



Analysis of the Influence of Macro Variables on Economic Growth in Indonesia

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KEYWORDS: Inflation, IHSG, JII, Gold Price, Dollar Exchange Rate, SBI and Economic Growth.

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ABSTRACT

This research aims to analyze the influence of inflation, IHSG, JII, gold prices, dollar exchange rates and SBI on economic growth in Indonesia from 2008 to 2022. The method used is multiple linear regression analysis, classical assumption test, F test and t-test. processed using the SPSS Version 25 program.

The conclusion of this research is that partially the IHSG and JII have a significant effect on economic growth, while inflation, gold prices, dollar exchange rates and SBI do not have a significant effect on economic growth. Taken together, all macro variables have an insignificant effect on economic growth.

INTRODUCTION

A country can be said to experience changes for the better, if its economy grows in various sectors. Economic growth is a change in the economic conditions of a country on an ongoing basis. If the level of economic activity achieved is higher than the previous period, it is said that a country's economy is growing well.

Economic growth is an important factor for the economic development of a country and is an indicator that there is hope for people's lives in the future. Economic growth can be linked to many things, including the energy sector, Gross Domestic Product (GDP), interest rates, exchange rates, inflation and the Jakarta Composite Index (IHSG) and the unemployment rate in a country.

Indicators of the success of economic development are one measure of economic growth. Several macro variables, as above, are indicators of Indonesia's economic conditions. Before the crisis, inflation was able to be controlled and state revenues (APBN) always increased, due to contributions from various sectors, such as; agriculture and industry, so as to increase per capita income which grows on average by 7% per year.

The following is data on inflation and economic growth in Indonesia from 2008 to 2022.

Data on Inflation and Economic Growth in Indonesia

Period 2008 to 2022

Year	Inflation (%)	Economic Growth (%)
2008	11,06	6,10
2009	2,78	4,63
2010	6,96	6,22
2011	3,79	6,49
2012	4,30	6,26
2013	8,38	5,79
2014	8,06	5,01
2015	3,35	4,88
2016	3,02	5,03
2017	3,61	5,07

2018	3,13	5,17
2019	2,72	5,02
2020	1,68	-2,52
2021	1,87	9,96
2022	5,51	5,31

Source: Indonesian Central Statistics Agency

The highest inflation in 2008 reached 11.06% and economic growth in 2021 was 9.96%, while the lowest inflation in 2020 was only 1.68% and economic growth in 2020 was minus 2.52%. This negative economic growth is more because in 2020, the Covid-19 pandemic occurred in Indonesia and spread throughout the world.

If the national economy experiences a global financial crisis which is characterized by a high level of uncertainty regarding the supply and demand for goods and services. If economic growth is uneven, the production of goods and services will increase, resulting in a higher standard of living. Rudiger & Singer (2013), the most significant form of economic growth is the rise and fall of a country in the world. In pandemic conditions, domestic macroeconomic stability is maintained thanks to strong synergy between fiscal, monetary and sectoral management. It turns out that the average annual inflation rate is higher than the rate of economic growth, both in developed and developing countries. In developing countries, the average annual inflation rate is between 4 and 6 percent, while in developed countries, it is no more than 2 percent. In Indonesia, the monetary authority continues to strive to prevent inflation from reaching double digits.

The rapidly improving economic situation is a factor causing inflation in Indonesia. High inflation rates will result from this rapidly improving economic situation. Domestic economic policies can cause high levels of inflation by encouraging increases in costs such as; Transportation tariffs, electricity tariffs and fuel prices rose almost simultaneously.

In an economy, a significant variable is the exchange rate. According to the Mundell-Fleming theory, there is a negative relationship between exchange rates and economic growth. The higher the exchange rate, the lower net exports (the difference between exports and imports), resulting in a decrease in output and a decrease in economic growth.

This research wants to see what macro variables influence economic growth and have quite a significant impact. The macro variables that will be studied include; Inflation, JCI, JII, Gold Price, Dollar Exchange Rate and SBI.

THEORITICAL REVIEW

The interest rate is the value, level, price or profit given to investors from the use of investment funds on the basis of calculating economic value in a certain time period. The interest rate used is the Bank Indonesia interest rate (Hanafi, 2006). According to (Boediono, 2014:76), the interest rate is the price of using investment funds (loanable funds), because the interest rate is an indicator in determining whether someone will invest or save.

According to Marshall (2003), the interest rate is the interest rate expressed in percent, over a certain period of time (monthly or annually). According to Natsir (2014), interest rates are a signal in the form of numbers in monetary policy transmission that show the current situation of the economy, including a description of the challenges in achieving the inflation target.

The meaning of the BI Rate is the interest rate with a tenor of one month which is announced by Bank Indonesia periodically for a certain period of time which functions as a signal (stance) for monetary policy determined by Bank Indonesia and announced to the public (Siamat, 2005: 139).

According to (Ekananda, 2015: 168), the exchange rate or exchange rate (foreign exchange rate) is defined as the price of a country's currency relative to the currency of another country. Because the exchange rate includes two currencies, the balance point is determined by the supply and demand sides of the two currencies.

In other words, the exchange rate is the amount of money of a certain currency that can be exchanged for one unit of another country's currency. According to (Hady, 2001:24), currency which is often used as a means of payment and unit of account in international economic and financial transactions is called hard currency, namely currency whose value is relatively stable and sometimes experiences appreciation or increases in value against other currencies.

According to Samuelson and Nordhaus (2004), the definition of inflation is an increase in the general price level. Nopirin (2012), inflation is the process of increasing general prices of goods continuously over a certain period. According to Sukirno (2011), the definition of inflation is a general and continuous increase in the prices of goods. Bank Indonesia (2016) defines inflation as the tendency for prices to increase generally and continuously.

The stock price index is one of the main indicators of stock price movements which provides information on stock market developments. The stock price index is an indicator that shows stock price movements. The index functions as a market trend indicator, meaning that index movements describe market conditions at any given time, whether the market is active or sluggish. Index movements are an important indicator for investors to determine actions to sell, hold or buy shares (invest). One type of stock price index owned by PT. The Indonesian Stock Exchange (BEI) is the Composite Stock Price Index (IHSG).

According to Sunariyah (2011), IHSG is a series of historical information regarding joint stock price movements, up to a certain date and reflects a value that functions as a measurement of the performance of a joint stock on the stock exchange.

Jogiyanto (2013), states that the IHSG is a stock price index number that has been compiled and calculated by producing a trend, where the index number is a number that is processed in such a way that it can be used to compare events in the form of changes in stock prices from time to time.

According to Kuznets (2014), economic growth is an increase in the long-term capacity of the country concerned to provide various economic goods to its population. According to Untoro (2010), economic growth is the development of activities in the economy which causes goods and services produced in society to increase and society's prosperity to increase in the long term.

RESEARCH METHODS

This research uses a "quantitative approach, namely a research method that is based on positivism with an emphasis on testing theories through measuring research variables with numbers and analyzing data using statistical procedures.

The location of this research is in Indonesia and the research period is from 2008 to 2022, as stated in the Publication Report of the Central Statistics Agency (BPS) and Bank Indonesia (BI).

The independent variables in this research are; Inflation, IHSG, JII, Gold Prices, Exchange Rates and SBI. and Economic growth as the dependent variable.

Data analysis uses SPSS software version 25, to see correlation and multiple regression and partial t test and simultaneous Anova test on the dependent variable (economic growth) for the 15 year period 2008 to 2022 in Indonesia.

The research model is as follows:

Information:

Y : Economics Growth

a : Constant

X1 : Inflation

X2 : Composite Stock Price Inde (IHSG)

X3 : Jakarta Islamic Index (JII)

X4 : Gold Price

X5 : Dollar Exchange Rate

X6 : Bank Indonesia Certificate (SBI)

b1-b6 : Regression coefficient, is the change in the dependent variable due to changes in the independent variable

e : Residual Error (error)

RESULTS AND DISCUSSION

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.703 ^a	.494	.114	2.35662
a. Predictors: (Constant), SBI_BI7_DRRR, Dollar Exchange Rate, JII, Inflation, Gold Price, IHSG				

The summary model shows that the correlation results of SBI, Dollar Exchange Rate, JII, Inflation, Gold Prices and IHSG for 15 years (2008 to 2022), Adjusted R Square of 0.494 or 49.4% is a strong correlation

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.356	6	7.226	1.301	.355 ^b
	Residual	44.429	8	5.554		
	Total	87.785	14			
a. Dependent Variable: Economic_Growth						
b. a. Predictors: (Constant), SBI_BI7_DRRR, Dollar Exchange Rate, JII, Inflation, Gold Price, IHSG						

The Anova test or simultaneous correlation between SBI, Dollar Lurs, JII, Inflation, Gold Price and IHSG on Economic Growth for 15 years is not significant with a calculated F value of 1.301 and F table of 3.481 and sig 0.355 > 0.05.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	228.576	106.135		2.154	.063
	Inflasi	-.365	.405	-.399	-.901	.394
	IHSG	88.400	36.149	6.744	2.445	.040
	JII	-79.105	31.906	-4.204	-2.479	.038
	Gold_Price	-45.324	29.117	-2.674	-1.557	.158
	Dollar_Exchange Rate	-17.888	16.518	-.573	-1.083	.310
	SBI_BI7_DRRR	1.130	1.072	.727	1.055	.322

a. Dependent Variable: Economic_Growth

The Correlation Equation of the influence of Inflation, IHSG, JII, Gold Price, Dollar Exchange Rate and SBI on Economic Growth for the period 2008 to 2022 is :

$$Y = 228,576 - 0.365 + 88,400 - 79,105 - 45,324 - 17,888 + 1,130$$

Means :

If the value of Inflation, IHSG, JII, Gold Price, Dollar Exchange Rate and SBI is 0 (zero), then Economic Growth is 228,576 units.

The results of the significance test are:

- The calculated t value of the Inflation variable is 0.901 and the t table is 2.262, and the sig is $0.394 > 0.05$, so it can be concluded that Inflation has an insignificant effect on Economic Growth in Indonesia.
- The calculated t value of the IHSG variable is 2.445 and the t table is 2.262, and the sig is $0.040 < 0.05$, so it can be concluded that the IHSG has a significant effect on Economic Growth in Indonesia.
- The calculated t value of the JII variable is 2.479 and the t table is 2.262, and the sig is $0.038 < 0.05$, so it can be concluded that JII has a significant effect on Economic Growth in Indonesia.
- The calculated t value of the Gold Price variable is 1.557 and the t table is 2.262, and the sig is $0.158 > 0.05$, so it can be concluded that the Gold Price has an insignificant effect on Economic Growth in Indonesia.
- The calculated t value of the Dollar Exchange rate variable is 1.083 and the t table is 2.262, and the sig is $0.310 > 0.05$, so it can be concluded that the Dollar Exchange rate has no significant effect on Economic Growth in Indonesia.
- The calculated t value of the SBI variable is 1.055 and the t table is 2.262, and the sig is $0.322 > 0.05$, so it can be concluded that SBI has an insignificant effect on Economic Growth in Indonesia.

CONCLUSION

Economic growth is a measure of a country's success, so economic growth must be maintained and can be increased in the future. The conclusion of this research is that partially only the IHSG and JII variables have a significant effect on economic growth, while Inflation, Gold Prices, Dollar Exchange Rates and SBI do not have a significant effect on economic growth. Taken together all the macro variables studied have an insignificant effect on economic growth. in Indonesia for the period 2008 to 2022.

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