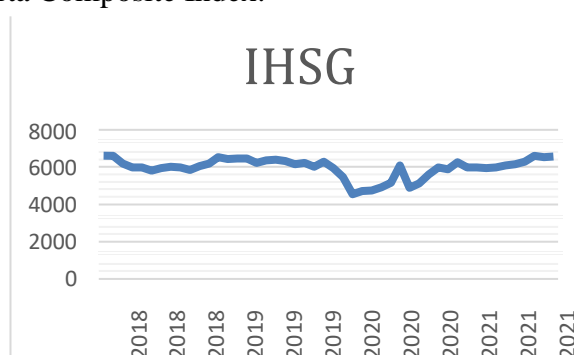


Figure 1. Composite Stock Price Index.

Source: Yahoo Finance (2021)

Chart 1 shows that the movement of the composite stock index fell sharply in 2020 and picked up again in 2021. From this data, it can be seen that the composite stock index is still fluctuating due to the onset of COVID-19, which could impact the composite index. stock price index. Significant after the drastic ups and downs of the IHSG and as a investment vehicle for long-term investors. Falling stock prices in thesector will also impact IHSG's decline.

The covid-19 pandemic also affected inflation, interest rates, exchange rates, and oil prices. The Covid-19 pandemic affected the exchange rate against the USD which experienced weakness. USR uncertainty due to Covid-19 has made investors tend to invest in safe haven assets such as world oil, gold, and world currencies such as the US dollar (Djailani, 2020). Thus, one might expect to find a negative relationship between oil and gold prices and the IHSG. Yet some investors have started to find the stock a safe haven due to the limited supply attributes that make it an inflation hedge. Marhen dan Yusra (2019), Krisna dan Wiratin (2013), Hermawan (2014), Kewal (2014), Arifin (2014), dan Hartanto

revealed in their research that exchange rates and interest rates have a negative effect on stock index prices. combined.

Based on the context explained, this study will analyze the impact of inflation, interest rates, exchange rates and oil prices on JCI during the 2019-2021 Covid-19 pandemic.

2. THEORETICAL STUDIES

a. Composite Stock Price Index

Another view is that the composite stock price index is something used to measure the performance of publicly traded stocks. This composite stock index is issued by the stock exchange. The securities in question are official and some are issued by specific private sector institutions such as financial media, financial institutions and others (Hermuningsih, 2012).

Sunariyah (2006), a composite stock price index, describes a set of historical information about the aggregate stock price movement of all stocks up to a given date. The subject of this study is the Composite Stock Price Index (IHSG). The Jakarta Composite Index (JCI or JSX Composite) is one of the stock indices used by the Indonesian Stock Exchange (IDX), formerly the Jakarta Stock Exchange (JSE). JCI is a composite index of all types of stocks listed on the Indonesian Stock Exchange (IDX). According to Fahmi (2013), the stock price is calculated to find the average change of all listed stocks. To calculate the JCI, all recorded and usable share prices must be added together

S. Suhadak (2022), Composite Stock Price Index (IHSG) also reflects the performance of various companies. The better the value of the stock market index (IHSG), the more it shows that the company is well positioned and is marked with a green arrow pointing up. However, when the demand for an asset decreases, the condition is not good and this is indicated by the red down arrow. Therefore, even a good or bad company can affect the price of the Composite Stock Price Index (IHSG).

b. Inflation

Inflation is one of the macroeconomic factors that can affect stock price movements. Inflation is a variable that affects share prices in the capital market. According to Rahayu et al. (2016, p. 201) Inflation is a continuous increase in the prices of general goods. Meanwhile, according to Silalahi et al. (2014, p. 213) Inflation is an increase in the price level of goods and services over time. Inflation will increase prices, but on the other hand, inflation can increase the selling price, so the effects overlap. However, the cost change amount is not necessarily the same as the revenue change

amount.

Sukirnos (2017) Inflation is defined as a process of price growth in the economy. The inflation rate (percentage increase in price increases) varies by time and country.

In the study by Prayog and Khairunnis (2019), Desfiandi (2017) clarifies that high inflation will be accompanied by a decline in company share prices. An increase in one or two material inputs is not called inflation, but it is when the increase comprises (or causes an increase) a large half of the price of other material inputs. In general, sustained inflation comes with pressures, as evidenced by the impact of mixed inflation or a mixed recession, you want higher costs, the external opportunity line, which occurs primarily on the supply side.

When inflation increases, commodity prices increase and the company's expenses also increase due to the increase in the cost of raw materials, operating and other costs, which reduces the company's revenue. Research by Harsono and Saparila (2018) shows that the inflation variable has a significant negative impact on the IHSG.

c. Interest Rate

Bank Indonesia stated that the BI rate or interest rate is a policy that reflects the direction or stance of monetary policy set by Bank Indonesia and is published. Ismail (2010), Interest rates are the price a bank or customer must pay in compensation for transactions between banks and customers. Meanwhile, Arif (2014) states that interest rates are the income (for creditors) or expenses (for debtors) that a creditor or a debtor receives or pays.

Mankiwa's (2016) interest rate is the price of the loan, also expressed as a percentage of the principal amount per unit. Interest is a measure of the price of funds used by debtors and paid to creditors. In general, when interest rates are low, more funds flow in, leading to higher economic growth. However, when interest rates are high, the flow of funds is lower, resulting in low economic growth.

Interest rates can be defined as a return on an asset with almost zero risk. Investors can use interest rates as a benchmark when they want to invest. In general, interest rates have a negative relationship with the stock market. If the government announces a higher interest rate, investors will sell their holdings and turn to fixed income instruments that offer higher interest rates. (Pasaribu et al.2009). Research by Harsono and Saparila (2018) shows that the inflation variable has a significant negative impact on the IHSG.

d. Exchange Rate

Pangestuti (2020), Exchange rate or exchange rate is the market price of a foreign currency in national currency, or the price of a national currency in foreign currency. The exchange rate is an important economic indicator because its fluctuations affect the prices of locally produced goods sold domestically and the cost of foreign goods bought domestically.

Companies that use foreign currency in their operations and investments are exposed to currency risk. Changes in exchange rates that the company does not anticipate will affect the value of the company. (Pasaribu et al. 2009: 6).

The exchange rate of the rupee against the US dollar tends to weaken for various reasons. That is, the exchange rate in Indonesia, especially foreign capital, which makes the value of the rupee dependent on investor confidence in Indonesia's business prospects. Exchange rate risk is the risk arising from the impact of exchange rate fluctuations between the local currency and the currencies of other (foreign) countries. Previous studies by Marhen and Yusra (2019), Krisna and Wiratin(2013), Hermawan (2014), Kewal (2014), Arifin (2014) and Hartanto (2013) have shown that exchange and interest rates have a negative impact on stocks a complex price index.

e. Oil Price

The world market price of the crude oil used is the West Texas Intermediate (WTI) commodity price, better known as "Light Sweet Crude". The World Oil Price (WTI) is the spot price of crude oil and one of the benchmarks for global crude oil prices. The world market price for consumed oil is the closing price at the end of the month, Filus Ragara et al., (2012)

Gumilang et al. (2014), an increase in world oil prices will lead to an increase in other basic commodities, with oil being one of the basic needs. It can also affect stock prices and the IHSG. The growing demand for crude oil with the emergence of emerging markets will directly impact global crude oil prices. In combination with economic activity, the price of oil affects the country's economy. For the oil producing (exporting) countries, the rise in oil prices illustrates the wealth transfer from oil imports to the oil exporting countries. This affects community acceptance and well-being (Raraga Journal, 2012).

Perdiguero (2017) found stock price results to be negatively related to gold prices. This is in line with research (Panagiotidis et al 2018),

Based on the explanation of the concepts and theoretical studies above, in this study, a framework of thought is proposed, which is embodied in the research model in the following figure:

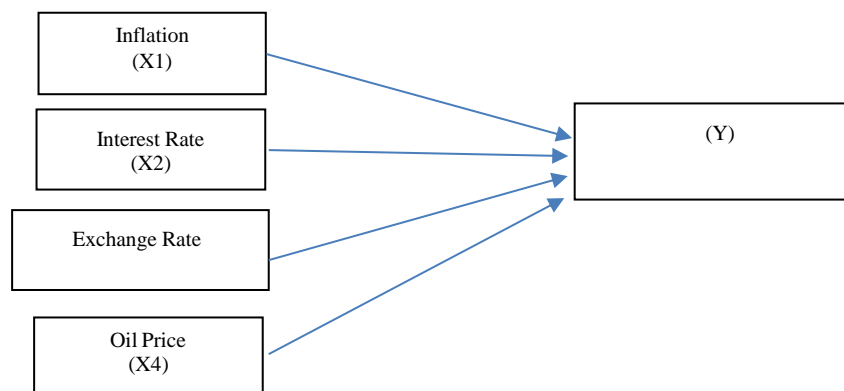


Figure 2. Conceptual Framework

The purpose of this study was to evaluate the proposed hypothesis using research methodologies designed explicitly for the variables being researched to obtain accurate results.

3. RESEARCH METHODS

a. Population and sample

The data type in this study is time series data collected from January 2019 to December 2021 as part of a literature review of monthly transaction reports published by EIB, Yahoo Finance, BI and BPS for the composite stock price index such that the target population consisted of 48 (4th Years x 12) monthly reporting data for this study's sample data. At the same time, the sample for this study is the total sample or all members of the population. This is because the research conducted is census research.

3.2. Data Collection Techniques

This study used secondary data from various news sources published by other publicly-published websites. This study uses time series. Data for IHSG, from IDX. Interest rates and exchange rates are sourced from Indonesian banks. In addition, world oil price data is pulled directly from the global investment forecast website www.Investment.com. The world oil price data on this page was calculated using survey methods and applicable measurement standards from global commodity trading institutes.

3.3. Multiple Linear Regression

Multiple regression analysis was used to determine whether a hypothesis was accepted or rejected (Ghozali, 2016). A multiple linear regression analysis was used to test the effects of inflation, exchange rates, interest rates and world oil prices on a composite stock index.

4. RESULTS AND DISCUSSION

The following are the results of multiple linear regression analysis:

Table 1. Multiple Linear Regression Results

Model		Coefficients				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12069.604	2131.110		5.664	.000
	x1	-390.810	126.641	-.447	-3.086	.004
	x2	646.524	107.854	.869	5.994	.000
	x3	-450.121	142.003	-.409	-3.170	.003
	x4	-34.809	6.358	-.807	-5.475	.000

a. Dependent Variable: y

Source: Results of Data Processing using SPSS

Multiple linear regression is determined as follows based on Table 1:

$$Y = 12069.604 - 390.810X_1 + 646.524X_2 - 450.121X_3 - 34.809X_4$$

The multiple linear regression equation has the following interpretation:

- The Inflation variable has a negative coefficient of -390.810 with a t count of -3.086 < 1.9723 and a significance level of 0.004 < 0.05. This demonstrates that inflation significantly negatively affects the Composite stock price index.
- The interest rate variable has a positive coefficient of 646.524 with a t value of 5.994 < 1.9723 and a significance level of 0.000 < 0.05. This shows that interest rate has a small but positive effect on the composite stock price index.
- The exchange rate variable has a negative coefficient of 450.121 with a t count of -3.170 < 1.9723 and a significance level of 0.003 < 0.05. This demonstrates that the exchange rate significantly negatively affects the composite stock priceindex.
- The investment oil price variable has a negative coefficient value of 0.868, with a t value of -5.475 > 1.9723, and a significance level of 0.000 < 0.05. This demonstrates that oil price significantly negatively affects the composite stockprice index.

The following are the findings of hypothesis testing in this study:

affect the composite stock price index. Tests of significance were performed inconjunction with decision-making criteria as follows:

H_0 is accepted if $\text{Sig. } t \geq \alpha$ H_a is accepted if $\text{Sig. } t \leq \alpha$

1. Effect of inflation on the composite stock price index

Based on the results, the data shows that $0.004 < 0.05$, so H_0 is rejected, suggesting that inflation is partially affecting the composite stock index. This shows that higher inflation will cause the composite stock price index to rise significantly. that high inflation will lead to lower economic growth. This decline in economic growth has also caused the stock price to move slowly, and eventually the stock index will also move slowly or even fall. this is consistent with Harsono and Saparila (2018) who showed that the inflation variable has a significant negative effect on IHSG.

2. Effect of interest rate on composite stock price index.

Since the results show that $0.000 < 0.05$, H_0 is rejected, suggesting that interest rate has a partial impact on the composite stock index. This shows that a higher interest rate will significantly increase the composite stock price index. This means that interest rates will negatively affect the price of a composite stock index over the long term. When interest rates are high, production costs rise and product prices become more expensive, allowing consumers to delay purchases and save money in the bank. As a result, the company's sales fell. Declining company sales and profits cause the share price to fall. this is consistent with research by Amin dan Herawati (2012) who found that interest rates have a positive and significant impact on a composite stock index.

3. Effect of exchange rate on composite stock price index.

The results show that $0.003 > 0.05$, so H_0 is rejected, suggesting that the exchange rate is partially affecting the composite stock index. This means that a higher price will significantly increase the composite stock price index. Exchange rate volatility can adversely affect trading activity and the performance of equity indices. If the exchange rate of the rupee against the US dollar changes, the devaluation may increase the cost of importing raw materials to increase the company's capital and reduce the company's profit and increase the share price, but dividends will decrease. This is consistent with studies by Marhen and Yusra (2019), Krisna and Wiratin (2013), Hermawan (2014), Kewal (2014), Arifin (2014) and Hartanto (2013) Exchange rates and interest rates have a negative impact on stocks composite price index.

4. Effect of oil price on composite stock price index.

The results show that $0.000 < 0.05$, thus rejecting H_0 , suggesting that the oil price has a partially significant impact on the composite stock index. This suggests that the opportunity for higher oil prices will give the composite stock price index a significant boost. Therefore, global oil

prices have a long-term negative impact on the composite equity index price. This is in line with the S&P 500 index and the world crude oil price (WTI) is also classified as a proxy asset. This substitution effect will induce consumers to substitute cheaper goods and avoid more expensive goods tailored to their needs. So when stock prices fall, investors will be tempted to buy replacement stocks (moving their mutual funds from one market to another depending on market conditions) in a more profitable market or to avoid further losses. This is consistent with research by Perdiguero (2017) who found that stock price behavior is negatively correlated with the price of gold. This is consistent with research (Panagiotidis et al.

5. CONCLUSION

1. As the results show that inflation, interest rates, exchange rates and oil prices affect the composite stock index, it is hoped that the company will be able to maintain the stock price stability, which investors who want to invest in the capital market really need a Combined stock index to read stock market movements to help investors make the right investment decisions.
2. In order to put public trust in the Indonesian Stock Exchange, it is necessary to trust the research conducted by the parties because thanks to the existence of these studies, the results can reflect the facts.
3. For future researchers, it is better if the research period used is increased so as to produce more supporting information and the variables used can be changed and expanded using factors that can affect other composite stock price indexes.

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