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# The Influence of Inflation, Interest Rates, and Exchange Rates on the Composite Stock Price Index (IHSG) in Indonesia

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## Abstract

IHSG is a parameter that describes the fluctuation of the overall nominal share on the stock exchange. Understanding the aspects that influence the IHSG is important for investors, market players and economic decision makers. In this article, we collect historical data about IHSG, interest rates, inflation, and exchange rates from a certain period. The analytical method used is linear regression with a time series approach. We analyze the relationship between the variables of interest rates, exchange rates, and inflation on the movement of the IHSG. The results of our research show that there is a significant influence between interest rates, exchange rates, and inflation on the IHSG movement. High inflation tends to have a negative impact on the IHSG, because inflation reduces people's purchasing power and reduces company profits. Low interest rates tend to have a positive effect on the IHSG, because low interest rates encourage investors to allocate funds to risky investment instruments, such as stocks. Apart from that, a strengthening exchange rate also has a positive impact on IHSG movements, because a stable exchange rate increases the confidence of foreign investors to invest in the Indonesian stock market. These findings provide important insights for investors and decision makers in managing their investment strategy. Knowing the relationship between inflation, interest rates and the exchange rate with the IHSG can help investors understand the risks and opportunities associated with investing in stocks. In addition, this research can also be used as a basis for the government and financial authorities in setting regulations that affect the capital market.

**Keyword :** IHSG, Interest Rates, Exchange Rates, Inflation, Stock Market **JEL Classification :** C01, H52, H75

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## Introduction

The capital market's implementation serves two purposes: the economic and the financial, this is what causes the capital market sector to have a crucial role in the national economy. In financial activities, the capital market is a place for people to make investments, such as bonds, stocks, investment funds, and so on. Conversely, in economic activities such as corporate financing or external income, we call investors on behalf of ordinary people (Hartana, 2019).

Now the capital market is the financial sector that is most crucial. The growth of the capital market that underpins economic activity in a country is a key economic indicator. Capital can be raised from investors on the capital market. Furthermore, the funds that have been collected are used and distributed to the real sector to run and develop their business, besides that the capital market is also a means for investors to make investments in the long term (Cao, Nie, Sun, Sun, & Taghizadeh-Hesary, 2021).

According to Tandelilin (2001), the capital market or capital market is a long-term stock market in the form of debt or equity. In addition to investing in capital market facilities, the capital market also provides offers or opportunities for investors with several products, such as buying gold, insurance, property, and saving at a bank. The capital market plays a crucial function in the country's economic activities, this is because the capital market plays two roles, namely as business capital, Businesses can use cash from the market for several purposes, including growing existing operations, raising new capital, and engaging in national investment initiatives. Communities can identify funds based on the profitability and performance indicators of each capital market.

The meeting between demand and maintenance of securities occurs in the business context of the capital market. The business entity has excess capital to continue investing in the securities issued by the organization. Government or private companies issue bonds as stock or long-term loans. To predict whether the current market scenario will improve or deteriorate, investors routinely monitor the total stock index of the Indonesian stock market. Capital market implementation variations are heavily influenced by inflation, the falling buying power of the populace, and the value of the rupiah relative to the US dollar (Adiningsih, 1998). In this case, what is no less crucial and influences the fluctuations of the capital market is the growth of a country's economic factors. If economic factors move in a negative direction, they can have a negative impact on capital market developments, and vice versa if economic factors move in a positive direction, they will have a positive effect on the capital market situation (Babu, 2019).

Macroeconomics actually influences the capital market situation. The state of the country's macro economy is inseparable from movements in the stock market index, interest rates, exchange rates, and inflation which can be said to be macro factors that have the most influence on security prices. Government policies to control inflation are very important and one of them is setting interest rates in the money market sector (Setiawan, 2020). From December 2012 to December 2014, interest rates rose from 5.75 percent to 7.75 percent. The data above provides an explanation that the increase in interest rates is still quite significant. This can be a challenge because in practice the interest rate greatly influences people's savings in a banking sector and vice versa (Jayawarsa, Wulandari, Saputra, & Saputri, 2021).

**44** | P a g e

Islamic Monetary and International Trade Research in Indonesia ASIAN Economic and Business Development Volume 6, No 1., August 2023



The rate of return on investment activities is another variable that responds to changes in interest rates; when rates are high, returns are low, and vice versa. With these considerations in mind, it is envisaged that rules will effectively manage interest rates and their trajectory, which in turn considerably affect the growth of the capital market. Investment returns are inversely proportional to interest rates, meaning that if rates are high, investors may get lower returns on their capital (Hussain, Nguyen, Nguyen, Nguyen, & Nguyen, 2021). Another thing that has quite a crucial influence is the IDR/USD exchange rate which can be said to be one of the variables that can influence the development of the capital market and certain stock prices. The exchange rate is a measure of how one country's currency compares to that of other countries. The falling value of the rupee versus the dollar is a symptom of the deteriorating importance of the rupee in the economy of the country. If this occurs, investors will reevaluate where they put their money because it will have an impact on their profits or income. However, the rising value of the rupiah against the dollar is a sign that the economy is doing well (Santosa, 2019).

#### **Literature Review**

Measurement of price increases can be carried out by measuring the price index and in practice, measuring the price index can be carried out in various ways, namely; real price index/consumer price index, wholesale price index, the power of GDP distribution (Sukirno, 2010).

Bank Indonesia Certificate Interest Rate (SBI) is a type of interest rate with a return on investment received by the original owner of the fund and forms the price of the asset that must be issued by investors when they spend money with these assets. The value of outstanding shares is affected by interest rates. When interest rates are excessively high, consumers and businesses alike are discouraged, while bond investors are enticed to sell their holdings in the stock market and buy debt or capital instead. Interest rates affect investment returns in two ways: Interest rates are prices, so an increase in the value of interest rates causes a decrease in investor returns, and vice versa. Interest rates show how much economic activity turns into company profits. Interest rates that provide benefits for investors (Yusuf, Ichsan, & Suparmin, 2021).

Nominal interest rates and real interest rates are the two main types of interest rates. The obligation to receive or pay interest at a fixed rate is called nominal interest, and it is unaffected by price increases. In its implementation, nominal interest rates are usually used when someone makes loans to the banking sector. Calculations carried out by banks and agreed to be paid by borrowers of funds can be said to be the nominal interest rate on loans (Miles & Monro, 2021). In its implementation, in Indonesia itself the calculation and regulation of interest rate management is carried out directly by BI or Bank Indonesia with a financial product in the form of a BI rate. This product is an activity carried out by the central bank to provide management of the current inflation rate. This calculation is then used as a reference by investors in making investments and as a reference for developments occurring in the Indonesian capital market (Nugraha, Janwari, Athoillah, & Mulyawan, 2023).

To compare the relative values of two currencies, traders use something called an exchange rate. The value of the rupiah is measured against the value of other currencies through the rupiah exchange rate. From this, we learn that the trial exchange rate is the rate at which domestic currency is converted to global currency. In this case, the exchange rate is something that



influences the portfolio of the capital market, this also causes the emergence of caution from investors to invest their shares in a particular company (Mandeij, 2020).

One term for the value of one country's currency concerning another is the exchange rate. The worth of a currency may be estimated by comparing it to the price of items, which in turn is calculated using supply and demand. The value of an exchange rate goes up or down depending on the relative demand and supply of currency. There are several issues with its implementation, one of which is a decline in the value of money due to government restrictions that allow the market to establish exchange rates (Kuncoro, 2009).

One indicator of market-wide stock-price movement is the Composite Stock Price Index (IHSG). The stock price index tracks the collective value of the market's most liquid and widely held equities. Index fluctuations are a crucial reference for investors to determine steps in investing. IHSG is an indicator of stock prices designed and calculated to compare events that may occur from time to time in the form of changes in stock prices. This index calculation uses the base period and the given/parent period (Fuad & Yuliadi, 2021).

Impact of Interest Rates, Inflation, and Currency Exchange Rates on Indonesia's Stock Market Index. This research indicated that the IHSG was significantly impacted by inflation, currency rates, and interest rates. The exchange rate variable has a negative but considerable impact on the IHSG, although a partial one. The IHSG was likewise unaffected by inflation to any notable degree (Parulian & Mahendra, 2021). The Jakarta Composite Index (IHSG) and Its Sensitivity to Inflation, Interest Rates, and Currency Exchange Rates. Multiple linear regression and the t-test were used to determine that interest and inflation rates were negatively correlated with the composite stock price index, while the exchange rate was positively correlated with the index (Hesniati, Ogawa, Clarence, Topher, & Engelina, 2022).

## **Research Methods**

The use of research methods in this study utilized a combined approach which was carried out with the influence of the dependent variable which was predicted using the combined hypothesis, and then analyzed using ordinal regression analysis (Sugiyono, 2017). The information used for the study spans the years 2011–2015, and it was gathered from the Indonesia Stock Exchange and Bank Indonesia websites. This study took time series data with a total of 60 samples of data and information from observations. The Composite Stock Price Index (IHSG) is the dependent variable in this analysis. In its calculations, the IHSG is obtained from the monthly average with inflation, exchange rates and interest rates as independent variables. The sum of the rupiah's monthly exchange rate with the US dollar is utilized. The interest rate for this study is taken from the monthly interest rate. Inflation in this survey is monthly inflation expressed as a percentage (%).

## **Analysis And Discussion**

Effect of Inflation Rate (X3) on IHSG (Y)

The tcount value of the partial effect of the inflation rate on the IHSG is 0.675; then calculate t  $(0.675) < t > \alpha$  (0.05); then Ho is accepted which means "inflation has no significant effect on the IHSG through the IDX."



Effect of interest rates (X2) on IHSG (Y)

The t-value of the effect of interest rates on the composite stock price index (IHSG) -1.503; then tcount  $(-1.503) < t > \alpha$  (0.05) then Ho is accepted which shows that "the IHSG interest rate has no significant effect on the IDX."

Effect of Exchange Rate (X1) on IHSG (Y)

The t value calculates the effect of the exchange rate on the Jakarta Composite Index (IHSG) of -4.659 and a significance (Sig. t) of 0.000. Meanwhile, to determine the t table with  $\alpha = 5\%$  and the value of df(n-2) = (60-2) = 58, is +2.003. This means that the t-count value (-4.659) > t-table (-2.003) and Sig. t(0.000) <  $\alpha$  (0.05), so that Ho is rejected which means "there is a negative but significant effect partially on the IHSG on the IDX."

Simultaneous effects of inflation, interest rates and exchange rates on the IHSG

Based on the results of the test for the coefficient of determination, the R-squared value was 0.331 (33.1%) which reflects the IDX IHSG which can be explained by exchange rates, interest rates and inflation. 33.1%, while the remaining 66.9% can be explained by other factors not considered in this study."

In addition, the results of testing hypothesis F (general test) concluded that "exchange rates, interest rates and inflation simultaneously have a significant effect on the IDX-IHSG". Based on several calculations that have been carried out, it is concluded that these three factors have a significant influence on the IDX ISHG. On the other hand, there are results of the determination test which explain that there are several other factors with a significant influence on the IDX ISHG apart from these three factors.

Inflation, currency values, and interest rates all have minimal impact on the IHSG. With this in mind, it can be concluded that an investor wishing to conduct transactions on the Stock Exchange must consider not only exchange rate inflation and interest rates, but also other micro factors such as the company's financial performance, including liquidity, profitability, solvency, price-earnings ratio, profit. per share, dividend payout ratio and other micro factors. In addition, investors must consider macro factors such as gross domestic product, investment activity, export activity, fuel prices, oil prices, gold, mining products, economic conditions, foreign debt, political conditions, security factors and other factors.

## Conclusion

The impact of fluctuations in the value of the dollar, inflation, and interest rates on the IHSG is substantial yet limited. This conclusion was derived from incomplete calculations showing that there was a negative impact of the exchange rate on the ISHG, and no impact of interest rates or inflation on the IHSG, respectively.

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#### **48** | P a g e

Islamic Monetary and International Trade Research in Indonesia ASIAN Economic and Business Development Volume 6, No 1., August 2023

