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Analysis Of The Effect Of Exchange Value, Inflation Level, SBI Interest Rate And Hang Seng Index For Joint Stock Price Index In Indonesia Stock Exchange (Study On IDX 2016 - 2019)

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ABSTRACT

The driver of one country's economy is capital markets, several factors that affect capital markets such as internal and external macroeconomics. the capital market conditions of a country are heavily influenced by various factors, namely internal and external macroeconomic conditions affecting the country. In this case, it aims to know and analyze the effect of rupiah on the exchange rate of the United States Dollar and, the inflation rate, bi-interest rate, and Hang Seng Index on the Stock Price Index (JCI) in the first quarter of -2019 Quarter IV, either partially or simultaneously. The data used is in the form of secondary data obtained through the website of Bank Indonesian and IDX. The data analysis method used is multiple linear regression analysis with a significance level of 0.05. This study concludes that in the 2016 quarter I -2019 Quarter IV, the Hang Seng Index partially has a significant effect on the JCI. in other ways the exchange rate of rupiah to the us dollar, bank indonesia interest rate, and inflation has no effect on JCI. In addition, it was found that the value of R-square is 84.7%. This means that 84.7% of all observations suggest that independent variables can explain variations in dependent variables, the remaining 15.3% (obtained from 100% - 84.7%) other factors not seen in the model or errors.

1. Introduction

The macroeconomic environment is an environment that affects a company's day-to-day operations. The ability of investors to understand and predict future macroeconomic conditions will be very useful in making profitable investment decisions. For this reason, an investor must consider several macroeconomic indicators that can assist investors in making their investment decisions. Macroeconomic indicators that are often associated with the capital market are fluctuations in interest rates, inflation, and the exchange rate or the rupiah exchange rate (Vina Sintya Dewi, 2016).

The capital market is one of the drivers of a country's economy. Because the capital market is a means of forming long-term capital and fund accumulation aimed at increasing public participation in mobilizing funds to support national development financing. Besides, the capital market is also a representative to assess the condition of companies in a country. Because almost all industries in a country are represented by the capital market. A capital market that is experiencing an increase (Bullish) or a decline (Bearish) can be seen from the ups and downs of recorded stock prices as reflected in an index movement or better known as the Composite Stock Price Index (JCI). JCI is the value used in knowing the overall performance of stocks (companies/ issuers) listed on the Indonesian stock exchange. Composite Stock Price Index (IHSG). IHSG is the value used to measure the combined performance of all shares (companies/issuers) listed on the Indonesia Stock Exchange (IDX).

The Indonesian capital market through the Indonesia Stock Exchange is an inseparable part of the global stock exchange activities. Besides, usually for stock exchanges that are close to their location, they often have the same investors. The phenomenon that occurs due to globalization and Indonesia as a member of the World Trade Organization has opened stock exchanges for foreign investors who invest around the world. Therefore, changes in one stock exchange will also be transmitted to other countries' exchanges. In this case, usually, the bigger exchange will affect the smaller exchange. The Hang Seng in Hong Kong's main stock index. This index is calculated using the value-weighted method, based on the basic value of 100 on July 31, 1964. This index is divided into four sub-indices, namely: trade and industry, finance, utilities, and property. The Hang Seng is the eighth largest stock index in the world with a market capitalization of US \$ 2.7 trillion in 2012.

changes in stock price indexes that serve as indicators of capital market performance have benefits. The Composite Stock Price Index (JCI) is used as the official benchmark of the Indonesian capital market. By following the Composite Stock Price Index (JCI) we can find out the movement of the share price in the capital market. changes in stock price indexes that serve as indicators of capital market performance have benefits. The Composite Stock Price Index (JCI) is used as the official benchmark of the Indonesian capital market. By following the Composite Stock Price Index (JCI) we can find out the movement of the share price in the capital market. changes in stock price indexes that serve as indicators of capital market performance have benefits. The Composite Stock Price Index (JCI) is used as the official benchmark of the

indonesian capital market. By following the Composite Stock Price Index (JCI) we can find out the movement of the share price in the capital market. At one time the capital market can be said to be experiencing a bull market period, which is a market climate in which prices tend to rise. Price movements are like bulls or bull horns when competing. This movement is different from the Bear Market, where stock prices move down and become sluggish like when bears fight.

As described above, the JCI is used as an official indicator in the performance of the Indonesian market. Besides, the development of the JCI on the JSE throughout the history of the Indonesian capital market has always fluctuated. The fluctuations in the composite stock price index that occur, in addition to being influenced by factors related to the issuer company (micro factors) are also influenced by factors outside the issuer (macro factors) where it is a systematic risk in stock investment.

Systematic risk is the risk posed by macro factors affecting all companies going public including economic growth, deposit interest rates, inflation, foreign exchange rates, gold prices, and government policies in the economic sector. These factors either directly or indirectly caused the JCI to experience an increase and decrease in line with changes in macro conditions in the country concerned.

2. Theoretical Basis

Definition of Capital Market

in general meaning the capital market is defined as a place in the sharing of long-term financial instruments (securities) that can legally be traded in the form of debt or equity, issued through the government or private sector (Husnan, 2003).

In other opinions the capital market is defined as a place where long-term financial trading such as debt, equity, derivative instruments, or capital itself is conveyed by Darmadji (2008), in the capital market also held funding for companies or government institutions can also be as investments. it can be concluded that the capital market is a place to facilitate selling and buying activities as well as other activities in the world of capital markets. Capital markets are places to form capital as well as the accumulation of public funds, where the active role of the community can support national financing..

According to Sunariyah (2003), in his book states several parties included in the activities of the Indonesian capital market as explained in PERMENKU (regulation of the Minister of Finance of the Republic of Indonesia) No. 1548/KMK.013/1990 on capital markets, namely:

- a. Capital Market Supervisory Agency (Bapepam)
- b. Exchange executor
- c. Companies that go public (issuers)
- d. Securities Companies
- e. Clearinghouse and deposit settlement
- f. Mutual Funds (Investment Fund)
- g. Capital Market Supporting Institutions

h. Capital Market Supporting Professionals

i. Investors

According to Anoraga et al. 2001 what is meant by capital market instruments are all securities traded on the stock exchange. These capital market instruments are generally long term. Hereby the existing instruments on the capital market consist of:

- a. Stock
- b. Bond
- c. Certificate

Composite Stock Price Index

The general overview of the capital market can be seen if we control the index of the combined share price, to know the calculation of JCI then we must add all the listed share prices. From this index number, we can find out whether market conditions are busy, sluggish, or in a stable state. describes a series of historical information about the movement of the combined share price of all shares, up to a certain date (Sunariyah, 2006)

The movement of the Composite Stock Price Index is indeed significantly influenced by movements or changes in the prices of large capitalized shares, on the contrary, in an index calculated based on weighted average market value, changes in the price of shares with small capitalization have almost no impact on the Price Index. Joint Stock. This is because the weights of each share are different, so it is not surprising that the movement of the Composite Stock Price Index is largely determined by large-capitalization stocks.

The movement of the index value will show changes in the market situation that occur. A market that is excited or an active transaction is indicated by an increasing share price index. This condition usually indicates a cool state. A stable condition is indicated by a fixed stock price index, while a sluggish market is indicated by a decline in the stock price index

The composite stock index will not change if the stock market does not change. This is because the base price is fixed. The price base price will remain, as long as there is no change in market price as a result of the new theoretical price of a share as a result of the calculation of the effect of the issuer's actions.

Factors Affecting JCI

Rupiah Exchange Rate Against The Dollar

In Calculating the exchange rate the currency should compare with the exchange rate of another country's currency. For example, we compare the value of rupiah with the value of the dollar. investment funds in the form of foreign currencies as well as investing in the form or style of stock investments.

or the same as bank investment because there is a standard calculation of selling and buying standards. Equating currency investment with stocks because there is a fluctuating value that is almost equal to the value of the stock, in both is a means or tool for infestations that are highly sensitive to the

effects of macro-economic and microeconomic developments. The expected profit is between buy and sell versus capital gain. (Hady, 2001)

Based on Bank Indonesia Circular No.8 / 13 / DPM concerning the Issuance of Bank Indonesia Certificates through auctions. Therefore, Bank Indonesia Certificate (SBI) is a letter sheet that has value or in other words valuable issuance carried out by Bank Indonesia where its function is in recognition of short-term debt due (1-3 months) using the discount/interest system. This securities is also the government's way of controlling the stable value of rupiah. With a paradigm adopted, namely, an excessive amount of base money (currency + demand deposit at BI) can reduce the stability of the Rupiah value. SBIs are issued and sold by BI to manage the excess base money.

Foreign exchange rates have a negative relationship with the JCI, it can be concluded that with the occurrence of fluctuations in foreign exchange rates, both increasing/decreasing can affect investors' attitudes and expectations in their investments, resulting in a decrease in investment value (Istijanto, 2009).

Inflation Rate

The meaning of the infalation itself is the state in which the price of goods in general increases continuously over a certain tempo or period of time. The increase in prices does not depend on the large or small percentage even though there is an increase in a large percentage, but only once this happens is not inflation. and services in general (not a kind of goods only and for a moment). According to this definition, a sporadic increase in the price of a good is not said to be inflation.

The increasing rate of inflation has resulted in the reluctance of investors to invest their funds in stocks, they tend to choose other forms of investment, such as investments in precious metals or real estate where this type of investment can protect investors from losses caused by inflation. (Winger, et. All, 1992).

The inflation rate has a negative relationship with the JCI, so it will directly affect the decline in real people's income, and the reluctance of investors to invest their funds in stocks, but instead choose investments in other forms such as precious metals / real estate where these investments can protect investors from losses.

Bank Indonesia Certificate Interest Rate (SBI)

The legal basis for issuance of SBIs is Law No.3 of 1968 concerning Central Banks, Decree of BI Directors No.31 / 67 / KEP / DIR dated 23 July 1998 concerning Issuance and Trading of SBIs and Rupiah Interventions, and BI Regulation No.6 / 2 / PB I / 2004 dated February 16, 2004, concerning BI - Scriplless Securities Settlement System.

Bank Indonesia's interest rate can be used as a benchmark in terms of the implementation of monetary controls to control the weighted average of SBI in order to remain within the interest rate area of Bank Indonesia. Furthermore, it is hoped that it can affect other banks in the long term. The difference in bank Indonesia interest rate (tenor of SBI 1 month) is determined constantly and gradually in multiples of 25 basis points (BPS).

Bank Indonesia uses SBI as an instrument or instrument for controlling inflation. If inflation is assessed to rise then Bank Indonesia will raise the SBI interest rate to tie the inflation rate. Currently, Bank Indonesia uses SBI interest rates as an instrument to control inflation.

SBI has an impact on capital markets as well as financial markets. If interest rates rise it will increase the interest burden. Companies that have high leverage will have an impact on raising interest rates. Rising interest rates will reduce the company's profits and will result in a reduction in the price of the shares. (Sunariyah, 2006).

Hang Seng Index

The Hang Seng index is a stock market index that has a capitalization base on stock exchanges across Hong Kong. This index has a function in recording and identifying every daily movement of the company or capitalization value in Hong Kong. The initial Hang Seng index began on November 24, 1969, founded and run by HSI service limited, which is a subsidiary of Hang Seng bank, the Hang Seng bank is the 2nd largest bank in Hong Kong. HSI as a managing company is responsible for creating, issuing, and managing Hang Seng shares and several other stock indexes. such as the Hang Seng Composite Index, HK's Hang Seng MidCap Index, and others. In the period January – December 2012, the Hang Seng was the eighth largest stock index in the world with a market capitalization of US\$ 2.7 trillion (Forbes, 2012).

If a country is involved in international economic trade, its national economic growth will be directly affected by international economic activities. So that the progress of the Hong Kong stock exchange, which is reflected in the Hang Seng index, will have a positive impact on Asian regional exchanges, including Indonesia. This is because hong kong regional stock exchanges are the main exchanges that are the driving force of asian capital markets. Researchers consider the behavior of 28 investors or market players on the Hong Kong Stock Exchange in explaining the JCI because, in addition to the index on the Hong Kong Stock Exchange, especially the Hang Seng is an index of regional capital market movers, it is also because more than 70% of investment in the Indonesia Stock Exchange is foreign investment. Thus, investment behavior on the Indonesia Stock Exchange will be strongly influenced by foreign economic conditions, especially conditions in countries where foreign investors place their funds or invest. Considering the explanation above, The Hong Kong-based Hang Seng Index has a positive influence on the Composite Stock Price Index (JCI).

3. Research Methods

In this case, using the data taken from the Indonesia Stock Exchange website which can be accessed through www.idx.go.id, Bank Indonesia website which can be accessed through www.bi.go.id, and the Central Bureau of Statistics. The time of the research was carried out from the first quarter of 2016 to the fourth quarter of 2019. This research method is ex-post-facto, namely data collection is carried out after all events have taken place. In this way, it is

expected to be seen from the rupiah exchange rate to the us dollar, the rise and fall of inflation and interest rates of Bank Indonesia. and the effect of the Hang seng index on the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange can be identified.

Research Variable

The following are the research variables used in this study;

1. The stock price index variable being tested is the composite stock price index on the Indonesia Stock Exchange. This study will use daily closing data which will then be tested how big the reaction of the composite stock price index is to the rupiah exchange rate against the US dollar, the inflation rate, the Bank Indonesia interest rate, and the Hang Seng index.
2. The variable of the Rupiah exchange rate against the US dollar can be defined as the US dollar when exchanged for Rupiah or the price of US dollars in Rupiah. The data used is the daily BI purchasing rate against the US dollar during the research period on the website www.bi.go.id
3. The variable rate of inflation is a percentage that is an indicator of conditions for an increase in the price level in a country. The data used is daily inflation data which has been averaged monthly during the study period on the website www.bi.go.id
4. The variable of the Bank Indonesia interest rate is the monetary policy implemented by the state to regulate the economy and the country's economic growth. The data used is the Bank Indonesia interest rate.
5. The Hang Seng index variable is the Hong Kong main stock index calculated using the value-weighted method. The Hang Seng Index is calculated based on the base value of 100 on July 31, 1964. The data used are daily closing data during the study period.

Data Analysis Technique

The data analysis technique in this study used multiple linear regression analysis. Before the multiple linear analysis is carried out, the classical assumption test is carried out first, where the classical assumption test is a model test that aims to make the regression model not biased or so that the regression model is BLUE (Best Linear Unisex Estimator) (Gujarati and Sumarno, 2003: 154). These tests include the Normality Test, Multicollinearity Test, Heteroscedasticity Test, and Autocorrelation Test. Multiple Linear Regression Analysis is used to determine the direction of the relationship between the independent variables and the dependent variable whether each independent variable has a positive or negative relationship (Gujarati, 2003: 92).

4. Discussion

The results of data processing calculations and hypothesis testing can be shown in the analysis as follows:

Table 1. Determination Coefficient Test (R²)

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.920 ^a	.847	.791	228.57767	1.397

a. Predictors: (Constant), x4=indeks Hangseng, x3=SBI, x2=Inflasi, x1=Kurs

b. Dependent Variable: y=IHSG

The coefficient of determination of the regression model is 0.847. This shows that 84.7% of JCI variation can be explained by all independent variables (Rupiah exchange rate against US Dollar, inflation rate, BI interest rate and Hang Seng index), while the remaining 15.3% is explained by other variables outside of the four regression model independent variable above.

Table 2.F Test (Significance of Regression Model)

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3170060	4	792514.925	15.168	.000 ^a
	Residual	574725.3	11	52247.751		
	Total	3744785	15			

a. Predictors: (Constant), x4=indeks Hangseng, x3=SBI, x2=Inflasi, x1=Kurs

b. Dependent Variable: y=IHSG

From the results of the F test in table 1 above, the Fcount value is obtained at 15.168. While for Ftable is 3.36 so Fcount > Ftable and a significance value of 0.000 at the 5% level. From the results of these calculations, it can be seen that the value of Fcount > Ftable. So it can be concluded that the linear regression model that uses the variable Rupiah exchange rate against the US Dollar (X1), the inflation rate (X2), the BI interest rate (X3), and the Hang Seng index (X4) can be used to predict the JCI variable.

Table 3. Significance Test of Each Regression Coefficient

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations	Collinearity Statistics		
	B	Std. Error	Beta				Partial	Tolerance	VIF
1	(Constant)	2626.015	2170.155		1.210	.252			
	x1=Kurs	-.100	.210	-.110	-.474	.644	-.142	.258	3.874
	x2=Inflasi	-72.471	133.863	-.077	-.541	.599	-.161	.693	1.442
	x3=SBI	171.555	153.816	.210	1.115	.288	.319	.393	2.547
	x4=indeks Hangseng	.151	.030	.955	5.062	.000	.836	.392	2.550

a. Dependent Variable: y=IHSG

By looking at the regression results obtained, the researcher can explain that for the Composite Stock Price Index (IHSG):

The Rupiah exchange rate against the dollar does not have a negative effect on the Composite Stock Price Index

The t-test against the Rupiah exchange rate against the Dollar obtained tcount of -0.474 < ttable 2.201 and a sig t value of 0.644 where sig t is greater than 5% (0.644 > 0.05), then the variable Rupiah exchange rate against the Dollar does

not negatively affect the JCI. This is due to the fact that during the 2016 quarter I - 2019 fourth quarter the rupiah exchange rate against the dollar was relatively stable so that it did not affect changes in general economic conditions and company performance. The absence of significant fluctuations in the rupiah exchange rate against the dollar during this period has made it unnoticed by investors in making investment decisions in the capital market.

The inflation rate does not have a negative effect on the Composite Stock Price Index

The t-test for the Inflation Rate obtained tcount of -0.541 <ttable 2.201 and a sig t value of 0.599 where sig t is greater than 5% ($0.599 > 0.05$), so the inflation rate variable does not negatively affect the JCI. This is because during the study period the inflation rate did not directly influence the decision of investors to invest in shares on the IDX. After all, the inflation rate factor was not directly a consideration for investors in making investment decisions. Investors are still more likely to wait in investing in the capital market. This study is following the Kewal Research (2012) which found that partially the inflation rate does not have a significant effect on the IHSG.

The BI interest rate has no positive effect on the Composite Stock Price Index

The t-test on the BI interest rate obtained tcount of 1.115 <ttable 2.201 and a sig t value of 0.288 where the sig t was greater than 5% ($0.288 > 0.05$), so the BI interest rate variable did not positively affect the JCI. This is because the type of investor in Indonesia is an investor who likes to do short-term stock transactions (traders/speculators), so that investors tend to take profit-taking in the hope of obtaining a high enough capital gain in the capital market compared to investing in SBI (Manullang, 2008).).

The Hang Seng Index has a positive effect on the Composite Stock Price Index

The t-test for the Hangseng Index obtained tcount of 5.062 > ttable 2.201 and a sig t value of 0.000 where sig t is less than 5% ($0.000 < 0.05$), then the Hangseng Index variable affects the IHSG positively. This is because the Hang Seng Index is one of the 3 indices on the Hong Kong market. Other indexes are the Hangseng Chine Enterprise Index (HSCI) and the Hangseng China-affiliated Corporation Index (HSCCI). This index consists of 45 stocks which represent 67% of the capitalization of the Hong Kong Stock Exchange. This index also reflects the condition of the Hong Kong economy. Data for 2012 shows that the Hang Seng is the eighth largest stock index in the world with a market capitalization of US \$ 2.7 trillion.

If a country is involved in international economic trade, its national economic growth will be directly affected by international economic activities. So that the progress of the Hong Kong stock exchange, which is reflected in the Hang Seng index, will have a positive impact on Asian regional exchanges, including Indonesia. This is because the Hong Kong regional stock exchange is the main

exchange driving the Asian capital market. Researchers consider the behavior of investors or market players on the Hong Kong Stock Exchange in explaining the IHSG because, in addition to the index on the Hong Kong Stock Exchange, especially the Hang Seng is a regional capital market driving index, it is also because more than 70% of investment in the Indonesia Stock Exchange is an investment. foreign. Thus, investment behavior on the Indonesia Stock Exchange will be strongly influenced by foreign economic conditions, especially conditions in countries where foreign investors place their funds or invest. Considering the explanation above, the Hang Seng Index has a positive effect on the Composite Stock Price Index (IHSG). (Krissa Paramastri, 2015).

5. Conclusions And Suggestions

From the results of testing the research hypotheses above, it can be concluded statistically that the Hang Seng index variable has a significant effect on the JCI, while the Rupiah exchange rate variable against the US Dollar, the inflation rate, and the BI interest rate do not significantly affect the IHSG.

This research is only limited to some of the factors that affect the JCI, namely the Rupiah exchange rate against the US Dollar, the inflation rate, and the BI interest rate and the Hang Seng index. So for future research, it can be suggested to add other relevant variables that can affect the Composite Stock Price Index (IHSG) on the Indonesia Stock Exchange. Expanding the scope of research such as regional or global stock exchanges, and extending the research time.

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