The Effect of Inflation, Interest Rate and Rupiah Exchange Rate on JCI in Food and Beverage Manufacturing Companies Registered on The Indonesian Stock Exchange (IDX)

Refera Bella Safitri [a,1,*], Tupi Setyowati [b,2], Nurhadi Yazid Rachman [c,3]

[1,2,3] Muhammadiyah University Prof. DR. HAMKA, Indonesia
[1] referabella36@gmail.com
* corresponding author

ARTICLE INFO

ABSTRACT

This study aims to determine the effect of inflation, interest rates, and the exchange rate of the rupiah against the JCI in manufacturing companies in the food and beverage sector on the Indonesia Stock Exchange. This research uses quantitative methods. Data collection techniques are carried out by processing data that has been published by Bank Indonesia, BPS. Data processing and analysis techniques used include descriptive statistical analysis, multiple linear regression, classical assumption test, correlation coefficient analysis, multiple correlation coefficient analysis, and hypothesis testing. The results showed that inflation has a negative and significant effect on the JCI. This result can be proven by the value of tcount <ttable (-2.265190 <-1.993) and a significance value of <(α) (0.0265 <0.05) so that H11 is accepted. Interest rate variable has no effect on the JCI. This result can be proven by the value of tcount <ttable (1.801611 <1.993) and a significance value> (α) (0.0758> 0.05) so that H02 is rejected. The Rupiah Exchange Rate variable has a positive and significant effect on the JCI. This result can be proven by the value of tcount> ttable (3.520699> 1.993) and a significance value <(α) (0.0008 <0.05) so that H13 is accepted. The coefficient of determination shows that the Adjusted R-squared is 0.282205. This means that the ability of the independent variable in explaining the variation of the dependent variable is 28.22%, while 71.78% is explained by other variables that are not included or explained in this study. 993) and the significance value> (α) (0.0758> 0.05) so that H02 is rejected. The Rupiah Exchange Rate variable has a positive and significant effect on the JCI. This result can be proven by the value of tcount> ttable (3.520699> 1.993) and a significance value <(α) (0.0008 <0.05) so that H13 is accepted. The coefficient of determination shows that the Adjusted R-squared is 0.282205. This means that the ability of the independent variable in explaining the variation of the dependent variable is 28.22%, while 71.78% is explained by other variables that are not included or explained in this study. 993) and the significance value> (α) (0.0758> 0.05) so that H02 is rejected. The Rupiah Exchange Rate variable has a positive and significant effect on the JCI. This result can be proven by the value of tcount> ttable (3.520699> 1.993) and a significance value <(α) (0.0008 <0.05) so that H13 is accepted. The coefficient of determination shows that the Adjusted R-squared is 0.282205. This means that the ability of the independent variable in explaining the variation of the dependent variable is 28.22%, while 71.78% is explained by other variables that are not included or explained in this study. 993) and a significance value <(α) (0.0008 <0.05) so that H13 is accepted. The coefficient of determination shows that the Adjusted R-squared is 0.282205. This means that the ability of the independent variable in explaining the variation of the dependent variable is 28.22%, while 71.78% is explained by other variables that are not included or explained in this study. 993) and the significance value <(α) (0.0008 <0.05) so that H13 is accepted. The coefficient of determination shows that the Adjusted R-squared is 0.282205. This means that the ability of the independent variable in explaining the variation of the dependent variable is 28.22%, while 71.78% is explained by other variables that are not included or explained in this study.

1. INTRODUCTION

Today's capital market is very play an important role in mobilizing and investors who will invest.

Stock investing is one of the most popular forms of investment in the capital market because stock investing can provide two kinds of benefits for investors, namely in the form of capital gains and dividends. Development capital market is an important indicator to monitor. The thing that monitored from the capital market, among others, value transactions and transaction volume, market capitalization, number of issuers, and indexes Composite Share Price (IHSG). Apart from the Price Index Joint Stock performance that affects the capital market, namely inflation, rates interest, and exchange rates.

Inflation is a factor that affects the fluctuation of the composite stock price index in a certain period. This research is supported by Siska Wahyu Sukamto (2016) that inflation has a positive and significant effect on the JCI, while research conducted by Meidiana Mulya Ningsih et.al (2018) states that inflation has a negative effect on the JCI. The second economic factor that influences the movement of the composite stock price index is interest rates. BI interest rate is the tribal level interest determined by Bank Indonesia as the benchmark for interest rates on deposits or loans for banks and or institutions finance throughout Indonesia. Interest rate SBI can affect interest rates for savings and deposits which are an alternative way for the public and / or potential investors to invest their capital. This research is supported by Siska Wahyu Sukamto (2016) that the SBI interest rate has a positive and significant effect on the JCI, while research conducted by Vina Sintya Dewi (2016) states that the SBI interest rate has a negative and significant effect on the JCI.

The third economic factor that also affects the composite stock price index is the rupiah exchange rate. The rupiah exchange rate is a comparison of the value of the rupiah price with foreign currencies. This research is supported by Ni Made Anita Dewi et.al (2015) that the rupiah exchange rate is negative and significant to the JCI, while research conducted by Dewi Kumala Sari (2016) states that the rupiah exchange rate has a positive and insignificant effect.

Currently, all countries in the world are shocked by the presence of the corona virus or covid-19. With the existence of this pandemic, the global economy experienced a very severe contraction. The state of economic activity in developed and developing countries declined this year. Conditions like this can make millions of people in a downturn, will also lead to poverty. This pandemic condition has made governments around the world see the stock market has decreased because people and traders are in desperate need of staple foodstuffs. In a situation like this, the existence of relevant and reliable information regarding the dynamics of share prices in the capital market is indispensable for investors to be able to obtain maximum finance for their share investment. This information will later be used in stock investment appraisals to determine the right investment decisions. Investors should see capital market movements that have increased (Bullish) or have decreased (Bearish) seen from the increase or decrease in stock prices recorded through an index movement or better known as the Composite Stock Price Index (IHSG).

Stock prices can change up or down in a matter of minutes even can change in accounting second. The fluctuations that occur in share prices are caused by the supply and demand mechanism in the capital market.
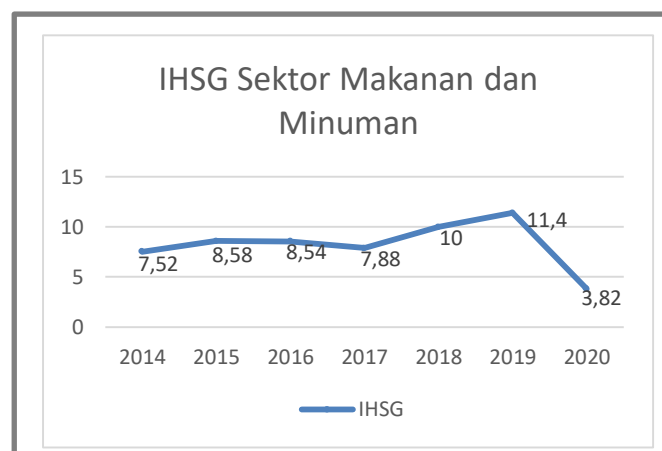

Figure 1 Average JCI Data

Judging from the chart above, it is average stock price index combined food sector and drinks in 2014 as much as 7.52, then an increase in 2015 as much as 8.58. In 2016, there was a decline again

of 8.54, a decline also occurred in 2017 of 7.88. In 2018 to 2019, there was a quite high increase of 11.4. In 2020 experienced a very drastic decrease of 3.82. This decline is certain to have occurred due to the impact of the pandemic on the composite stock price index.

Most of the stock price fluctuation caused by events outside the factors company fundamentals, such as circumstances macroeconomics, namely GDP, inflation rate, interest rate, and rupiah exchange rate (exchange rate).

The food and beverage sector is one of the sectors that produces various basic necessities needed by humans, with the current economic condition also marked by the people's purchasing power for food needs which tends to increase, the unemployment rate increases, then for investors this is a negative signal on the capital market. . The inflation rate in pandemic conditions causes dividends which will be distributed to holders stocks will be problematic could be   decreased or not   distributed because will be retained earnings to be made working capital, the impact also has an impact on the composite stock price index, which has also decreased.

In a pandemic like this, the BI interest rate will increase. This situation makes the public and / or investors more interested in saving. Because the public and / or investors will tend to be motivated to sacrifice their consumption expenditure in order to increase savings. Exchange rate will continue to be vulnerable to weakening during the spread of covid-19 and could make local markets anxious about the availability of food and drinks that will continue to surge. In addition, people with low economies experience difficulties to make ends meet. Automatically, the need for food increases, demand increases, but income is low.

From various research results above, if there is still a theoretical gap that can be proven empirically about the inflation relationship , SBI interest rates, rupiah exchange rates, and indexes stock price combined (IHSG). Research this is done aims to prove the nature of the relationship between variables   whether partial or shared or both, significant or insignificant , as well as positive or negative. Therefore, the authors are interested in conducting research with the title "The Effect of Inflation, Interest Rate and Rupiah Exchange Rate on JCI in Food and Beverage Manufacturing Companies in Indonesia Stock Exchange (BEI) 2014-2020 Period".

2. LITERATURE REVIEW

Composite Stock Price Index

According to Zulbiadi Latief (2018: 1) IHSG is an index for all shares traded on the Indonesia Stock Exchange, which reflects the movement trend and the average value of all shares of issuers in Indonesia.

1. Internal Factors (Micro Environment)
   Internal factors (microenvironment) include:
   a. Announcements regarding marketing, production,   sales   as   advertising,   contract details, price changes, new product recalls, production reports, reports product safety, and sales reports.
   b. Financing announcements, such as announcements related to equity and debt.
   c. Management-board of director announcements such as changes and changes in directors, management and organizational structure.
   d. Announcement   takeover diversification, such as reports on mergers, equity investments, reports of take over by acquisitions, divestment reports and others.
   e. Announcement investation (investment annuncements), such as conducting   plant expansion, research development and, closing other businesses.
   f. Labor announcements, such as new negotiations, new contracts, strikes and others.
   g. Announcement   report   finance companies, such as forecasting earnings before the end of the fiscal year and after the end of the fiscal year, earnings per *share* (EPS) and dividends per share (DPS), price earning ratio, net profit margin, return on assets (ROA) and others.
2. External Factors (Macro Environment) External factors (macro environment) include:
   a. Announcements from the government such as changes in savings and deposit interest rates, foreign exchange rates, inflation, as well as various economic regulations and deregulations

issued by the government.

b. Legal announcements, such as employee claims against the company or their manager and company claims against their manager.
Securities industry announcements, such as annual meeting reports, insider trading, trading share volume or price, trading restrictions / postponements.

c. Domestic political turmoil and exchange rate fluctuations are also factors that have a significant effect on stock price movements on a country's stock exchange.

d. Various issues both from within the country and abroad

e. annual meeting reports, insider trading, trading share volume or price, trading restrictions / delays.

f. Domestic political turmoil and exchange rate fluctuations are also factors that have a significant effect on stock price movements on a country's stock exchange.

g. Various issues both from within the country and abroad

Method IHSG calculation

The general market situation can only be known if we know the composite stock price index. For the calculation of the composite stock price index, the method is almost the same as calculating the individual stock price index but must add up all the listed share prices.
The formula for calculating the Composite Stock Price Index (JCI) is as follows:

$$JCI = (Ht / Ho) \times 100\%$$

Information :
JCI: Composite Stock Price Index
Ht: the total price of all shares at the valid time (open)
Ho: total price all at base time (close)

Inflation

According to M. Natsir   (2014: 253) states   that Inflation is a trend   rising prices for goods and services   in general and continously.

Indicator Inflation

According to Bank Indonesia that Indicator which is often used to measure the rate of inflation is the Price Index Consumers (CPI).

CPI changes over time   to time shows the price movements of packages of goods and services consumed by the public. Since July 2008, the package of goods and services in basket CPI has been carried out on the basis of the Survey Cost of Living (SBH) in 2007 implemented by the Central Statistics Agency (BPS). Then, BPS will monitor it development of the prices of these goods and services on a monthly basis in several cities, in traditional markets and modern against several types of goods / services in every city. Other inflation indicators based on   international best practice between other:

1. Index Price Trading Large (IHPB).
Price big trade from a commodity   is the price of the transaction between the first wholesaler / wholesaler with the next wholesaler / buyer in large numbers on the first market over a commodity.

2. Deflator Product Domestic Gross (PDB) illustrates price level measurement final goods and services produced in in an economy (country). The GDP deflator is generated by dividing GDP by nominal price with GDP at price constant.

Factors cause Inflation

According to M. Natsir (2014: 255) the main factors being cause inflation, inflation could caused both from the side demand, supply side and expectations. That is:

1. The second one cause inflation is a supply factor and the resulting increase in prices (inflation) known as the cost pust inflation or shock inflation. This inflation was caused by increases in production costs or costs procurement of goods and inflation due to

traction demand (full demand *inflation*) Inflation due the pull of demand that is increase prices incurred as a result interaction between requests and domestic offer in term long.

2. Inflation because of impulse cost (cost pust *inflation*) Consequently, the service factor, producers must increase price in order to gain income (profit) and activities production can continue in period long term (sustainable).

3. Inflation due expectations Inflation expectations   very influential in the formation of prices and wages of labor work. If economic actors, both individuals, the business world thinks that pace inflation in the period then will still happen in the future which will come, then the economic actors will anticipate to minimize losses that may arise. The hammers of 15 will take into account the costs production with price level increases like in the past (Suseno and Astiyah, 2009 in M. Natsir, 2014) ".

Inflation Calculation Formulas

According to M. Natsir (2014: 266) the formula used to calculate inflation is:

$$INFn = \frac{IHKn - IHKn-1}{IHKn-1} \times 100\%$$

Information:
INFn: inflation or deflation over time (month or year) (n)
CPI: Price Index Consumer at time (month or year) (n)
CPI-1: Price Index Consumer at time (month or year) (n-1)

Understanding Interest Rates Bank Indonesia

BI-Rate is a policy interest rate that reflects the monetary policy stance or stance set by Bank Indonesia and announced to the public. The operational target of the BI-Rate is the interbank money market interest rate which will then be followed by the deposit rate and ending at the bank interest rate. Taking into account other factors in the economy, Bank Indonesia will generally raise the BI Rate if future inflation is expected to exceed the set target, on the other hand Bank Indonesia will lower the BI Rate if future inflation is estimated to be below the set target. The BI Rate is determined every month through the monthly RDG (Board of Governors Meeting) mechanism with monthly material coverage.

Bank Indonesia (2018) said "the BI Rate is the policy on the interest rate set by Bank Indonesia, which is concerned with monetary policy that will be applied to people throughout Indonesia".

Operational Targets of Bank Indonesia Interest Rates

1. Tribe money market interest
2. Deposit interest rate
3. Banking interest rates

Bank Indonesia Interest Rate Fixing Mechanism

Determination of the BI Rate done every month through the mechanism of the monthly RDG (Board of Governors Meeting) with monthly material coverage. The size changes in the BI Rate can be seen from the response monetary policy. "Monetary policy responses are expressed in changes in the BI rate (consistently and gradually in multiples of 25 basis points (bps). Conditions that indicate Bank Indonesia's greater intention to achieve the inflation target. The process of determining the monetary policy response in this case the BI Rate. :

1. The determination of the monetary policy response is carried out in the Quarterly RDG
2. Monetary policy response is expected for the next quarter.
3. The determination of the monetary policy response is carried out by taking into account the delay (lag) effect of monetary policy in influencing inflation.
4. Under extraordinary conditions, the determination of the monetary policy response can be carried out in the monthly RDG (Bank Indonesia in the Inflation Targeting Framework)

Definition Score Exchange

International trade will encourage the exchange of two or more different currencies. This transaction will lead to a demand and supply of certain currencies, here are some definitions of exchange rates.

According to Mahyus Ekananda (2014: 168) "Exchange rates is Exchange rate is the price of an eye money relative to currency other countries. Exchange rate play a role   important in decisions   expenditure, because   exchange rate allows we translate prices of various country to in one language the same one".

System Score Exchange Currency

According to Mahyus Ekananda (2014: 314) exists 3 value system exchange used something countries, namely:
1. Exchange rate system free (floating)
   In this system there is no government intervention to stabilize it exchange rate. Score exchange rate determined by requests and offers against foreign currencies.
2. System *exchange rate* fixed
   In system this is the government or central bank which country concerned interfere in a manner active in the market foreign exchange with buy or selling currency foreign if the value deviate from standards are has been determined.
3. System *exchange rate* controlled or under control (controlled)
   In this system, the government or the central bank of the country concerned has exclusive power in determining the allocation of the use of available foreign currencies.

Types Score Exchange

According to Sadono Sukirno (2011: 411) types score currency exchange money or exchange rate currency consists from 4 types namely:
1. Selling *Rate* (Exchange rate Sell)
   Is an exchange rate that determined by a bank for sales currency certain foreigners on moment certain.
2. Middle *Rate* (Exchange rate Middle)
   Is an exchange rate middle between the chairs selling and exchange rates buy currency foreign to currency national, that has been set by the bank central on moment certain.
3. Buying *Rate* (Exchange rate Buy)
   It is an exchange rate determined by a bank for the purchase of certain foreign currencies at a certain time.
4. Flat *Rate* (Exchange rate Flat)
   It is the exchange rate that applies in buying and selling bank notes and travelers checks.

Measurement Score Exchange

Measurement of the exchange rate in this study uses the middle rate, as explained by Sadono Sukirno (2011: 411) the middle rate, namely: "the middle rate between the selling rate and the buying rate of foreign currency against the national currency, which has been determined by the central bank at that time. . "

To get the middle rate itself according to Mahyus Ekananda (2014: 201) the value of the middle rate is calculated using the following formula:

$$Middle\ Rate = \frac{Kb + Kj}{2}$$

Information:
Kb : *Exchange rate* buy
Kj : *Exchange rate* selling

3. RESEARCH METHODS

This research was conducted with a quantitative approach. The quantitative approach can explain the formulation of the problem under study with respect to the existence of the method used. A quantitative approach is also used to obtain numerical data, namely the annual financial report data of the Food and Beverage Sector Manufacturing Companies in Indonesia.The type of data used in this study is secondary data derived from company financial reports or company annual reports to find out how the financial performance of a company that is included in sector companies listed on the Indonesia Stock Exchange. The variables of this study include dependent and independent variables.

1. Dependent variable (Y) is a type of dependent variable that is described or influenced by an independent variable. In this study the dependent variable is the Composite Stock Price Index / IHSG on the Indonesia Stock Exchange (IDX).
2. Independent variable (X) or independent variable is a variable that is not influenced or not dependent on other variables. In this study the independent variables / independent variables are:
    a. Inflation (X1)
    Inflation is one of the variables that affects the up and down movement of the composite stock price index in a certain period (Ardelia Rezeki Harsono and Saparila Worikinasih (2018). The data used is in the form of monthly secondary data accessed through the website. www.bi.go.id.
    b. Interest Rate (X2)
    Interest rates can be said to be a cost that is often incurred by banks for customers in saving funds or money. Interest rates are also sustainable in the capital market for investment (Ni Wayan Sri Asih and Musithah Akbar 2016). The data used is in the form of monthly secondary data accessed through the websitewww.bi.go.id.
    c. Rupiah Exchange Rate (X3)
    The exchange rate is a comparison of the value or price of the rupiah currency with other currencies which has an important effect on economic movements (Saputra & Dharmadiaksa 2016). The data used is in the form of monthly secondary data accessed through the websitewww.duniainvest.com.

    The population of this study were 24 Food and Beverage Sector Companies listed on the IDX.

    The population used in this study is single, namely the Composite Stock Price Index listed on the Indonesia Stock Exchange (BEI) in January 2014-April 2020 which has been published by the Indonesia Stock Exchange (IDX). Given that this research was conducted on the Composite Stock Price Index, the population uses time series data as much as 60 months. There are 76 population from the monthly inflation variable data, rates sbi interest, the rupiah exchange rate and the composite stock price index.

Data analysis technique

The data analysis technique was performed using the analysis used in this study is multiple linear regression analysis using the Eviews 10 computer program. The following is the framework for this research:
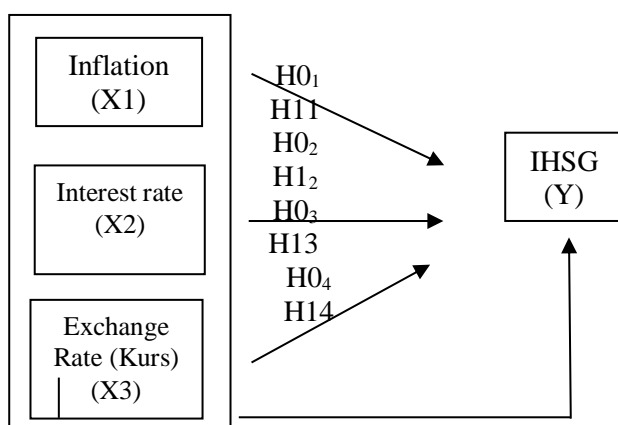

Figure 2 Theoretical Framework

Information:
X1 = Inflation
X2 = Interest rate SBI
X3 = Rupiah exchange rate
Y = IHSG

Based on the picture of the framework above, it can be explained that the independent variables (independent) are inflation (X1), SBI interest rates (X2) and the Rupiah exchange rate (X3). These variables affect the dependent variable, namely IHSG (Y), either simultaneously or partially.

Hypothesis

A hypothesis is a proposition that will be tested for its validity, or is a temporary answer to the researcher's question (Priyono, 2016: 66). If the temporary answer contained in the hypothesis will be used as a basis for decision making, it must be tested first using observational data. The hypotheses in this study are:

H01: Partially inflation has no effect on the JCI
H11: Inflation partially affects the JCI
H02: Partially interest rates have no effect on the JCI
H12: Partially interest rates affect the JCI
H03: Partially the rupiah exchange rate has no effect on the JCI
H13: partially the rupiah exchange rate has an effect on the JCI
H04: Simultaneously, inflation, interest rates and the rupiah exchange rate have no effect on the JCI
H14: Simultaneously, inflation, interest rates and the rupiah exchange rate affect the JCI

Table recapitulation of research data:

Table 1. Research Data

.	Inflation	Interest rate	Rupiah exchange rate	JCI
1.	8.22	7.50	12,210	17.01
2.	7.75	7.50	11,609	16.94
3.	7.32	7.50	11,360	17.16
4.	7.25	7.50	11,561	17.15
5.	7.32	7.50	11,675	16.97
6.	6.70	7.50	11,855	17.20
7.	4.53	7.50	11,577	17.24
8.	3.99	7.50	11,690	16.83
9.	4.53	7.50	12,158	16.99
10.	4.83	7.50	12,085	17.06
11.	6.23	7.75	12,204	17.22
12.	8.36	7.75	12,385	16.81
13.	6.69	7.75	12,667	17.08
14.	6.29	7.50	12,925	17.05
15.	6.38	7.50	13,075	17.35
16.	6.79	7.50	12,962	17.13
17.	7.15	7.50	13,224	17.15
18.	7.26	7.50	13,332	16.80
19.	7.26	7.50	13,527	16.80
20.	7.18	7.50	14,050	16.99
21.	6.83	7.50	14,650	16.96
22.	6.25	7.50	13,687	16.99

23.	4.89	7.50	13,835	17.16
24.	3.35	7.50	13,787	17.50
25.	4.14	7.25	13,775	17.05
26.	4.42	7.00	13,372	17.25
27.	4.45	6.75	13,260	17.04
28.	3.60	5.50	13,185	16.60
29.	3.33	5.50	13,660	17.06
30.	3.45	5.25	13,212	17.00
31.	3.21	5.25	13,098	16.92
32.	2.79	5.25	13,267	17.40
33.	3.07	5.00	13,051	16.98
34.	3.31	4.75	13,048	17.04
35.	3.58	4.75	13,552	16.98
36.	3.02	4.75	13,472	17.09
37.	3.49	4.75	13,352	3.00
38.	3.83	4.75	13,336	17.09
39.	3.61	4.75	13,325	17.06
40.	4.17	4.75	13,329	20.17
41.	4.33	4.75	13,322	16.89
42.	4.37	4.75	13,327	17.28
43.	3.88	4.75	13,325	16.86
44.	3.82	4.50	13,343	17.12
45.	3.72	4.25	13,471	16.95
46.	3.58	4.25	13,562	16.78
47.	3.30	4.25	13,526	16.66
48.	3.61	4.25	13,567	16.91
49.	3.25	4.25	13,888	20.02
50.	3.18	4.25	13,745	20.40
51.	3.40	4.25	13,765	19.87
52.	3.41	4.25	13,912	20.17
53.	3.23	5.75	13,895	20.14
54.	3.12	5.25	14,330	20.16
55.	3.18	5.25	14,420	19.87
56.	3.20	5.50	14,730	19.97
57.	3.88	5.75	14,901	19.95
58.	3.16	5.75	15,202	20.08
59.	3.23	6.00	14,302	20.13
60.	3.13	6.00	14,380	20.88
61.	2.82	6.00	13,972	22.86
62.	2.57	6.00	14,065	22.78
63.	2.48	6.00	14,240	23.15
64.	2.83	6.00	14,250	23.34
65.	3.32	6.00	14,275	23.13
66.	3.28	6.00	14,127	22.81

67.	3.32	5.75	14,017	23.03
68.	3.49	5.50	14,185	23.15
69.	3.39	5.25	14,195	23.16
70.	3.13	5.00	14,037	22.90
71.	3.00	5.00	14,105	23.07
72.	2.72	5.00	13,882	22.43
73.	2.68	5.00	13,655	22.96
74.	2.98	4.75	14,347	22.90
75.	2.96	4.50	16,310	23.07
76.	2.67	4.50	14,875	22.91

Source: www.bi.go.id and www.duniainvest.com, (data processed by the author 2020)

Classic Assumption Testing

Normality test
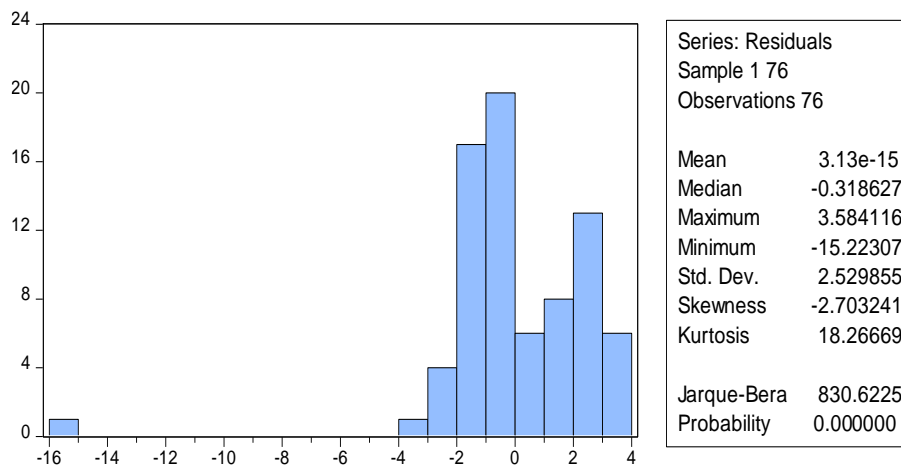
Source: *Eviews10 output* (Author data processing results, 2020)
Figure 3: Normality Distribution Histogram Test

Heterocedasitisity test

Table 2. Heteroscedasticity Test

Heteroskedasticity Test: Glejser

F-statistic	0.632497 Prob. F (3.72)	0.0064
Obs * R-squared	1.951479 Prob. Chi-Square (3)	0.0055
Scaled explained SS	2.693838 Prob. Chi-Square (3)	0.0013

Based on the results of the normality test in Figure 3, the Jarque-Bera value is 830.6225 which is smaller than the α level of 0.05 (5% significance level). The results of this study indicate that Ho is rejected because of the prob value. Jarque-Bera is smaller than α, which means that the data in this research model is not normally distributed or does not pass the normality test.

Based on Table 2 it is known that the prob. Chi-Square on Obs * R-squared is 0.0055 with α of 0.05. The test results obtained the prob value. Chi-Square on Obs * R-squared of 0.0055 is smaller than the α value of 0.05, so Ho is rejected, meaning that there is no heteroscedasticity in this study or does not pass the heteroscedasticity test.

Multicollinearity Test

Multicollinearity testing aims test whether there is a significant correlation that is close to perfect between the independent variables. If there is a significant correlation between the independent variables, then the linear regression model has multicollinearity symptoms To determine whether there is multicollinearity, what needs to be seen from the Eviews 10 data processing program is *tolerance* and Variance Inflation Factor (VIF), if the tolerance variance independent value is greater than 0.01 and the VIF value is less than 10, it means that there is no multicollinearity.

Table 3 Multicollinearity Test

Variance Inflation Factors
Date: 07/10/20 Time: 13:30
Sample: 1 76
Included observations: 76

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	39.84484	454,2195	NA
INFLATION	0.091596	22.29125	2.790336
SUKU_BUNGA_SBI	0.137170	57.47881	2.413365
RUPIAH EXCHANGE RATE	1.63E-07	339.4427	1.542761

Source:*Eviews10 output* (Author data processing results, 2020)

Based on the multicollinearity test results above, it can be seen that the variance inflation factor (VIF) value for the three independent variables in this study is not more than 10 (the VIF value ranges from 2.790336 to 1.542761), it can be concluded that there is no multicollinearity problem in the regression model for data. this research.

Descriptive Statistical Analysis Test

Table 4 Descriptive Statistical Analysis Results

	IHSG	Inflation	SBI Interest Rate	Rupiah exchange rate
Mean	18.63171	4.321579	5.934211	13484.66
Median	17.16000	3,580000	5.750000	13539.50
Maximum	23.34000	8.360000	7,75,000	16310.00
Minimum	3,000,000	2.480000	4.250000	11360.00
Std. Dev.	3.047613	1.645582	1.250579	917,2155
Skewness	-1.253359	1.063242	0.212203	-0.249268
Kurtosis	10.32048	2.680108	1.477841	3.668405
Jarque-Bera	189,5981	14,64350	7.907448	2.201795
Probability	0.000000	0.000661	0.019183	0.332572
Sum	1416,010	328,4400	451,0000	1024834
Sum Sq. Dev.	696,5959	203.0954	117,2961	63096315
Observations	76	76	76	76

Source: Eviews10 Output (Author data processing results, 2020)

Multiple Linear Regression

Table 5 Multiple Linear Regression Test

Dependent Variable: IHSG
Method: Least Squares
Date: 10/7/20 Time: 12:42
Sample (adjusted): 1 76
Included observations: 76 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.533199	6.312277	-0.242892	0.8088
INFLATION	-0.685556	0.302648	-2.265190	0.0265
SUKU_BUNGA_SBI	0.667253	0.370365	1.801611	0.0758
RUPIAH EXCHANGE RATE	0.001421	0.000404	3,520699	0.0008

Source:*Eviews10 output* (Author data processing results, 2020)

The structural equation for linear regression based on the table above is

Y = -1.533199 - 0.685556 X1 + 0.667253 X2 + 0.001421 X3

The regression equation above can be explained as follows:
a. The constant number of -1.533199 states that if inflation (X1), Interest Rate (X2) and Exchange Rate (X3) are 0, then the potential for JCI is -1.533199.
b. The regression coefficient for the Inflation variable is negative at -0.685556 which means that the variable other independent (Interest Rate or Exchange Rate) the value is fixed and Inflation has grown by 1, it will lower the JCI by 0.685556 or vice versa.
c. The regression coefficient for the Interest Rate variable is positive at 0.667253, meaning that if the other independent variable (inflation or exchange rate) is fixed and the interest rate increases by 1%, it will lower the JCI by 0.667253%.
d. The regression coefficient for the Exchange Rate variable is positive at 0.001421, meaning that if other independent variables (inflation or interest rates) are fixed, the exchange rate increases by 1, it will increase the JCI by 0.001421.

Autocorrelation Test

Table 6 Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.071551 Prob. F (2.63)	0.3486
Obs * R-squared	2.269988 Prob. Chi-Square (2)	0.3214

Source:*Eviews10 output* (Author data processing results, 2020

In this study using the autocorrelation test with the LM Test with a hypothesis
Ho: no autocorrelation,
H1: there is autocorrelation. The interpretation of the LM Test results in this study is as follows: The results of the LM Test above identify that there is no autocorrelation, this can be seen from the value of Obs * R-squared which is statistically significant (more than 0.05) then Ho (no autocorrelation) is rejected.

Partial Test (T Test)

Table 7 Partial T Test

Dependent Variable: IHSG
Method: Least Squares
Date: 10/7/20 Time: 13:38
Sample: 1 76
Included observations: 76

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.533199	6.312277	-0.242892	0.8088
INFLATION	-0.685556	0.302648	-2.265190	0.0265
SBI interest_ rates	0.667253	0.370365	1.801611	0.0758
RUPIAH EXCHANGE RATE	0.001421	0.000404	3,520699	0.0008

Source:*Eviews10 output* (Author data processing results, 2020)

The following is the interpretation:
1. Based on the table of processed Eviews data above using the Partial Test (T test) it shows that the tcount of the Inflation variable is -2.265190 with a t-table value of 1.993 which means -thitung (-2.265190) <-table (-1.993). So it can be concluded Reject H01 and Accept H11, which means that inflation (X1) partially has a negative and significant effect on the Composite Stock Price Index (Y).
2. Based on the table of processed Eviews data above using the Partial Test (T test) it shows that the tcount of the SBI Interest Rate variable is 1.801611 with a ttable value of 1.801611.
3. 1.993 which means tcount (1.801611) <ttable (1.993). Then it can It is concluded that Accept H02 and Reject H12, which means that the SBI Interest Rate (X2) partially has no effect on the Composite Stock Price Index (Y).
4. Based on the table of processed Eviews data above by using the Partial Test (T test), it shows that the tcount of the Rupiah Exchange Rate variable is 3.520699 with a ttable value of 1.993, which means tcount (3.520699)> ttable (1.993). So it can be concluded that Reject H03 and Accept H13, which means the Rupiah Exchange Rate (X3) partial positive and significant effect on the Composite Stock Price Index (Y).

Simultaneous Test F

Table 8 F test

R-squared	0.310917	Mean dependent var	18.63171
Adjusted R-squared	0.282205	SD dependent var	3.047613
SE of regression	2.582022	Akaike info criterion	4.786219
Sum squared resid	480,0123	Schwarz criterion	4.908889
Log likelihood	-177.8763	Hannan-Quinn criter.	4,835244
F-statistic	10,82890	Durbin-Watson stat	0.946477
Prob (F-statistic)	0.000006		

Source:*Eviews10 Software Output* (Author data processing results, 2020)

Based on table 8 above, it shows that F counts 10.82890> F table 0.05 (3; 72) = 2.73, with a significance value of 0.000 <0.05, it can be interpreted that inflation, SBI Interest Rates and Rupiah Exchange Rates are Simultaneously a significant effect on the JCI, so the hypothesis H1.4 is accepted.

Analysis Multiple Correlation Coefficient (R)

Based on the R square value, it can be seen that the magnitude of the relationship between the independent variables, namely inflation, interest rates and exchange rates, with the dependent variable, namely IHSG, simultaneously obtains the calculated result with the correlation coefficient is 0.333045,

which is more than 0.5, this shows the independent variable has strong influence on the dependent variable in this study. On the other hand, the simultaneous contribution or association of the independent variable inflation, SBI interest rate and Rupiah exchange rate to the dependent variable of the JCI is 33.30%, while the remaining 66.7% is determined by other variables not examined or explained in the study.

Analysis of the Coefficient of Determination (R2)

Analysis of the coefficient of determination (R2) aims to measure the ability of a model to explain the variation in the dependent model. The value of Adjused R-squared (R2) which is close to zero means that the ability of the independent variables to explain the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict the variation in the dependent variable.

Based on the test results, it can be explained that the coefficient of determination (R2) shown by the Adjusted R-squared value is 0.282205, which means that the independent variables of inflation, SBI interest rates, and rupiah exchange rates are able to explain the dependent variation, namely the JCI of 28.22%, while the remaining 71.78% explained by other variables that were not included or explained in this study. This shows that other factors are more dominant, especially the company's internal fundamental factors including Current Ratio (CR), leverage ratio, Net Profit Margin (NPM), Return On Asset (ROA), Earning Per Share (EPS), Price Earning Ratio (PER).), Return On Equity (ROE) and others. There are 3 companies with foreign ownership> 50% of the 24 companies in the food and beverage sector, namely, PT. Prasidha Aneka Niaga Tbk (PSDN) amounted to 59.93%, PT. Multi Bintang Indonesia Tbk (MLBI) at 81.75%, and PT. Delta Djakarta (DLTA) of 58.33%.

4. CONCLUSION

Based on the results and discussion in the previous chapter, the conclusions that can be drawn from the results of this study are as follows:

1. Based on the research conducted, inflation has a significance value oftcount -2.265190 with ttable value of 1.993, which means -thitung (-2.265190) <ttable (1.993), it can be concluded that inflation has a negative and significant effect on the Composite Stock Price Index because inflation is an economic factor that cannot be avoided. Increases in the price of goods often occur in Indonesia, this has an impact on the decline in the Composite Stock Price Index, which makes people withdraw their investment to meet their daily needs.

2. Based on the research conducted, the BI Interest Rate has a significant value tcount is 1.801611 with a ttable value of 1.993, which means tcount (1.801611) <ttable (1.993), it can be concluded that SBI interest rates partially have no effect on the JCI, because interest rates can be seen from how big the interest rate ratio is when compared to the profit rate will be obtained by the company on the stock exchange.

3. Based on the research conducted, the Rupiah Exchange Rate has a significance value tcount of 3.520699 with a ttable value of 1.993, which means tcount (3.520699)> ttable (1.993), it can be concluded that the Exchange Rate Rupiah by Partial has a positive and significant effect on the Composite Stock Price Index because the Rupiah Exchange Rate can have an impact on share ownership in the IDX, namely if investors come from outside and use US Dollars. For outside investors, the decline in the rupiah will cause investors to tend to release US dollars to buy shares whose prices have fallen due to the influence of the currency exchange rate.

4. Based on research conducted, the results of the F statistical test show that F counts 10.82890> F table 0.05 (3; 72) = 2.73, with a significance value of 0.000 <0.05, it can be interpreted that Simultaneously, Inflation, Interest Rates and Exchange Rates have a significant effect on the Composite Stock Price Index.

REFERENCES

Ayom Gumelar, B. (2013). The Effect of Inflation, Deposit Interest Rates, and Total Profit Sharing on Time Deposits Mudharabah (Case Study of PT. Bank Syariah Mandiri Year 2008-2012).

Asih, NWS, & Akbar, M. (2017). Analysis of the Effect of Inflation, Interest Rates, Exchange Rates and Growth of Gross Domestic Product (GDP) on the Composite Stock Price Index (IHSG) Case Studies on Property Companies Listed on the Indonesia Stock Exchange. Journal of Management and Accounting, 17 (1).

Akbar, AJ, Yuliana, S., & Marwa, T. (2016). The influence of the rupiah exchange rate, SBI interest rates, and inflation on the composite stock price index (IHSG) of the agricultural sector on the Indonesia Stock Exchange. Journal of Development Economics, 14 (2), 47-53.

Dewi, VS (2016). Analysis of Factors Affecting the Movement of the Composite Stock Price Index (IHSG) on the Indonesia Stock Exchange (BEI) 2012-2014 (Doctoral dissertation, Muhammadiyah University of Surakarta).

Faizah, NI, Rachmansyah, Y., & Anoraga, P. (2017). Analysis Of The Effect Of Inflation, World Oil Price And Dollar Exchange Value (Usd / Idr) On The Combined Share Price Index (Jci) In Indonesia Stock Exchange (Bei) 2011-2014. Magisma: Scientific Journal of Economics and Business, 5 (2), 34-38.

Faoriko, Akbar. 2013. Thesis. The Influence of Inflation, Interest Rates and Rupiah Exchange Rates on Stock Returns on the Indonesia Stock Exchange. Yogyakarta State University, Yogyakarta.

Ghozali, Imam (2018). Multivariate and Econometric Analysis: Theory, Concepts and Applications with EViews 10 Issue 2, Diponegoro University (Semarang).

Handiani, Sylvia 2014. "The Effect of Gold Prices, World Oil Prices and the US Dollar / Rupiah Exchange Rate on the JCI on period (2008-2013) ". Graduate E-Journal Unpar, Vol. 1 (1): pp. 85-93.

Harsono, AR, & Worokinasih, S. (2018). The Influence of Inflation, Interest Rates, and Rupiah Exchange Rate on the Composite Stock Price Index (Study on the Indonesia Stock Exchange 2013-2017 Period). Journal of Business Administration, 60 (2), 102-110.

Jayanti, Y. (2014). The Influence of the Inflation Rate, SBI Interest Rate, Rupiah Exchange Rate, Dow Jones Index, and Klse Index on the Composite Stock Price Index (Ihsg) Studies on the Indonesia Stock Exchange Period January 2010 – December 2013. Journal of Business Administration, 11 (1).

Kewal, SS (2012). The effect of inflation, interest rates, exchange rates, and GDP growth on the composite stock price index. Journal of Economia, 8 (1), 53-64.

Kumalasari, D. (2016). The Effect of Exchange Rate (Kurs) Usd / Idr, Sbi Interest Rate, Inflation and Money Supply (M2) on the Composite Stock Price Index (Ihsg) on the Indonesia Stock Exchange (BEI). Akademika, 14 (1), 8-15.

Larasati, CA, & Topowijono, T. (2017).

The Influence of the Inflation Rate, Bank Indonesia Certificate Interest Rates, and the United States Dollar Exchange Rate on the Composite Stock Price Index Study at the Indonesian Stock Exchange 2010-2015. Journal of Business Administration, 49 (2), 147-156.

Marhen, A., & Yusra, I. (2019). Analysis of the effect of inflation levels, sbi interest rate and rupiah exchange rate on the joint share price index (jci) in indonesia stock exchange.

Ningsih, MM, & Waspada, I. The Effect of SBI Interest Rates, Capital Structure, and Company Size on Firm Value in Property and Real Estate Companies Listing on the Indonesia Stock Exchange in the 2015–2017 Period. Journal of Accounting and Financial Research, 7 (1), 97-110.

Ningsih, MM, & Waspada, I. (2018). The Effect of Bi Rate and Inflation on the Composite Stock Price Index (Studies on the Property, Real Estate, and Building Construction Indexes, on the IDX for the 2013-2017 Period). Managerial: Journal of Management and Information Systems, 17 (2), 247-258.

Novitasari, I. (2012). The Effect of Inflation, Indonesian Crude Oil Price, and Interest Rate (BI Rate) on the Composite Stock Price Index (IHSG) (Monthly Data for the 2006-2012 Period). FEB Student Scientific Journal, 1 (2).

Putra, DAA (2017, May). The Effect of Rupiah / US $ Exchange Rate, Inflation and SBI Interest Rate on Composite Stock Price Index (CSPI) in Indonesia Stock Exchange. In International Conference on Education (ICE2) 2018: Education and Innovation in Science in the Digital Era (pp. 202-214).

Muhammadiyah University Prof. Dr. Hamka, Faculty of Economics and Business (2014). Thesis Preparation Guidelines. Faculty of Economics and Business Prof. Muhammadiyah University. Dr. Hamka, Jakarta

Rimbano, Dheo. 2015. "Analysis of the Effect of Inflation and Interest Rates on Bank Indonesia Certificates (SBI) on the LQ45 Stock Price Index in the Indonesia Stock Exchange (BEI)". Journal
Scientific Business Oration, Vol. 13 (1): p. 41-59.

Internet sources:
www.bi.go.id
www.duniainvest.com
www.idx.do.id