THE IMPACT OF GOLD PRICES AND MACROECONOMIC VARIABLES ON THE COMBINED STOCK PRICE INDEX

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Abstract

The Composite Stock Price Index (IHSG) is a key indicator of a country's success. The aim of this research is to see what macro variables have a significant influence on the IHSG. The research period was 15 years from 2008 to 2002. Data analysis used SPSS software version 25, to carry out the t test, F test, correlation, multiple linear regression and determinant coefficients. The research results show that Inflation, LQ-45 and Gold Prices have a significant effect on the IHSG, while Economic Growth, JII and SBI do not have a significant effect on the IHSG. Simultaneously, all independent variables (Inflation, Economic Growth, LQ-45, JII, Gold Price and SBI) have a significant effect on the IHSG for the period 2008 to 2022 on the Indonesian Stock Exchange (BEI).

Keywords: Gold Price, Macroeconomic Variables and IHSG.

INTRODUCTION

The capital market is a mirror of the Indonesian economy, where the Composite Stock Price Index (IHSG) value can be the key to a country's success. Index movements are strongly influenced by investors' expectations regarding fundamental analysis of the country and the global economy. Positive information has a big influence on investors' expectations regarding changes in the stock price index (IHSG). The flow of globalization has made most capital markets in the world increasingly dependent and interconnected, so that investors need to consider important factors in determining investment decisions in the capital markets (Nuryasman & Permatasari, 2016).

Shares are an investment alternative that investors can consider. According to Andriyani & Armereo (2016) shares are proof of ownership or a sign of individual or institutional participation in a company and business activities. The Indonesian Stock Exchange is a trusted institution that facilitates investors and issuers to trade securities.

The Indonesian Stock Exchange is a means of facilitating companies that need capital (issuers) and investors who have excess capital. Companies get capital by offering their shares, while investors will get a level of profit in the form of returns on the shares they own. The Composite Stock Price Index (IHSG) is an index indicator that is often used by the Stock Exchange (BEI) and to see the development of the capital market in Indonesia. Changes in the IHSG are strongly influenced by three main factors, namely: domestic factors, foreign factors, and capital flow factors to Indonesia. Domestic factors consist of fundamental factors in a country such as inflation, economic growth, the amount of money in circulation, interest rates and the rupiah exchange rate. These various fundamental factors are considered to have an influence on investors' expectations which ultimately influence the movement of the composite stock index (IHSG).

Inflation is a change in aggregate prices. Development will run smoothly if inflation can be kept as low as possible. If the inflation rate increases, the JCI price level will decrease further. This is because with a high level of inflation, company profits will decrease, so that investors do not want to invest, ultimately causing the JCI price to decline. Inflation can encourage people to reduce investment and save more of their investment funds in banks to get returns (interest) that are quite high compared to other investment profits. This condition will reduce investment in the capital market, resulting in the JCI tending to experience bearish (decline).

Table of IHSG Period 2008 To 2022

Year	IHSG	Inflation	Economic Growth
	(Unit)	(Unit)	(Unit)
2008	1.355	11,06	6,10
2009	2.534	2,78	4,63
2010	3.703	6,96	6,22
2011	3.821	3,79	6,49
2012	4.316	4,30	6,26
2013	4.274	8,38	5,79
2014	5.226	8,06	5,01
2015	4.593	3,35	4,88
2016	5.296	3,02	5,03
2017	6.355	3,61	5,07
2018	6.194	3,13	5,17
2019	6.299	2,72	5,02
2020	5.979	1,68	-2,52
2021	6.723	1,87	9,96
2022	7.318	5,51	5,31

Sources: BEI, OJK, BI, BPS

The Composite Stock Price Index (JCI) fluctuated from 2008 to 2002, investors' expectations for the JCI were bullish (rising), not otherwise bearish (falling). The decline in the IHSG condition occurred in 2013 (from 4,316 down to 4,274), 2018 (from 6,355 down to 6,194) and 2020 (from 6,299 down to 5,979. Inflation also went up and down or fluctuated during the research period, where inflation experienced a decline in 2009, 2011, 2014, 2015, 2016, 2018, 2019 and 2020. Meanwhile, economic growth also fluctuated the same as the inflation rate, over 15 years, up to 8 years. had negative economic growth, namely down from the previous year and 7 years experienced positive economic growth or increased from the previous year.

Increased economic growth will directly result in the economic conditions of a country improving, such as; unemployment decreases, inflation decreases, people's income increases, the country's gross domestic product increases, people's purchasing power increases. With this increasing economy, people are starting to have excess funds, so they will place their excess funds into several investment instruments, such as; savings,

deposits, property and capital markets (shares, bonds, sukuk etc.). It is hoped that increasing economic growth will increase stock prices (bullish) on the Indonesian capital market (BEI).

If you pay close attention to the performance of the LQ-45 Index, it always follows the IHSG performance pattern. This means that when there is a decline or increase in the IHSG, this will also happen to the LQ-45 Index. This phenomenon shows that the performance of the LQ-45 Index and the shares listed in it are able to present market performance to make it easier for investors to screen the shares of their choice.

Investors who place options on the LQ-45 Index cannot be assured that the shares of the companies included in it will continue to increase. The LQ-45 Index can make it easier for investors to analyze shares of companies that have performed well compared to shares of companies outside the LQ-45 Index.

Apart from LQ-45, there is the Jakarta Islamic Index According to (JII) which is also the choice of investors in Indonesia, especially investors who are still afraid of usury. According to Manan (in Rusbariand 2012:727) the sharia capital market is a capital market that is run according to sharia principles, every securities trading transaction in the capital market is carried out in accordance with the provisions of Islamic sharia. Transactions that occur in the capital market, according to sharia principles, are not prohibited (allowed) as long as there are no transactions that conflict with the provisions outlined by Islamic sharia. The mechanism for issuing and trading securities in the capital market follows the capital market concept in general, except for matters that are clearly prohibited by Sharia.

Gold is also one of the investment instruments of choice for potential investors besides shares on the Indonesia Stock Exchange (BEI). Rising gold prices can cause investors to shift their investments to gold, resulting in a decline in the Composite Stock Price Index (IHSG). In line with the opinion of Venkatraja (2014), the increase in gold prices has a negative impact on stock price movements. Handiani (2014) emphasized that the increase in gold prices caused investors to shift their investments from stocks to gold investments, so that the stock price index fell. Nugraha (2020) stated something different, that the increase in gold prices did not have an impact on changes in stock prices.

The increase in interest rates makes investors shift funds from the capital market to banks in the form of deposits. The diversion of these funds by investors causes the stock price index to fall. Silim (2013) and Hsing & Hsieh (2012) emphasize that interest rates will have a negative impact on stock price movements. An increase in interest rates causes share prices to fall, conversely share prices will increase if interest rates decrease.

Based on the highly fluctuating movement of the IHSG from 2008 to 2022, it is necessary to examine in depth what macro variables have a significant impact on changes in the IHSG in Indonesia.

RESEARCH METHODS

1. Research Model

This research uses a form of relationship between performance and stock prices and uses a multiple linear model, which explains the casual relationship between one dependent variable and several independent variables.

The cause-and-effect relationship in multiple linear regression is formulated as follows:

Inflation, Economic Growth, LQ-45, JII, Gold Prices, and SBI (7-Day Reverse Repo Rate) on IHSG

$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + e$ The cause-and-effect relationship in multiple linear regression is formulated as follows

Explanation:

Y = dependent variable, in the form of the Composite Stock Price Index (IHSG)

a = constant, if there are no variables independent.

b_1, b_2, b_3, b_4, b_5, b_6 = regression coefficient of the variable shows the value of increase or Y decrease.

X_1 = independent variable 1, Inflation

X_2 = independent variable 2, Economic Growth

X_3 = independent variable 3, LQ-45

X_4 = independent variable 4, JII

X_3 = independent variable 5, Gold Price

X_4 = independent variable 6, SBI (&-Days Reverse Repo Rate)

ε = other variables that influence Y

2. Collection Method

a. Secondary Data

This research uses secondary data in the form of time series data on an annual scale taken from data sources including Bank Indonesia (BI), Financial Services Authority (OJK), Central Statistics Agency (BPS) and the Indonesian Stock Exchange (BEI) and Other websites that can be used as reference sources.

b. Literature Data collection

In this research was also complemented by reading, studying and analyzing literature sourced from books, articles and journals related to this research.

c. Data source

Data collection in this research used books, journals, or articles, and sources from internet media, including:

1) Indonesian Stock Exchange (https://www.idx.co.id),

2) Yahoo Finance (https://finance.yahoo.com)

3) Capital Financial Services Authority (https://www.ojk.go.id)

4) Bank Indonesia (https://www.bi.go.id),

5) Central Capital Statistics Agency (https://www.bps.go.id)

3. Population and Sample

Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiyono, 2010: 115). Sample according to Sugiyono (2010:116), the research sample is based on the number and characteristics of the population. If the population is large and the researcher cannot possibly learn everything in the population, what is learned from the sample, the conclusions will be applicable to the population.

4. Hypothesis

The hypothesis states "A statement about the researcher's expectations regarding the relationships between the variables in the problem, so that this research hypothesis is as follows:

H1: It is suspected that inflation has an effect on the IHSG

H2: It is suspected that economic growth has an effect on IHSG

H3: It is suspected that LQ-45 has an effect on the IHSG

H4: It is suspected that JII has an influence on the IHSG

H5: It is suspected that gold price has an influence on the IHSG

H6: It is suspected that SBI has an influence on the IHSG

H7: Suspected Inflation, Economic Growth, LQ-45, JII, Price Gold and SBI simultaneously influence the IHSG

ANALYSIS AND DISCUSSION

1. Multiple Linear Regression Analysis

In this research, multiple linear regression analysis is used to determine whether or not there is an influence between the independent variables (independent) on the dependent variable. From testing classical assumptions, it can be concluded that the regression model can be used in data processing.

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.589	.505		-3.149	.014
	Inflasi	.006	.002	.082	2.858	.021
	Pert_Ekonomi	.003	.002	.041	2.013	.079
	LQ45	.758	.303	.605	2.504	.037
	JII	.216	.262	.150	.823	.435
	Harga_Emas	.426	.113	.329	3.775	.005
	SBI_BI7_DRRR	-.004	.005	-.037	-.908	.390
a. Dependent Variable: IHSG						

IHSG = - 1,589 + 0,006 Inflation+ 0,003 Economic Growth + 0,758 LQ-45 + 0,216 JII + 0,426 Gold Price – 0,004 SBI_BI7_DRRR

Based on the test above, it can be seen that the resulting constant value (α) is 1.589, indicating that if the values of the variables Inflation, Economic Growth, LQ-45, JII, Gold Price and SBI are considered constant (0), then the value of the Composite Stock Price Index (IHSG) is 1,589 scale units.

The results of hypothesis testing show that the regression coefficient value for the inflation variable is 0.006. So, the results of this research indicate that information on changes in inflation has a positive effect on decisions on the Composite Stock Price Index (IHSG) in the Indonesian capital market, which means that every 1 percent increase in inflation will affect the IHSG increase by 0.006 percent.

The results of hypothesis testing show that the regression coefficient value for the Economic Growth variable is 0.003. So, the results of this research indicate that information on changes in Economic Growth has a positive effect on decisions on the Composite Stock Price Index (IHSG) in the Indonesian capital market, which means that every 1 percent increase in economic growth will affect the IHSG increase by 0.003 percent.

The results of hypothesis testing show that the regression coefficient value for the LQ-45 variable is 0.758. So, the results of this research indicate that information on changes to LQ-45 has a positive effect on decisions regarding the Composite Stock Price Index (IHSG) in the Indonesian capital market, which means that every 1 percent increase in economic growth will affect the IHSG increase by 0.758 percent.

The results of hypothesis testing show that the regression coefficient value for the JII variable is 0.216. So, the results of this research indicate that information on changes to JII has a positive effect on decisions regarding the Composite Stock Price Index (IHSG) in the Indonesian capital market, which means that every 1 percent increase in economic growth will affect the IHSG increase by 0.216 percent. The results of hypothesis testing show that the regression coefficient value for the Gold Price variable is 0.426. So, the results of this research indicate that information on changes in gold prices has a positive

effect on decisions on the Composite Stock Price Index (IHSG) in the Indonesian capital market, which means that every 1 percent increase in the dollar exchange rate will affect the IHSG increase by 0.426 percent.

The results of hypothesis testing show that the regression coefficient value for the SBI variable or 7 Day Repo Rate is - 0.004. So, the results of this research indicate that information on changes to the SBI or 7 Day Repo Rate has a negative effect on decisions on the Composite Stock Price Index (IHSG) in the Indonesian capital market, which means that every 1 percent increase in SBI will affect the IHSG decrease by 0.004 percent.

Coefficients[a]						
Model	**Unstandardized Coefficients**		**Standardized Coefficients**		**t**	**Sig.**
	B	**Std. Error**	**Beta**			
1 (Constant)	-1.589	.505			-3.149	.014
Inflasi	.006	.002	.082		2.858	.021
Pert_Ekonomi	.003	.002	.041		2.013	.079
LQ45	.758	.303	.605		2.604	.037
JII	.216	.262	.150		.823	.435
Harga_Emas	.426	.113	.329		3.775	.005
SBI_BI7_DRRR	-.004	.005	-.037		-.908	.390
a. Dependent Variable: IHSG						

2,57 (t)

4,95 (f)

2. t test

According to Ghozali (2013:61) the t test basically shows how far the influence of an independent variable individually is in explaining the dependent variable and the test is carried out using a significance level of 0.05.

Inflation has a calculated t of 2.858 > t table of 2.570 and Test 2 with a significance value of 0.037 < 0.050, which means H1 is accepted, so it can be concluded that inflation has a significant effect on the Composite Stock Price Index (IHSG).

Economic Growth has a calculated t of 2.013 < t table of 2.570 and Test 2 with a significance value of 0.079 > 0.050, which means H2 is rejected, so it can be concluded that Economic Growth has an insignificant effect on the Composite Stock Price Index (IHSG). The LQ-45 index has a calculated t of 2.604 > t table of 2.570 and Test 2 with a significance value of 0.037 < 0.050, which means H1 is accepted, so it can be concluded that LQ-45 has a significant effect on the Composite Stock Price Index (IHSG).

The Jakarta Islamic Index (JII) has a calculated t of 0.823 < t table of 2.570 and Test 2 with a significance value of 0.435 > 0.050, which means H2 is rejected, so it can be concluded that the Jakarta Islamic Index (JII) has an insignificant effect on the Composite Stock Price Index (IHSG).

The Gold Price has a calculated t of 3.775 > t table of 2.570 and Test 2 with a significance value of 0.005 < 0.050, which means H1 is accepted, so it can be concluded that the Gold Price has a significant effect on the Composite Stock Price Index (IHSG).

SBI has a calculated t of 0.908 < t table of 2.570 and Test 2 with a significance value of 0.390 > 0.050, which means H2 is rejected, so it can be concluded that SBI has an insignificant effect on the Composite Stock Price Index (IHSG).

3. Correlation and Determination Coefficient

The Coefficient of Determination (R^2) basically measures how far the model is able to explain variations in the dependent variable. The coefficient of determination value is between 0 and 1. A small R^2 value means that the ability of the independent variables to explain variations in the dependent variable is very limited.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999[a]	.997	.995	.01348
a. Predictors: (Constant), SBI_BI7_DRRR, Pert_Ekonomi, JII, Inflasi, Harga_Emas, LQ45				

Based on the analysis results, the value of R Square = 0.997 or 99.7%. This shows that there is a very strong positive relationship between the variables Inflation, Economic Growth, LQ-45, JII, Gold Prices and SBI on the Composite Stock Price Index (IHSG) variable. Meanwhile, the Adjusted R Square is 0.995 or 99.5%. This shows that there is a large contribution of the influence of the variables Inflation, Economic Growth, LQ-45, JII, Gold Prices and SBI on the Composite Stock Price Index (IHSG) variable.

Meanwhile, the remaining 0.05% (100.00% - 99.5%), is influenced by other independent variables which are not included in this research model.

4. F Test

According to Ghozali (2013:64) the F test shows whether all the independent variables intended to be in the model have the same significant effect on the dependent variable. Testing was carried out using a significance level of 0.05 (cr5).

ANOVA[a]						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.509	6	.085	467.451	.000[b]
	Residual	.001	8	.000		
	Total	.511	14			
a. Dependent Variable: IHSG						
b. Predictors: (Constant), SBI_BI7_DRRR, Pert_Ekonomi, JII, Inflasi, Harga_Emas, LQ45						

Based on the results of data processing using SPSS software version 25, it can be seen that the results of the F test can be seen from the calculated value of 467.451 > 4.95 with a significance value of 0.000 < 0.050, which means that the regression model can be used to predict the dependent variable Y, namely the Stock Price Index.

Combined (IHSG). So it can be concluded that the variables Inflation, Economic Growth, LQ-45, JII, Gold Prices and SBI together (simultaneously) have a significant influence on the Composite Stock Price Index (IHSG) for the period 2008 to 2022 in Indonesia.

CONCLUSION

Based on the analysis and discussion, it can be concluded that inflation, LQ-45 and gold prices have a significant effect on the IHSG, while Economic Growth, JII and SBI do not have a significant effect on the IHSG. Simultaneously all independent variables (Inflation, Economic Growth, LQ-45, JII, Gold Price and SBI) have a significant effect on the IHSG for the period 2008 to 2022 on the Indonesian Stock Exchange (BEI).

Recommendation

Potential investors should first place their funds in the capital market, they need to look at inflation, the LQ45 index and the price of gold. If inflation rises, share prices will tend to increase and if the LQ45 index rises, the tendency for share prices will also increase. However, if the price of gold falls, share prices will tend to increase, because investors will move and place funds from shares into precious metals such as gold.

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