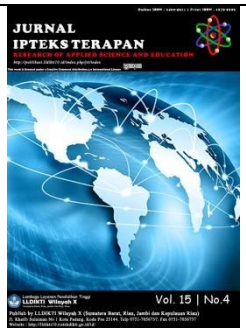

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EFFECT OF INFLATION, ER, SBI AND NET INCOME ON INDUSTRIAL AND CHEMICAL SECTOR COMPANIES

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Abstract

IHSG is a stock price index number that has been compiled and calculated by generating a trend, where the index number is a number that is processed in such a way that it can be used to compare events that can be changes in stock prices from time to time. The purpose of this study was to determine whether there is a significant effect between inflation, exchange rates, SBI interest rates, and net income on the composite stock price index. There are 80 company populations during 2017-2019 with a total sample of 34. This type of research uses explanatory research, the research location is carried out on the IDX. Data collection was obtained from BEI, BPS and BI. The data analysis technique used statistical analysis techniques with multiple linear regression analysis methods. Based on the tests that have been carried out, the results show that inflation, interest rates, and net income have no effect on the IHSG, but the exchange rate has a significant effect on the IHSG.

Keywords: Inflation; Exchange Rate; SBI Interest Rate; Net Profit; IHSG

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INTRODUCTION

The industrial world has had its ups and downs. The development of the industry is also followed by the need for large funds so that the industry must find sources of funds to carry out its operations. The need for these sources of funds can be met by going public or selling shares to the public through the capital market. As a consequence of globalization and economic integration, the performance of the capital market is highly dependent on the performance of the national, regional and international economies. The growth rate of the capital market is also determined by various macroeconomic indicators. This is an important foundation for future capital market growth because it will determine the extent to which the capital market growth rate is[1].

The problem that often occurs is how far the company's performance is able to affect stock prices in the capital market. For example the Composite Stock Price Index (CSPI). The composite stock price index does not always increase nor does it always decrease. An increase in the stock price index indicates that there are active transactions in the market, while a weak market condition indicates that the composite stock price index has decreased[2].

The inflation rate is one of the problems in the economy. The high rate of inflation can even lead to the destruction of a country's economy. Where economic conditions experience demand for products that exceed the capacity offered, so prices tend to increase. Not only does the value of money decrease, inflation also affects savings, even investment. The high rate of inflation will also put the risk of a decline in the rate of return on investment[3].

Economic problems also occur because of high interest rates. Interest rates refer to financial products from bonds to bank loans. In investment, if interest rates rise, investors will withdraw their investment in stocks and transfer them to investments in the form of deposits or savings. The diversion of funds by investors from the capital market to savings will certainly result in a massive sale of shares so that it will cause a decrease in the composite stock price index[4].

The exchange rate (exchange rate) greatly affects companies that actively carry out export and import activities. The stability of the rupiah against foreign currencies such as the United States dollar is very important. Because when the value of the rupiah depreciates or weakens against the US dollar, this will cause imported goods to become expensive. If most of the company's raw materials using imported materials, this will automatically result in an increase in production costs. This increase in production costs will certainly reduce the company's profit level. The decline in the company's profit level will certainly affect investors' buying interest in the shares of the company concerned. In general, this will lead to a decline in the composite stock price index[5].

Net profit is one of the factors seen by investors to invest. One of the ways that investors can invest their funds is by buying shares. Therefore, it is important

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for companies to maintain and increase net income so that the shares still exist and are still in demand by investors[6].

The company, PT Semen Indonesia Tbk, which is engaged in the cement industry, posted a significant revenue growth last year, which was 31.55%. As a result, SMGR's revenue rose from IDR 30.68 trillion in 2018 to IDR 40.37 trillion. However, Semen Indonesia's net profit actually fell 22.31%, from IDR 3.08 trillion in 2018 to IDR 2.39 trillion in 2019[7].

At the company PT. Japfa Compeed Indonesia Tbk exchange rate increased from 2016 to 2017 by 0.83% but the share price decreased by 10.65%. Should the exchange rate increase, the stock price will increase and vice versa if the exchange rate decreases stock price will decrease[8].

At the company PT. Citra Turbindo Tbk interest rates decreased from 2016 to 2017 by 10.52% but the stock price decreased by 6.73%. Supposedly if interest rates have decreased then stock prices will increase and vice versa if interest rates have decreasedincrease, the same price will decrease[9][10].

RESEARCH METHODS

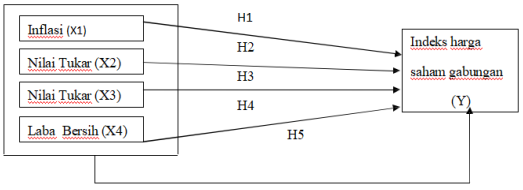

Figure 1. Conceptual Framework

This type of research is an explanatory research with a quantitative approach. Explanatory research is research that explains the position between the variables studied and the relationship between one variable with others through hypothesis testing that has been formulated.

Graph Analysis

The easiest way to see the normality of the residuals is to look at the histogram graph that compares two observations with a distribution that is close to a normal distribution. However, just looking at the histogram can be misleading especially for small sample sizes.

Statistic analysis

Normality test with graphs can be misleading if you are not careful visually it looks normal, but statistically it can be the other way around. Statistical tests that can be used to test residual normality are :

a. The purpose of the multicollinearity test is to test whether the regression model finds a correlation between the independent (independent) variables. A good regression model should not have a correlation between the independent variables. If the independent variables are correlated, then these variables are not orthogonal
b. According to Ghozali (2016), the autocorrelation test aims to test whether in the linear regression model there is a correlation between the confounding error in period t and the confounding error in period t-1

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c. According to Ghozali (2016), the heteroscedasticity test is to test whether in the regression model there is an inequality of variance from the residual of one observation to another observation. If the variance of the residual from one observation to another observation remains, it is called Homoscedasticity and if it is different it is called Heteroscedasticity.

In this study, using statistical analysis methods. SPSS (Statistical Product and Service Solution) is used to analyze data in managing data. The data analysis model uses multiple linear regression analysis to determine the effect of the independent/independent variable and the dependent/bound variable, the formula for multiple linear regression analysis is used as follows :

$$Y = a + b_1X_1 + b2X2 + b3X3 + b_4X_4 + e$$

Y : Composite Stock Price Index

a : Constant

b1,b2,b3, B_4 : Regression Coefficient of Variable X
X1 :Variable Inflation
X2 :Variable exchange rate
X3 :Variable interest rate
X4 :Profit
e :Percentage Error (0.05)

RESULTS AND DISCUSSION

Descriptive analysis is a description of a data that is displayed with a minimum, maximum, mean (average value) variance, and standard deviation of inflation variables, exchange rates, interest rates, net income and the composite stock price index (IHSG).

	N	Min.	Max.	Mean	Std. Deviation
inflasi	102	-.27	.97	.2682	.27764
nilai tukar	102	13319.00	14929.00	13874.9608	456.64435
suku bunga	102	4.25	6.00	5.0882	.66902
laba bersih	102	.01	23.60	6.0495	5.51805
IHSG	102	5294.10	6605.63	6059.5435	325.21870
N	102				

Table 1 : Descriptive Static

From the data above, it can be seen that the minimum inflation value is -0.27, the maximum value of inflation is 0.97, the average inflation rate is 0.2682 and the standard deviation is 0.27764. It is known that the minimum value of the exchange rate is 13319.00, the maximum value of the exchange rate is 1429.00, the average of the exchange rate is 13874,9608 with a standard deviation of 456,64435. it is known that the minimum interest rate is 4.25, the maximum interest rate is 6.00, the maximum interest rate is 5.0882 with a standard deviation of 0.66902. it is known that the minimum value of net income is 0.01, the maximum value of net income is 23.60, the average value of net income is 6.0495 with a standard deviation of 5.51805. It is known that the minimum value of the IHSG is 5294.10, the maximum value of the IHSG is 6605.63, the average value of the IHSG is 60595435 and the standard deviation of the IHSG is 325,21870.

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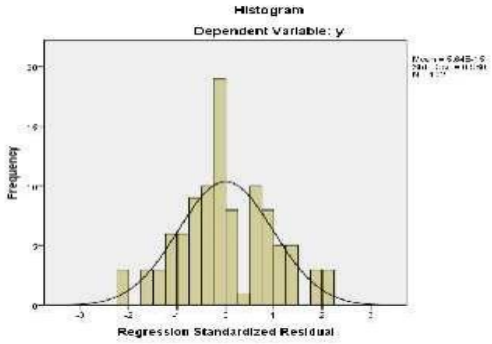

Figure 2. Histogram Graphic

From the graphic above, it can be concluded that the data is normally distributed where the curve is bell-shaped. Not tilted right or tilted left.

	Unstandardized Residual
Kolmogorov-Smirnov Z	.916
Asymp. Sig. (2-tailed)	.371

Table 2. Kolmogorov-Smirnov Test

The results from the table show that the value of Kolmogorov-Smirnov Z is 0.916 with a significant value of 0.371> 0.05, which means that the assumption of normality is met.

	Collinearity Statistics	
constant	Tolerance	VIF
x1 x2 x3 x4	.937	1.068
	.433	2.312
	.475	2.105
	.897	1.115

Table 3. Multicollinearity Test

Based on the results of the tests that have been carried out, there is a tolerance value for the inflation variable, exchange rate, interest rate, and net profit of 0.937, 0.433, 0.475, and 0.897 and the VIF value for the inflation variable, exchange rate, interest rate, and net profit of 1,068, 2.1312, 2.105 and .115. It can be concluded that the two independent variables have a Tolerance value greater than 0.1 and a VIF less than 10. So that the data does not contain multicollinearity.

The statistical value of the DW test is between 1 and 3. The result of the Durbin Watson test is 1,568 which means 1 < 1.568 > 3. So that there is no autocorrelation.

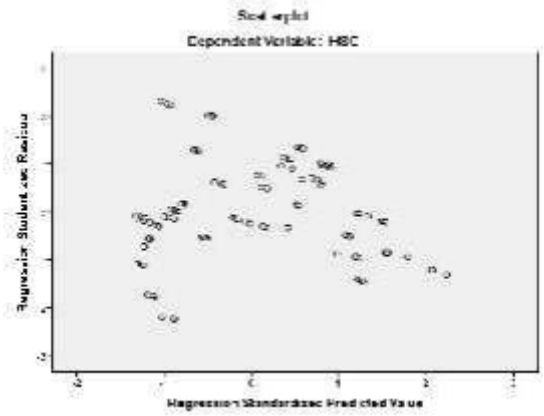

Figure 3. Heteroscedasticity Test

From the picture above, it can be seen that the results of the graph show that the data is scattered and does not form a particular model. So it can be concluded that there is no heteroscedasticity in this data.

Multiple Linear Regression Analysis

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		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	2151.036	1177.701		1.826	.071
	inflasi	40.070	112.612	.034	.356	.723
	nilai tukar	.276	.101	.388	2.741	.007
	suku bunga	14.680	65.616	.030	.224	.823
	laba bersih	-1.377	5.791	-.023	-.238	.813

Table 4. Multiple Linear Regression Analysis

Based on the results of the table above, the following multiple linear regression equation is obtained:

Y=2151,036 + 40,070(Inflation)+0.276 (exchange rate) + 14,680(interest rate)-1,377 (net income) + e.

Based on this equation, it is interpreted as follows:

a) The constant is 2151,036. This value can be interpreted if inflation, exchange rates, interest rates, net income have no effect on the IHSG then the IHSG variable value is 2151,036.

b) The regression coefficient of the INFLATION (X1) variable is 40,070; This means that if the other independent variables have a fixed value and inflation has increased 1%, the IHSG tends to rise 40,070.

c) The regression coefficient of the EXCHANGE RATE variable (X2) on the IHSG is 0.276, which means that when the exchange rate increases by 1%, the IHSG variable tends to increase by 0.276.

d) Regression coefficient of the effect of the INTEREST RATE variable (X3) on the IHSG is 14,680, which means that when interest rates experience an increase of 1%, the IHSG variable tends to increase by 14,680.

e) The regression coefficient of the effect of net income (x4) on the IHSG is -1,377 which means that when net profit decreased by 1%, the IHSG decreased by 1.377. value coefficient negative means that there is a negative relationship between net income and the IHSG The lower the profit, the lower the IHSG.

Adjusted Coefficient of Determination Test (R2)

Model	R	R Square	Adjusted R Square
1	.400[a]	.160	.126

Table 5. Adjusted Coefficient of Determination Test (R2)

Based on the table above, it is obtained R2 data worth 0.160. this shows that the percentage contribution of the influence of the independent variable on the dependent variable is 0.160 while the

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rest is influenced by other independent variables that are not present in this study.

	F	Sig.
Regression	4.629	.002[b]
Residual		

Table 6. F-Test

The results from the table show that the calculated F is 4.629 and the sig value is 0.002. where Fcount 4.629 > Ftable 2.43 with a significance of 0.002 < 0.05 so that the independent variables in this study are simulated significant effect on the dependent variable.

Model		t	Sig.
1	(Constant)	1.826	.071
	inflasi	.356	.723
	nilai tukar	2.741	.007
	suku bunga	.224	.823
	laba bersih	-.238	.813

Table 7. T-Test

The t table in this test has sig.0.05 degrees of freedom, the value of n = 102, k = 4, n-k =98 is 1.9842. Then the t-test is obtained as follows:

I. The value of t-count inflation (x1) is 0.356 and the figure is sig.0.723 which is higher than 0.05. it is concluded that inflation has no impact on the IHSG

II. The value of the t-count exchange rate (x2) is 2.271 and the figure is sig. 0.007 which is lower than 0.05. it is concluded that the exchange rate has an impact on the IHSG.

III. The value of the t-count interest rate (x3) is 0.224 and the sig number is 0.823 which is higher than 0.05. it can be concluded that interest rates have no impact on the IHSG.

IV. The value of t-count net income (x4) is -0.238 and the figure is sig. 0.813 which is higher than 0.05. it is concluded that net income has no impact on the IHSG.

CONCLUSION

The test results of the inflation variable have a Tcount of 0.356 with a significance of 0.723. Thus, the value of tcount < t table or 0.356 < 1.9842 and the significance of 0.72 > 0.05 which explains that inflation has a negative effect on the IHSG. The test results of the exchange rate variable have a tcount of 2.741 with a significant level of 0.007. then the value of tcount < ttable or 2.741 < 1.9842 with a significant. 0.007 <0.05 which means that the exchange rate has a positive and significant effect on the IHSG. The test results of the exchange rate variable have a tcount of 2.741 with a significant level of 0.007. then the value of tcount < ttable or 2.741 < 1.9842 with a significant. 0.007 <0.05 which means that the exchange rate has a positive and significant effect on the IHSG. The results of the test of the net income variable have a tcount of 0.238 with a significant level of 0.813. then the value of tcount < ttable or 0.238 <1.9842 with a significant 0.813>0.05 which explains that net income has a negative effect on the IHSG.

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