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Effect of Changes in Interest Rates and Exchange Rates on Stock Prices Period 2018-2019

M. Anton Fatoni[1*] & Fransiska Simanullang[2]

[1]Universitas Tama Jagakarsa Jakarta*
e-mail: antonutama152@gmail.com

[2]Universitas Tama Jagakarsa Jakarta
e-mail: fransiskasimanullang15@gmail.com

Abstract

Shares are securities in the form of proof of ownership of companies traded on a stock exchange, where the stock price is the result of an agreement between the buyer and seller. Changes in stock prices are caused by changes in the perception of each party of a stock traded, where changes in perception are caused by changes in information as a basis for investment decision making. Because there is a lot of information available on the capital market that can affect stock prices. Changes in interest rates and exchange rates (exchange rates) are also the main factors that influence investor perceptions of the results to be received which are reflected in changes in stock prices. The tendency of rising interest rates will result in the expected return on investment also going up, on the other hand there is a potential return to be received as a result of declining company performance. on stock prices on the Indonesia Stock Exchange (BEI) and want to know the extent of the influence of changes in interest rates and the exchange rate of Rupiah / USD. on stock prices on the Indonesia Stock Exchange (BEI) Period 2018 - 2019.

Keywords: Effect of Changes in Interest Rates and Exchange Rates (Exchange Rate) Rupiah / USD Against Stock Prices

1. Introduction

The stock exchange is a part of the capital market, where the capital market plays an important role in a country's economic system. The capital market carries out two functions at once, namely the economic and financial functions. The capital market performs an economic function, because the capital market provides facilities to move funds from lenders to borrowers. Whereas the capital market performs the financial function, where the capital market provides the funds needed by the borrowers (the business world) and those who lend (the public) funds without having to be directly involved in the ownership of real assets needed for investment.

In general, the capital market functions as an institution that provides funds for those who need it (the business world) in the context of developing a business or investment and as an institution that provides investment facilities or platforms for the general public. The capital market is one of the alternative investment institutions besides banks. Therefore, the success of the capital market is one indicator of the success of a country's economy.

The capital market provides a means or a means of investing through the purchase of securities commonly referred to as securities or securities on the stock exchange, so that the stock exchange is

an institution or party providing facilities and infrastructure for the sale and purchase of securities transactions in the capital market. The Indonesia Stock Exchange (IDX) is one of the institutions or parties that have obtained approval from the capital market authority to conduct activities related to the capital market.

Marketable securities that are traded on the capital market are called securities or securities, where the securities or securities are commonly referred to as capital market instruments. Securities or securities are a piece of paper that shows the right of the investor (the party who owns the paper) to obtain a share of the prospect or wealth of the organization that issued the securities, and various conditions that enable the investor to exercise his rights. Organizations that can issue securities and trade on the capital market are companies with PT (Limited Liability Companies) and government institutions.

In general, securities that are traded on the capital market consist of (1) proof of ownership of a company commonly referred to as shares, (2) debt acknowledgment issued by companies or government institutions commonly referred to as bonds, and (3) derivative securities (derivatives) such as right, warrant, option, and so on. Thus, investing in the capital market can be done by buying shares, bonds or derivative securities.

In principle, the investment is carried out to expect the results or benefits in the future through the sacrifice of some money at this time. Investment can be done in two ways, namely (1) direct investment by buying real assets, and (2) indirect investment by buying securities through the financial market.

The level of yield or benefits of direct investment is determined by how the management of assets (assets) carried out by the owner (investor). While the results or benefits of indirect investment cannot be determined by the party making the investment, but it depends on the results or benefits received by the party (company) that issued the securities purchased.

Securities investments in companies or shares are types of instruments that are traded on the Indonesia Stock Exchange (IDX), where the results or benefits to be received by investors in the form of dividends and capital gains / losses. The amount of dividends the company will distribute to shareholders depends on the results of operations that have been achieved by the issuer. Capital gains / losses are the positive / negative difference between the selling price and the buying price of shares. Changes in interest rates and exchange rates (exchange rates) greatly affect the condition of the stock exchange, because changes in both of these will have an impact on the performance of issuers whose securities are listed on the stock exchange. An increase in interest rates will increase the cost of funds that must be borne by the company, which in turn profits go down, so the dividends paid will also be smaller. Likewise, the exchange rate (exchange rate) which rises against foreign currencies has an impact on company performance.

Changes in interest rates and exchange rates (exchange rates) will also affect investor perceptions of the results to be received which are reflected in changes in stock prices. The tendency of rising interest rates will result in an expected rate of return on investment, on the other hand there is a potential return to be received due to a decline in company performance. Thus, investors will sell shares at a share price which will decline.

The stock exchange as a place for capital market instruments, especially stocks, provides information about changes in stock prices in the form of a stock price index compiled at any time. BEI as a stock exchange organizer in Indonesia has compiled a number of stock price indexes and IHSG (Composite Stock Price Index) into one of the stock price indexes formed. JCI is a stock price index that has a function as an indicator of changes in stock prices that shows the level of investment returns and as an indicator of current market trends. JCI also serves as a general guideline for investors before making investment decisions.

Based on the description above, it is interesting to study further about how the influence of changes in interest rates and exchange rates (exchange rates) on changes in stock prices on the IDX.

The results of this study were manifested in a thesis scientific paper entitled: "The Effect of Changes in Interest Rates and Exchange Rates (Exchange Rate) of Rupiah / USD Against Stock Prices on the Indonesia Stock Exchange (BEI) Period 2018-2019".

2. Literature Review

Interest Rates

The interest rate is a percentage of the price value of the use of money or also in return for rent for the use of money within a certain period. This rental fee is a compensation to the lender (the owner of the fund) for the future benefits of the loan if it is invested and / or is done doing something productive with the money.

According to Kasmir in his book entitled Banks and Other Financial Institutions (2008: 131), bank interest can be interpreted as a remuneration provided by the bank based on conventional principles to customers who buy or sell their products. Bank interest can also be interpreted as a price that must be paid to customers (customers who have deposits) with which customers must pay to banks (customers who get loans).

The meaning of interest rates according to Sunariyah (2013: 80) is "the price of the loan. Interest rates are expressed as a percentage of the principal per unit time. Interest is a measure of the price of resources used by debtors to be paid to creditors ".

The interest rate according to Boediono (2014: 76) 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 ". While interest rates according to (Mishkin, 2008: 4) are: the cost of loans or the price paid for the loan funds (usually expressed as a percentage per year).

From the definition above implies that the interest rate (interest rate) is the amount that the lender (lender) is charged to the borrower (borrower) expressed in percent, or compensation paid / received for the use of a sum of money. The amount of compensation that is willing to be received by the owner is very dependent on how likely the value of money lent has decreased, because the value of money when lent and received is not the same.

In connection with the above, the interest rates can be divided into 2 (two) types, namely: (1) nominal interest rates and (2) real interest rates (Boediono, 2005: 110). The difference between nominal interest rates and real interest rates is caused by inflation.

According to Ismail (2011: 132) the application of interest contained in conventional banks can be separated into two types, namely: 1. Deposit interest, 2. Loan interest. Interest on loans and deposits will have a very close relationship. In the condition that there is an increase in deposit rates, the increase in deposit rates will affect the increase in lending rates.

Interest rates are the result of the formation of market mechanisms for the demand and supply of money and are a macroeconomic indicator, so that changes in interest rates are influenced by many factors. According to Kasmir (2010: 137-140), "the main factors influencing the size of interest rates (loans and deposits) are as follows:

1. Fund requirements

The fund requirement factor is specific to the deposit fund, which is how much the desired funding needs. If the bank is short of funds while the loan application is increasing, what is done by the bank is that the funds can be quickly met by increasing the deposit interest rate. However, an increase in deposit rates will also increase lending rates.

2. Target earnings

The desired factor is devoted to loan interest. Conversely, if there are a lot of funds in savings in the bank, while the loan application is small, the deposit interest will go down because this is a burden.

3. Quality guarantee

Quality guarantees are also intended for loan interest. The more liquid the collateral is provided, the lower the loan interest charged and vice versa.

4. Government policy

In determining both deposit rates and bank loan interest may not exceed the limits set by the government.

5. Duration

The time period is crucial. The longer the term of the loan, the higher the interest rate, this is due to the large possible risk of bad debt in the future. Vice versa, if the loan is short-term, the interest is relatively low.

6. Company reputation

The company's reputation also determines interest rates, especially for loan interest. The bona fide of a company that will get a loan will determine the interest rate that will be charged later, because usually a bona fide company the possibility of bad credit risk in the future is relatively small and vice versa.

7. Competitive products

For competitive products, the loan interest rate is relatively low when compared to less competitive products. This is due to competitive products having high product turnover so that payments are expected smoothly.

8. Good relationship.

Loan interest is usually associated with factors of trust in a person or institution. In practice, banks classify customers between major customers and ordinary customers. This classification is based on the activeness and loyalty of the relevant customers to the bank. Customers who have good relations with banks certainly determine the interest rates are different from ordinary customers.

9. Competition

In unstable conditions and banks lacking funds, while the level of competition in fighting over deposit funds is quite tight, banks must compete hard with other banks. For loan interest, it must be below the competitor's interest so that the funds that accumulate can be channeled, even though the profit margin is reduced.

10. Third party guarantees

In this case the party providing the guarantee to the bank to bear all the risks borne by the credit recipient. Usually if the party providing a bona fide guarantee, both in terms of ability to pay, good name and loyalty to the bank, the interest charged is different ".

Exchange Rates (Exchange Rates)

According to Mishkin (2009: 27), the exchange rate is the price of one currency in another currency. To understand exchange rate behavior in the short term is to understand that the exchange rate is the price of domestic assets (bank deposits, bonds, shares, etc., denominated in domestic currency) expressed in foreign assets (similar assets denominated in foreign currencies). Because the exchange rate is the price of an asset stated in other assets, the natural way to find out the rate determination in the short run is to use an asset market approach that relies heavily on asset demand theory.

The exchange rate according to Ekananda (2014: 168) is: "An exchange rate is the price of a currency against another country's currency, the exchange rate plays in spending decisions because the exchange rate allows translating prices from various countries into the same language. ".

In general, the exchange rate (exchange rate) is nothing but a comparison of the value of one country's currency against another country's currency, where the comparison reflects the purchasing power of one currency against another country's currency.

The exchange rate is the purchasing power of a currency against another country's currency (the value of external currency), if the exchange rate of a country's currency (A) against another country's currency (B) decreases / weakens (depreciation), meaning the amount of state money (A) needed to get a certain amount of state money (B), and vice versa.

As a result of globalization and economic liberalization, there was an imbalance in each country's trade balance. A country experiences a trade surplus over another country, so a surplus country will have a bill to the deficit country. This imbalance results in the demand for a currency becoming unbalanced.

Increasing demand for a country's currency that has a trade surplus has a higher bargaining power so that the country's exchange rate will be stronger, and vice versa, the main factor that causes changes in the exchange rate (exchange rate) is the condition of the balance of transactions running from a country's international balance of payments.

The current account deficit or import of a country imports is greater than exports, automatically the country concerned requires foreign exchange to pay so that demand for foreign exchange increases, which in turn exchange rates will change. And vice versa if the current account condition (current account) of the country concerned is surplus.

There are several main factors that influence the high and low exchange rates of domestic currencies against foreign currencies. According to Hamdy Hady (2001: 46-53) These factors are:
1) Interest rates.
2) Inflation rate.
3) The rate of economic growth.
4) Government policy.

Share Prices

From the juridical aspect, shares are proof of ownership of a company issued by a company with a limited liability company (PT), while the financial aspect is nothing but the rest of the claim or claim on the assets of a company. The stock price is the closing price of the stock market during the observation period for each type of stock that is sampled and its movements are always observed by investors. Sartono (2008: 70) states that:

"Stock prices are formed through the mechanism of demand and supply in the capital market. If a stock experiences excess demand, then the stock price tends to rise. Conversely, if the excess supply then the stock price tends to go down ".

According Jogiyanto (2008: 167) understanding of the stock price is:

"The price of a stock that occurs in the stock market at a certain time determined by market participants and is determined by the demand and supply of shares that are contested in the capital market".

According to Brigham and Houston (2010: 7) stock prices are:

"Share prices determine shareholder wealth. Maximizing shareholder wealth translates into maximizing the company's stock price. The price of a stock at a certain time will depend on the cash flow that is expected to be received in the future by investors "on average" if the investor buys shares ".

Based on the understanding of the experts above, it can be concluded that the stock price is the price formed according to the requests and offers in the stock trading market and is usually a closing price.

There are several factors that can affect fluctuations in share prices on the capital market, this is because stock prices can be influenced by external factors of the company and internal factors of the company. According to Brigham and Houston (2010: 33) stock prices are influenced by several main factors, namely:

1. Internal factors

- Announcements about sales production marketing such as advertising, contract details, price changes, withdrawal of new products, production reports, safety reports, and sales reports.
- Announcement of funding, such as announcements relating to equity and debt.
- Announcement of the management board of directors (management board of directors announcements) such as changes and changes in directors, management and organizational structure.
- Announcements of takeovers are verified such as investment merger reports, equity investments, take over reports by acquisition and acquisition, investment reports and others.
- Investment announcements such as conducting expansion of research development factories and other business closures.
- Labor announcements, such as new negotiations, new contracts, strikes and others.
- Announcement of the company's financial statements, such as forecasters before the end of the fiscal year and after the end of the year fiscal earnings per share (EPS), dividends per shere (DPS), Price Earnings Ratio, Net profit margin, return on assets (ROA) and others.

2. External factors

- Announcements from the government such as changes in interest rates on deposits and foreign exchange rates, inflation, and various economic regulations and regulations issued by the government.
- Legal prosecutions such as claims against the company or against its managers and company demands against its managers.
- Announcements of the securities industry, such as reports on annual insider trading meetings, trading volume or price of trading restrictions or trading delays.

According to Agus Sartono (2008: 9), the price of shares is formed in the capital market and is determined by several factors such as earnings per share or earnings per share, the ratio of earnings to prices per share or price earnings ratio, the risk-free interest rate measured by the interest rate government deposits and the certainty of company operations.

In addition to the above factors, stock prices can also be influenced by company conditions. The better the performance of a company will have an impact on the profits of the company and the profits of investors, so that it will affect the increase in stock prices.

Definition of the Capital Market / Indonesia Stock Exchange (IDX)

The capital market can be defined as a market for a variety of long-term financial instruments that can be traded, both in the form of debt, equity (shares), derivative instruments, and other instruments (Darmadji and Fakhrudin, 2008). The capital market law in Moechdie and Ramelan (2012: 36) defines the capital market as an activity concerned with public offering and trading of securities, public companies related to the issuance of securities, and professional institutions related to securities. The capital market provides a longer-term source of financing, which is invested as capital to create and expand employment that will increase the volume of profitable and healthy economic activity.

According to Martalena and Maya Malinda (2011: 3) the capital market also has the following functions:

a. Saving function

   The capital market can be an alternative for people who want to avoid a decline in currency due to inflation.

b. Wealth function

   The community can develop the value of wealth by investing in various capital market instruments that will not experience depreciation such as houses and jewelry.

c. Liquidity function

   Capital market instruments are generally easy to liquidate, making it easier for people to recover their funds compared to houses and land.

d. Loan function

   The capital market is a source of loans for the government and companies to finance their activities.

3. Methods

Data Collection Methods

To get the data needed in compiling this scientific work, the authors use the data collection methods as follows:

1. Field research

   Field research is research carried out by visiting or being brought directly to the Capital Market Reference Center (PRPM) in the Indonesia Stock Exchange building.

2. Library research / library research

   This research was conducted by obtaining and collecting data or materials from the literature consisting of books, magazines, articles, and other relevant sources.

This study uses 2 (two) types of variables, namely the dependent variable (dependent variable) and the independent variable (independent variable), which consists of:

1. Dependent variable.

   While the dependent variable used in the study is the CSPI (Composite Stock Price Index) as Y. CSPI is an indicator of changes in the stock price of all that occurs on the IDX. The JCI used is the JCI closed at the end of each 2018 period to 2019 (2 years).

2. Independent variable.

   While the independent variables used in research are:

   a. Interest rates, i.e. comparisons of the use of certain amounts during certain periods as X1. The interest rate used is the interest rate of SBI (Bank Indonesia Certificate) for a period of 1 month for the period 2018 to 2019 (2 years).

   b. The exchange rate (exchange rate), i.e. the exchange rate of a country's currency against another country's currency as X2. The exchange rate / exchange rate used is the exchange rate / Rupiah exchange rate against the US-Dollar at the end of the 2018-month period s.d. 2019 (2 years).

Data Analysis Techniques

   In accordance with the type of research conducted above, namely verification or research conducted to test hypotheses, the data analysis technique used is a multiple regression model (multiple regression).

   Based on the problem formulation in Chapter I above, the hypothesis that will be proposed can be formulated as follows;

Ho: Interest rates and Rupiah / USD exchange rates / exchange rates. not related either partially or jointly (simultaneously) to the Composite Stock Price Index (CSPI).

H1: Interest rates and Rupiah / USD exchange rates / exchange rates. together (simultaneously) against the Composite Stock Price Index (CSPI).

To discuss the above hypothesis, the multiple regression model used is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2$$

Where:

Y: Composite Stock Price Index (CSPI).

X1: 1-month SBI interest rate.

X2: Rupiah exchange rate / exchange rate against US dollar.

α: Constants.

β1; β2: Regression coefficients X1 and X2.

Hypothesis testing is done by:

1. F. Test

   F-Test is used to prove the effect of the independent variable (X) together (simultaneously) on the dependent variable (Y), by testing the relationship comparing the value of Fcalculate with Ftable or comparing the value of the significance model in SPSS output with an error rate (alpha).

To calculate the value of F, the following formula can be used:

Where:

SSR = Number of squared regressions = number of quadratic regressions

SSE = Number of error squares = number of error squares.

k = Number of variables

n = number of observations.

2. Test t. (T-test).

   Individual test (t-test) aims to find out how the influence of independent variables on the dependent variable itself. Testing is done by comparing the value of tcount with ttable or comparing the significance value of each variable from the SPSS output with the error rate (alpha).

To calculate the value of t, the following calculation can be used:

Where:

bi = regression coefficient of the independent variable i

Sbi = Independent standard deviation i

3. Strength of the Model (Determination Coefficient Test = R2)

   Test the strength of the supported models to study how the ability of independent variables fully explain the dependent variable together. To find out what needs to be done use the coefficient of determination test by taking into account the deermination coefficient number or R2. The coefficient of determination or R2 between 0 and 1, meaning that the higher, the value of R2 means the greater the ability of the variable and vice versa. To find out the coefficient of determination or R2 the formula is used as follows:

Where:

SSR = Number of squared regressions = number of quadratic regressions

SSE = Number of error squares = number of error squares.

SST = Total number of squares = Number of squares.

4. Results and Discussion

Impact of Changes in Interest Rates and Exchange Rates Against IHSG

Capital market activity which is rapidly considering makes its role in the economy of a country even greater, so that the function of the stock price index is no longer merely an indicator of the capital market but has become a macroeconomic indicator. An increase in the stock price index, which means that the stock price generally increases, so that the value of public investment increases. An increase in the value of investment means that the welfare of investors in particular and the general public has increased. Therefore, research on the factors that influence changes in the stock price index is needed as one of the guidelines for investing in the capital market, especially in stock instruments.

Changes in interest rates as an indicator of yield or investment benefits in risk-free investments, so that it becomes a reference for investors who invest in risk assets such as stocks. After the change in interest rates will be responded negatively by investors. In addition to interest rates, changes in exchange rates (exchange rates) are factors that get a lot of investor attention because financial markets, especially capital markets are open.

As stated in the previous chapter, the main factor causing changes in the stock price index is the change in stock prices that make up the stock price index in question. Share prices are investors' perspectives on the value of the company based on relevant information available and entering the market.

Company value is the end result of the management process in managing company resources and becomes the ultimate goal of managing the company. Because the company of a living entity that strives to continue to grow and develop, the process of increasing the value of the company is not only influenced by how the company is managed but also influenced by the environmental conditions in which the company operates.

The environmental conditions in which a company operates are reflected in a country's macroeconomic indicators, such as the level of economic growth, the price level (inflation), interest rates, exchange rates and other related variables. Thus, macroeconomic indicators will affect the company's performance which ultimately the value of the company. Changes in company value due to changes in macroeconomic indicators will affect investor perceptions and changes in these perceptions are reflected in changes in stock prices.

Changes in interest rates and exchange rates are indicators that affect changes in the stock price index and get a lot of attention from capital market players. Macroeconomic indicators, namely interest rates and exchange rates (exchange rates), become the independent variables studied and the CSPI becomes the dependent variable in this study.

Hypothesis Test

Based on the above research data summarized, a test was conducted to determine the extent of the influence of interest rate and exchange rate variables on the JCI.

Table 1. Data Analysis

NO	PERIOD	INTEREST (%)	RATE	IHSG
1	Jan 2018	4,25	13,413.00	6,605.6310
2	Feb 2018	4,25	13,707.00	6,597.2180
3	March 2018	4,25	13,756.00	6,188.9870

4	April 2018	4,25	13,877.00	5,994.5950
5	May 2018	4,75	13,951.00	5,983.5870
6	June 2018	5,25	14,404.00	5,799.2370
7	Jull 2018	5,25	14,413.00	5,936.4430
8	Agst 2018	5,50	14,711.00	6,018.4600
9	Sept 2018	5,75	14,929.00	5,929.2160
10	Okt 2018	5,75	15,227.00	5,831.6500
11	Nov 2018	6,00	14,339.00	6,056.1240
12	Des 2018	6,00	14,481.00	6,194.4980
13	Jan 2019	6,00	14,072.00	6,532.9690
`14	Feb 2019	6,00	14,062.00	6,443.3480
15	March 2019	6,00	14,244.00	6,468.7550
16	April 2019	6,00	14,215.00	6,455.3520
17	May 2019	6,00	14,385.00	6,209.1170
18	June 2019	6,00	14,141.00	6,358.6290
19	July 2019	5,75	14,026.00	6,390.5050
20	Agst 2019	5,50	14,237.00	6,328.4700
21	Sept 2019	5,25	14,174.00	6,169.1020
22	Okt 2019	5,00	14,008.00	6,228.3170
23	Nov 2019	5,00	14,102.00	6,011.8300
24	Des 2019	5,00	13,901.00	6,299.5390

Source: Jakarta Composite Index for the 2018 period to 2019

Statistical testing of the independent variables (interest rates and exchange rates) on the CSPI by using the data above is done through hypothesis testing using multiple regression, and the statistical hypotheses to be tested are:

Statistical Hypothesis:

H0: Interest rates and Rupiah / USD exchange rates / exchange rates. no effect either partially or jointly (simultaneously) on the composite stock price index (CSPI).

H1: Interest rates and exchange rates / Rupiah / USD exchange rates. influence both partially and jointly (simultaneously) on the composite stock price index (CSPI).

To obtain the statistical parameter values needed in order to model and test, a SPSS (Statistical and Social Science Program) version 13. software is used. Based on the results of the SPSS computation or output (appendix 1) as shown in table 7, a model can be formed testing as follows:

a. Effect of Independent Variables Individually (Partially) on Non-Independent Variables (CSPI).

To find out how the influence of the independent variables individually (partial) to the dependent variable (CSPI) is carried out by using the t test (tcount). From the computational results (appendix 1) as shown in table 2, the following statistical parameters can be seen:

Table 2. Calculation results for t-count

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3789.174	899.210		4.214	,000
	Interest	26.578	14.812	,295	1.794	,087
	Rate	-.295	.089	-.547	-3.326	,003

a. Dependent Variable: IHSG

From the data table above, the multiple regression models that are formed are as follows:

Y = 3,789,174 + 26,578 X1 - 0,295 X2
t 4,214 1,794 -3,26
Sig 0,000 0.087 0.003

From the statistical parameter data above, it can be concluded that the two independent variables of interest rates and exchange rates individually (partial) significantly influence changes in CSPI at alpha 10%. This is reflected in each tcount, where tcount> t table or significant value is smaller than 0.10.

Based on the sign of the regression coefficient of each independent variable, it can be seen how the relationship between the independent variable (interest rates and exchange rates) with the dependent variable (CSPI). From the table above it can be seen that the interest-free variable has a positive regression coefficient (+). This means that the relationship of rate changes with the CSPI is positive, that is, any change (up / down) of interest rates will result in an increase in CSPI. While the exchange rate free variable relationship with the CSPI is negative, meaning that any changes (up / down) of the exchange rate will result in a change in the CSPI in the opposite direction (down / down).

The magnitude of the value of the regression coefficient indicates the amount of change in the value of the dependent variable due to changes in the independent variable. The regression coefficient for the interest-free variable is 26.578, meaning that any change in interest rate of 1% will result in an increase in the JCI of 26.578 points and vice versa. While the regression coefficient of the exchange rate free variable is 0.295, meaning that every change in the exchange rate is one unit or Rp. 10, - will cause JCI to increase by 2.95 points and vice versa.

b. The Effect of Free Variables Together (Simultaneously) on Non-Free Variables (CSPI).

As stated in Chapter III that to find out how the influence of the independent variables together (simultaneously) on the dependent variable (CSPI), then testing the hypothesis by using the F test (F test). From the computational results (attachment 1) obtained the value of Fcalculation as shown in table 3.

Table 3. Calculation Result of Fcount Value
ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig
1	Regression	574525.7	2	287262.848	10.281	.001[a]
	Residual	586749.9	21	27940.472		
	Total	1161276	23			

a. Predictors: (Constant), Rate, Interest
b. Dependent Variable: IHSG

Based on the above Fcount value of 10.281 with a significance of 0.01. By comparing the significance of the Fcount value of 0.01 with the magnitude of the confidence level or alpha of 0.05, it can be concluded that the hypothesis H0 is rejected and H1 is accepted. This means that the interest rate and the exchange rate / exchange rate of Rupiah / USD have a joint (simultaneous) effect on the CSPI (index of joint stock prices).

Model testing is conducted to determine the magnitude of the ability of the independent variable to explain changes in the value of the dependent variable and testing is done by looking at the value of the coefficient of determination (R2). From the results of computerization (appendix 1) we can know the coefficient of determination (R2) as shown in table 4.

Table 4. Calculation of Determination Coefficient (R2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.703[a]	.495	.447	167.15404

a. Predictors: (Constant), Rate, Interest

From the data in table 4 above, it can be seen the magnitude of the coefficient of determination (R2) of 0.703 or 70.30%. This means that the interest-free and exchange-rate variables together can explain the change in the value of the non-IHSG variable of 70.30% and the remaining 29.70% is influenced by other factors outside the analysis variables such as other macroeconomic factors that are not analyzed, namely the inflation rate , the level of economic growth, and the money supply or issuer's fundamental factors, and the volume and value of foreign investor transactions.

From descriptive data using the graphical approach above, where changes in interest rates are not consistent with changes in the CSPI. Likewise, the exchange rate independent variable, where during the research period was relatively constant but the JCI experienced an increase. Statistically tested using a multiple regression model, where the independent variable interest rates and exchange rates both simultaneously (simultaneously) and individually (partially) affect the JCI significantly at alpha 10%, but changes in the independent variables together -same (simultaneous) able to explain the change in CSPI by 70.30% and the rest by other variables outside the analysis variable.

5. Conclusion

Based on the results of the analysis and discussion in Chapter IV, several conclusions can be drawn in response to the problems that have been formulated in Chapter I as follows, during the 2018 research period 2019 (two years) the condition of 1-month SBI interest rates tends to increase and decrease. This is due to the policy of the government of Bank Indonesia to strengthen the monetary operating framework by introducing a new benchmark interest rate or policy rate, the BI 7-Day Repo Rate, which will be effective from August 19, 2016. In addition to the current BI Rate, the introduction of rates This new policy interest does not change the stance of the monetary policy being applied. Why did BI introduce a new BI reference rate? This is so that policy interest rates can quickly affect the money market, banking and the real sector. The BI 7-Day Repo Rate instrument as a new reference has a stronger relationship to money market interest rates, is transactional or traded on the market, and encourages financial market deepening.

Influence of interest rates and the exchange rate of rupiah / USD. jointly and individually to changes in the CSPI are statistically significant, in accordance with the results of tests conducted using the F test and test. Partially the effect of changes in interest rates on the JCI is positive, and this finding is contrary to the theory that should be negative, meaning that any increase in interest rates will increase the JCI, but theoretically and practically these conditions every change in interest rates will decrease the JCI. While the effect of changes in the exchange rate is negative, meaning that each exchange rate (up / down) of the rupiah against the US dollar rises (dropped), the CSPI will experience a decline. Based on the coefficient of determination (R2) found a figure of 0.703 or 70.30%. This means that changes in interest rates and the exchange rate of the rupiah / USD are able to explain the change in the CSPI of 70.30% and the rest of 29.70 $ explained or influenced by other factors outside the analysis.

JCI is an indicator of changes in stock prices that indicate the level of investment returns on the IDX, so investors should not only pay attention to changes in the JCI, but also pay attention to the

factors that influence it. The results of this study indicate that the interest rate and the exchange rate of the rupiah / USD significantly influence changes in the JCI, and this finding supports the decision of practitioners who always consider changes in interest rates and exchange rates before making investment decisions. The study found a difference in the relationship of changes in interest rates with changes in the CSPI, so investors do not always refer to habits that occur because it can result in losses. The relationship of interest rates with the changes in the JCI which is not appropriate is more caused by the revival of the Indonesian capital market in line with the re-entry of foreign investors.

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