# Effect of Inflation, Exchange Rate, and Interest Rate on the Composite Stock Price Index

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# **Abstract**

The purpose of this research is to discuss effect of inflation, exchange rate, and interest rate on the composite stock price index. The type of research used in this research is casual research. This study uses quantitative data with the type of time series data. Samples taken from 2018 to the end of 2021, in the form of monthly data, the data is secondary data that has been validated and issued directly from the official website. The method of analysis used multiple regression analysis. The results show that inflation has a positive and significant effect on the composite stock price index. Exchange rate has a positive and insignificant effect on the composite stock price index. Interest rate has a positive and significant effect on the composite stock price index.

Keywords inflation; exchange rate; interest rate; composite stock; price index



## I. Introduction

Investing in shares in the capital market facilitated by the Indonesia Stock Exchange is an alternative investment for the public. By becoming an investor in the capital market, it means that you have done financial planning to increase asset value and strive to beat inflation to meet long-term needs. Before starting to invest or play stocks, it's a good idea to know the types of stock indices that exist in Indonesia. Because the stock index is a reference for stock investors in the capital market. In addition to functioning as an indicator of stock movements, the stock index is also a benchmark for the performance of a country's capital market. Almost all countries have their own stock index. In Indonesia, we have a composite stock price index as a reference for our investment portfolio. Composite stock price index is a stock index consisting of a combination of leading stocks from various sectors. Changes in the value of the composite stock price index which is an illustration of all stocks in Indonesia can be influenced by various things related to microeconomic factors such as inflation, currency exchange rates, interest rates, and growth in gross domestic product, the money supply also has an impact for the capital market. However, not infrequently, stable macroeconomic conditions have the impact of unidirectional movements in daily observations.

The Indonesian capital market is still not healthy and fair, many parties who are considered to be price makers or better known as Bandar is a phenomenon that is still feared to invest. With these problems, researchers want to know whether macroeconomic factors affect the movement of stock prices on the Indonesia Stock Exchange and how much influence they have on stock price movements.

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According to Tandelilin (2010), the composite stock price index is an index that uses all listed stocks as the price index calculation. If the composite stock price index shows an increase, it indicates that the condition of the Indonesian economy is in an improving cycle and vice versa. The movement of the composite stock price index always fluctuates from time to time.

Several studies related to the composite stock price index have also been carried out. The research conducted also has different results and shows a research gap. According to research conducted by Krisna and Wirawati (2013) inflation has a positive and significant effect on the composite stock price index. Sunardi and Ula (2017) in their research reveal that the exchange rate has a positive effect on the composite stock price index. Research conducted by Herdiyana (2017) reveals that interest rates have a significant effect on the composite stock price index. Nofiatin (2013) the money supply has an effect on the composite stock price index.

In contrast to the research conducted by the researchers above, the research conducted by several researchers showed different results. According to research conducted by Asmara and Suarjaya (2018) inflation does not partially have a significant effect on the composite stock price index. Research owned by Murwaningsari (2008) exchange rate has no significant effect on the composite stock price index. According to Kewal (2012) interest rates and GDP do not have a significant effect on 2018-2021. In the research, Kusuma and Badjra (2016) wrote the conclusion that the money supply has no effect on the composite stock price index.

The purpose of this research is to discuss effect of inflation, exchange rate, and interest rate on the composite stock price index.

# II. Review of Literature

# 2.1 Signaling Theory

According to Brigham and Houston (2013) signal is an action taken by the management of a company to provide instructions to investors on how management assesses the prospects of the company. Signaling theory is a theory that discusses the rise and fall of stock prices in the market, so that it will have an influence on investor decisions. A signal is given in order to reduce asymmetric information. Asymmetric information is a situation where the manager has different (better) information about the company's prospects than that of outsiders or investors.

The positive thing in signaling theory is that companies that provide good information will distinguish them from companies that do not have "good news" by informing the market about their condition, signals about good future performance given by companies whose past financial performance was not good will be trusted by the market.

#### 2.2 Inflation

Inflation is an important factor for assessing economic growth. According to Irving Fisher in Sukirno (2011), the increase in general prices or inflation (P) is caused by three factors, namely the money supply (M), the speed of money circulation (V), and the number of goods traded (T). According to him, inflation is the process of increasing the price of general goods prevailing in the economy. This does not mean that the prices of various goods rise by the same percentage. What is important is that there is an increase in general prices of goods continuously during a certain period. An increase that occurs only once (albeit by a large percentage) is not inflation.

According to Bank Indonesia, other inflation indicators based on international best practice include:

- 1. The wholesale trading price of a commodity is the transaction price between the first seller/ wholesaler and the next wholesaler/buyer in large quantities in the first market for a commodity.
- 2. Producer price index, this indicator measures the change in the average price received by domestic producers for the goods they produce.
- 3. The gross domestic product deflator shows the magnitude of changes in the prices of all new goods, locally produced goods, finished goods, and services. The gross domestic product deflator is generated by dividing the gross domestic product at nominal prices by the gross domestic product at constant prices.
- 4. Asset price index this index measures the price movement of assets, including property and shares, which can be used as an indicator of pressure on overall prices.

# 2.3 Exchange Rate

Every country in the world has a medium of exchange for payment in the form of money. According to Lubis (2008) money has a fundamental purpose in the economic system, facilitating the exchange of money and services and shortening the time and effort required to trade/exchange goods and services. Money is a unit of value that is used as a transaction tool in every payment in the community, where the nominal value, issuer, and other provisions are stated on the money.

#### 2.4 Interest Rate

The interest rate according to Boediono (2014) is the price of the use of investment funds (loanable funds). The interest rate is one indicator in determining whether someone will invest or save. Interest rates greatly affect investment demand in the capital market. If interest rates are high, investors prefer to keep their funds in banks with the expectation of a favorable rate of return with lower risk. Conversely, if interest rates are low, investors tend to invest their money in the capital market or other investments. The interest rate is one of the monetary indicators that have an impact on several economic activities as follows:

- a. The interest rate will affect the decision to invest which in turn will affect the rate of economic growth.
- b. The interest rate will also affect the decision making of the owner of capital whether he will invest in real assets or in financial assets.
- c. Interest rates will affect the business continuity of banks and other financial institutions.
- d. Interest rates can affect the value of the money supply.

# 2.5 Composite Stock Price Index

Composite stock price index is a summary of the simultaneous and complex impact of economic phenomena that occur in a country. The composite stock price index can be used as a barometer of a country's economic health and as a basis for statistical analysis of recent market conditions. The composite stock price index is not always about economic phenomena but is also exposed to social, political and even internal corporate phenomena. The composite stock price index in English is also known as the Jakarta Composite Index or the JSX Composite, which presents an index that covers all stocks. The composite stock price index fell to its lowest position. However, capital market problems cannot be separated from investment flows that will determine the economy of a region, Indonesia is no exception from countries in Southeast Asia.

# III. Research Method

The type of research used in this research is casual research. Causal research is research that is useful for measuring relationships between research variables, or useful for analyzing how one variable affects other variables (Asyraini et al., 2022; Octiva, 2018; Pandiangan, 2015). In other words, the clause will be used, if the researcher wants to know there is a cause of a phenomenon, as well as the consequences. The clause will identify whether the variable X causes the variable Y, so that if the variable X is changed, it is expected to change the variable Y as expected (Octiva et al., 2018; Pandiangan, 2018).

The sampling technique in this research is the technique of literature study or document study, where the data taken comes from a population of secondary data that has been previously available (Jibril et al., 2022; Pandiangan et al., 2018; Pandiangan, 2022). This study uses quantitative data with the type of time series data. The sample is a part of the whole as well as the characteristics possessed by a population (Octiva et al., 2021; Pandiangan et al., 2021; Pandia et al., 2018). Samples taken from 2018 to the end of 2021, in the form of monthly data, the data is secondary data that has been validated and issued directly from the official website.

The method of analysis used multiple regression analysis. Multiple regression analysis was used to test the effect of two or more independent variables on the dependent variable (Pandiangan et al., 2022; Tobing et al., 2018).

# IV. Results and Discussion

# 4.1 Indonesia Stock Exchange

Historically, the capital market has existed long before Indonesia's independence, which was established by the Dutch government in Indonesia starting in 1912 in Batavia. The capital market at that time was established for the benefit of the colonial government or the VOC, but was later closed due to world war 1. Although the capital market has existed since 1912, the development and growth of the capital market did not work as expected, even in some periods of capital market activity did not function and even closed due to various factors.

In several periods, capital market activities experienced a vacuum, which was caused by several factors such as World War I and II, the transfer of power from the colonial government to the Indonesian government, and various conditions that caused the operation of the stock exchange not to run properly.

In 1977 the Stock Exchange was reopened and developed into a modern capital exchange by implementing the Jakarta Automoted Trading Systems which was integrated with the clearing and settlement system, as well as the stock depository owned by PT. Indonesian Securities Depository Custodian.

Securities trading began in the Indonesian Capital Market on June 3, 1952. However, the biggest milestone occurred on August 10, 1977, known as the revival of the Indonesian Capital Market. After the Jakarta Stock Exchange was separated from the BAPEPAM Institution in 1992 and made private, the capital market began to experience very rapid growth. The capital market grew rapidly in the period 1992-1997. The crisis in Southeast Asia in 1977 made the capital market crash. The composite stock price index fell to its lowest position. However, capital market problems cannot be separated from investment flows that will determine the economy of a region, Indonesia is no exception from countries in Southeast Asia.

The Government of the Republic of Indonesia reactivated the capital market in 1977, and several years later the capital market experienced growth in line with various incentives and regulations issued by the government.

The vision of the Indonesia Stock Exchange is to become a competitive exchange with world-class credibility. The mission of the Indonesia Stock Exchange is to create competitiveness to attract investors and issuers, through empowering Exchange Members and Participants, creating added value, cost efficiency and implementing good governance.

# 4.3 Multiple Regression Analysis Results

**Table 1.** Multiple Regression Analysis Results

| Variable      | В     | Sig.  |
|---------------|-------|-------|
| Inflation     | 0.140 | 0.000 |
| Exchange Rate | 0.081 | 0.702 |
| Interest Rate | 0.344 | 0.000 |

Dependent Variable: Composite Stock Price Index

Source: Data Processing Results

The results show that inflation has a positive and significant effect on the composite stock price index. Exchange rate has a positive and insignificant effect on the composite stock price index. Interest rate has a positive and significant effect on the composite stock price index.

# V. Conclusion

The results show that inflation has a positive and significant effect on the composite stock price index. Exchange rate has a positive and insignificant effect on the composite stock price index. Interest rate has a positive and significant effect on the composite stock price index.

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