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The impact of macroeconomic variable movements on stock price index performance in consumer goods industry sector companies: Evidence from Indonesia

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Abstract. This research essentially aims to examine the extent to which macroeconomic variables (including inflation, exchange rate, and interest rate) have a significant influence on stock price index and the level of significance for that influence. The researchers focused more on consumer goods industry companies that are listed on the Indonesian Stock Exchange (IDX) within 2015 until 2019, with consideration for the stock price of consumer goods companies listed on the Indonesia Stock Exchange (IDX) as claimed to be the most defensive stock. This study finds that inflation, exchange rate, and interest rate, as composite variables, have a significant influence on stock price index. A partial test revealed that inflation, and exchange rate have negative significant influence on stock price index, while interest rate is found to be nonsignificant.

Keywords. Inflation, Exchange Rate, Interest Rate, Stock Price Index, Consumer Goods Industry Sector

1. Introduction

The consumer goods industry sector is the sector with the second largest market capitalization value in the Indonesian capital market at 16.12%, while the first largest market capitalization value comes from the financial sector of 34.96%. Based on IDX Stock Index report data (2019), which is displayed in Figure 1, with its high market capitalization value, the share price index of the consumer goods industry sector has actually decreased performance over the last 5 years by -5.75%. Throughout 2015 to 2019, the stock price index performance of the consumer goods industry sector fell to far behind the basic industry and chemicals sector with growth of 79.91% and a market capitalization value of only 10.67%.

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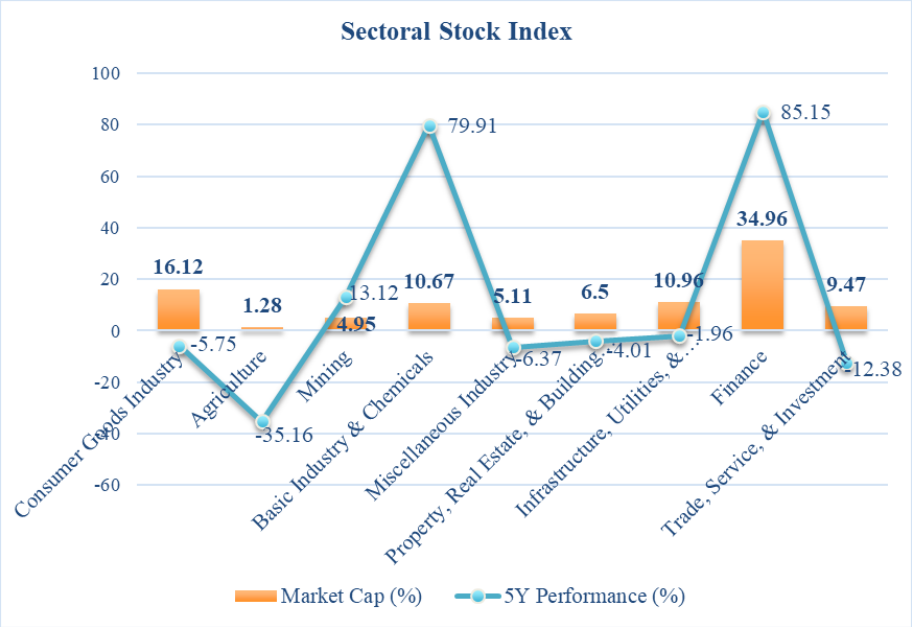

Figure 1. IDX Sectoral Stock Index Performance
(Source: IDX Stock Index Report, 2019 December)

The decline in performance seen from the negative value of the stock price index of the consumer goods industry sector is an unexpected phenomenon by Indonesian capital market investors. Over the past 10 years, the consumer goods industry sector has been assumed to be a defensive sector. Amidst pressures in the consumer goods industry sector is considered able to show a stable performance in the face of several macroeconomic issues affecting the Indonesian capital market such as the high inflation rate that reached 8.36% in 2014, rupiah exchange rate volatility influenced by political issues, and high interest rates that reached 7.75% in 2014. The defensive claim was delivered on the positive performance of the consumer goods industry sector stock price index for a 10-year period of 205.77% before starting to decline in 2015, as shown in Table 1.

Table 1. IDX Sectoral Stock Index Performance
(Source: IDX Stock Index Report, 2019 December)

Sector Index	Bloomberg Code	Market Cap (%)	5Y Performance (%)	10Y Performance (%)
Consumer Goods Industry	JAKCONS	16.12	-5.75	**205.77**
Agriculture	JAKAGRI	1.28	-35.16	-13.04
Mining	JAKMINE	4.95	13.12	-29.72
Basic Industry, & Chemicals	JAKBIND	10.67	79.91	257.07
Miscellaneous Industry	-	5.11	-6.37	103.48
Property, Real Estate, & Building Construction	JAKPROP	6.5	-4.01	243.24
Infrastructure, Utilities, & Transportation	JAKINFR	10.96	-1.96	56.14
Finance	JAKFIN	34.96	85.15	349.42
Trade, Service, & Investment	JAKTRAD	9.47	-12.38	179.17

According to stock price index data from companies on the main board of the consumer goods industry sector in Figure 2 by Yahoo Finance (2020), in 2015 the sector's share price

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index decreased by -50.48% from the previous year, which was 137.23% in 2014 to 86.75% in 2015.

Figure 2. Stock Price Index data from Companies on the main boards of the Consumer Goods Industry Sector (Source: Yahoo Finance, 2020)

The decline in the share price index is estimated to be caused by several interconnected factors. The first factor is inflation. The total inflation rate as shown in Table 2, in 2015 was only 3.35% much lower than the inflation rates the previous year. However, based on data from BPS (2020), inflation of the expenditure group, namely finished food products, beverages, cigarettes, and tobacco itself, was 6.42%, and inflation from foodstuffs was 4.93%.

Table 2. Indonesia's inflation, exchange rate, and interest rate data (Source: BI, 2020)

Year	Inflation (%)	Exchange Rate (IDR)	Interest Rate (%)
2014	*8.36*	*12,440.00*	*7.75*
2015	3.35	13,795.00	7.50
2016	3.02	13,436.00	4.75
2017	3.61	13,548.00	4.25
2018	3.13	14,481.00	6.00
2019	2.72	13,900.50	5.00

Companies in the consumer goods industry sector are companies producing FMCG (Fast Moving Consumer Goods) products which are products that can be sold quickly at relatively cheap prices, and are usually the daily needs of household consumption such as food, beverages, and cigarettes. The increase in the price of consumer goods due to inflation resulted in a decrease in household consumption so that throughout 2015 household consumption only grew by 4.96%, this value is lower than the previous two years which reached 5.43% in 2013 and 5.16% in 2014 (BPS, 2020). The decline in consumer purchasing power ultimately resulted in a decline in sales that eroded the company's profit and caused negative sentiment on the shares of consumer goods industry companies.

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The second factor, the slowdown in FMCG industry growth was exacerbated by the weakening rupiah. The weakening of rupiah exchange rate from year to year as shown in table 2 causes problems in the debts of companies with high foreign currency denominations. The company's burden on debt will increase in line with the weakening rupiah exchange rate. According to Bank Indonesia data (2020), the value of private sector external debt rose to 14% year on year in February 2015 to USD164.1 billion. With the debt burden rising there is a risk of default, as well as weakening corporate productivity which will be a signal for investors to temporarily hold back on buying stocks in the consumer goods industry sector.

Third factor, high interest rates. With the dollar rising against the rupiah during 2015 to 2019, interest rates were also raised, although they fell to 4.75% and 4.25% in 2016 and 2017. To prevent inflation due to exchange rate volatility, Bank Indonesia needs to control the amount of money in circulation with a discount policy. As a result, the public withheld its consumptive expenditures and allocated funds to save so that the sales of FMCG products were also reduced.

Stock valuation analysis should consider several macroeconomic variables that affect a company's ability to make a profit. Three macroeconomic factors in the form of inflation, exchange rate, and interest rates ultimately influenced the decision to buy stocks of the consumer goods industry sector by investors, as the company's prospects depended on the overall economic situation. Therefore, the prudence of investors in choosing company shares makes the demand for this sector's shares in the capital market decrease, which then makes the stock price index also move down.

The phenomenon, which occurs in the stock price index in consumer goods industry sector companies, reveals the gap between defensive sector claims based on 10 years of stock price index performance data and the sudden decline that occurred in the performance of the stock price index over the last 5 years, namely throughout 2015 to 2019. Performance inconsistencies shown in the results received are influenced by the same factors, namely inflation, exchange rates, and interest rates. Therefore, this study was made to answer the problems caused by in-depth observations of existing data as follows:

- Do macroeconomic variables namely inflation, exchange rates and interest rates simultaneously have a significant negative influence on the stock price index of consumer goods industry companies?
- How much influence macroeconomic variables simultaneously have on stock price indexes on consumer goods industry sector companies?
- Does each macroeconomic variable partially have a significant negative effect on the stock price index of consumer goods industry sector companies?

Considering the data and formulation of problems in the Indonesian capital market that have been presented, this study decided to analyze, "The Impact of Macroeconomic Variable Movements on Stock Price Index Performance in Consumer Goods Industry Sector Companies (Data tested in the period 2015 to 2019)." Empirical studies are expected to prove existing claims and as a consideration for investors in selecting stocks in the consumer goods industry sector based on risk factors that affect them, namely macroeconomic index volatility and stock prices, both simultaneously and partially.

2. Literature Review

2.1. Stock Price Index

A stock price index is a statistical measure that reflects the overall price movement of a selected set of stocks based on certain criteria and methodologies and is evaluated periodically. The Indonesia Stock Exchange (IDX) owns 35 active stock indices (IDX, 2020).

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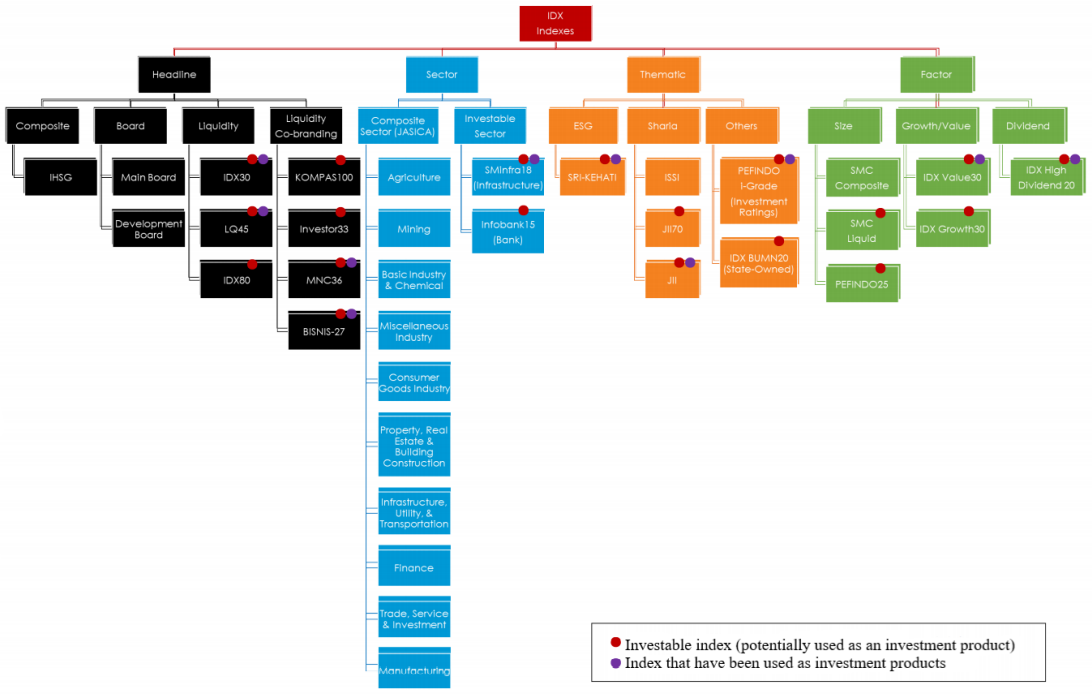

Figure 3. List of The IDX Stock Price Index (Source: IDX, 2020)

One of the stock price indices used in this study is the subclassification of composite sector indices, namely the stock price index belonging to the consumer goods industry sector. IDX itself uses 2 code naming systems specifically for the consumer goods industry sector index, namely the so-called CONSUMER for the Jakarta Automated Trading System (JATS), and JAKCONS for Bloomberg. The function of CONSUMER or JAKCONS index is to measure the price performance of all shares in the main board and development board in the consumer goods industry sector, referring to the classification of The Jakarta Stock Industry Classification (JASICA).

The study itself sampled stock price index data from each company listed on the main boards of the consumer goods industry sector. The data is then processed with a formula to calculate the price index that is not listed, using the closing price of the stock as follows:

$$Price\ Index = \frac{\sum p_n}{\sum P_0} \times 100$$

Where, Pn = Price calculated index number
Po = Price on year basis

It is expected that the research of the stock price index of the consumer goods industry sector can be a determinant of stock price movements in a period. According to research on macroeconomic factors and LQ45 stock price index by (Utomo et al., 2019), in the long run, simultaneously exchange rates, BI rates, and inflation have a significant negative influence on stock market performance. The increase in the value of macroeconomic factors has an impact on the decline in stock market performance.

Therefore, this research needs to hypothesize about the effect of simultaneous movement of macroeconomic variables on the ups and downs of the performance value of the stock price index of the consumer goods industry sector and how much influence it produces.

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2.2. Macroeconomic Variables

In the investment world, economic analysis, especially on a macro scale, is carried out due to the tendency of the relationship between what is happening in the macroeconomic environment and the performance of capital markets. The theoretical basis of the linkage between the stock market and macroeconomic risk factors is based on the efficient market hypothesis (EMH) and asset price theory (APT). According to EMH, stock market prices combine the most relevant and up-to-date information, so that, past or old information becomes less effective in predicting future stock prices. That is the reason why only relevant and new information is used to explain price volatility in the stock market (Fama and France, 2015). Meanwhile, APT predicts that if the market is efficient, any changes in macroeconomic variables will directly or indirectly affect the expected cash flow from the company and its financing and investment decisions (Fama and France, 2015). As a result, the profitability of the company may change so that it will affect the return of shares on the stock market in aggregate. With respect to macroeconomic fundamentals, this theory provides the foundation of a dynamic link between stock market prices or stock returns with macroeconomic variables (Abbas and Wang, 2020).

The importance of macroeconomic analysis is to reduce risk factors that may occur in the future and find the right stocks for the allocation of investment funds. Therefore, investors' ability to understand and predict macroeconomic conditions is especially useful in making investment decisions (Nengah Aryasta and Sri Artini, 2019).

According to the study of macroeconomic factors and stock prices in food and beverage industry, by (Šimáková et al., 2019), companies in the food and beverage industry (FMCG) operate in an open system where the company can be affected by a variety of factors. In addition to internal factors, external macroeconomic factors play an important role in generating revenue for the company, as it can affect the high demand for products, and the level of cost or other aspects of business. The consequences caused by macroeconomic factors will then create volatility in the share price of companies in the capital market that affects the performance of the stock price index.

Previously, empirical studies of what macroeconomic variables have had a significant effect on capital market movements have been carried out, both for inflation, exchange rates and interest rates. Research contributions by (Eldomiaty et al., 2020), (Simbolon and Purwanto, 2018), (Mawardi, Widiastuti and Sucia Sukmaningrum, 2019), (Šimáková et al., 2019), (Utomo et al., 2019), and (Ho and Odhiambo, 2020), show that macroeconomic variables such as inflation have a significant influence on stock market movements both in terms of stock performance, stock prices, and stock returns. However, there are differences in inflation impacts from each study, where the results of research by (Simbolon and Purwanto, 2018), and (Mawardi, Widiastuti and Sucia Sukmaningrum, 2019) stated that there is a positive impact of rising inflation rate on capital market movements, while the results of research by (Eldomiaty et al., 2020), (Šimáková et al., 2019), (Utomo et al., Utomo et al., 2019), (Utomo et al., 2019), and (Ho and Odhiambo , 2020), states that there is a negative impact of rising inflation in the capital market.

Empirical study by (Simbolon and Purwanto, 2018), (Nengah Aryasta and Sri Artini, 2019), shows that macroeconomic variables in the form of exchange rates have a positive significant influence on capital market movements, while empirical studies by (Chang and Meo, 2019), (Mroua and Trabelsi, 2019), (Utomo et al., 2019), and (Ho and Odhiambo, 2020), state that exchange rates have a significant negative impact on capital markets.

Then based on the results of research by (Simbolon and Purwanto, 2018), by (Chang and Meo, 2019), (Mawardi, Widiastuti and Sucia Sukmaningrum, 2019), (Šimáková et al., 2019), (Utomo et al., 2019), and (Ho and Odhiambo, 2020), show that interest rates have a significant

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negative impact on capital markets and only one study by (Eldomiaty et al., 2020), which states that interest rates have a positive impact.

In the macroeconomic environment of rapid real economic growth with low inflation, it can be a signal that there will be a rise in stock prices, thus providing positive sentiment. Investors tend to keep a close eye on the possibility of long-lasting positive fundamentals and for such positive sentiment they will gradually become over consistent that a good macroeconomic decade will continue (Bhar and Malliaris, 2011).

The results of empirical studies by (Mawardi, Widiastuti and Sucia Sukmaningrum, 2019), prove that Indonesia's Sharia Stock Index is significantly influenced by inflation rates, and interest rates. Empirical studies conducted (Liang, Lin and Hsu, 2013), show a positive and significant short-term and long-term relationship between the exchange rate (US Dollar) and share prices in five ASEAN countries including Indonesia. (Jareño, 2016) found that interest rates and the unemployment rate had a significant negative impact on stock returns for cases on U.S. capital markets.

Contrary to the results of the above research, (Nengah Aryasta and Sri Artini, 2019), stated that inflation and interest rates have an insignificant negative influence on the Indonesian Securities Market (JCI). In addition, according to research by (Tsen, 2017), on “Real exchange rate returns and real share price returns", there is no significant correlation between real exchange rates and stock prices in the following countries namely the Philippines, Japan and Germany. On the other hand, research by (Simbolon and Purwanto, 2018), proves that interest rates, inflation, and exchange rates as composite variables have a significant influence on stock prices, while partial testing shows that interest rates, inflation rates, and exchange rates partially have a significant influence on share prices in real estate and property sector companies in Indonesia.

It can be concluded, from some research results that have been presented previously, there are differences in significance levels, as well as the impact of each macroeconomic variable on capital market movements.

Furthermore, in previous research, no research has been found that focuses on the influence of macroeconomic variables on the stock price index specifically for the consumer goods industry sector in Indonesia. Therefore, this study decided to focus more on the movement of three macroeconomic variables, namely inflation, exchange rate, and interest rate which is suspected to have a partial negative influence on the performance of stock price index in the consumer goods industry sector.

2.3. Hypothesis

Based on background on introduction, literature review, and previous research, hence the research hypothesis is formulated as shown in Figure 4 below.

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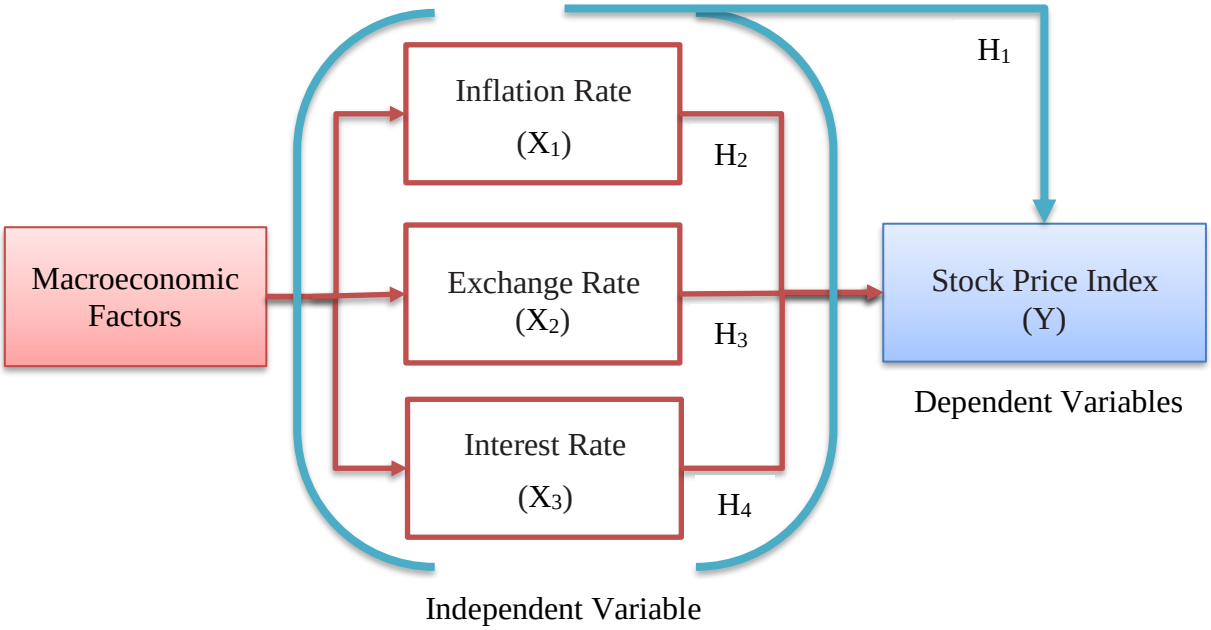

Figure 4. Theoretical Framework

The variables tested in this study are inflation (X1), exchange rate (X2), interest rate (X3) as independent variable and stock price index (Y) as dependent variable. Considering the results of the previous research and literature reviews, then this research decided on the following research hypothesis:

- H1: How does inflation (X1), exchange rate (X2), and interest rate (X3) simultaneously affect the stock price index (Y) on consumer goods industry sector companies as dependent variables.
- H2: How inflation (X1) affects the stock price index (Y) on consumer goods industry sector companies.
- H3: How the exchange rate (X2) affects the stock price index (Y) on consumer goods industry sector companies.
- H4: How the interest rate (X3) affects the stock price index (Y) on consumer goods industry sector companies.

3. Research Methodology

The research was conducted using quantitative research methods aimed at answering the question of which macroeconomic variables have an influence on the stock price index by using mathematical models. The data obtained will be processed and analysed quantitatively.

The model used is a double regression model that is specifically linearly based, considering that this research variable consists of one dependent variable namely the stock price index and three independent variables namely inflation, exchange rate (Rupiah to USD), and interest rate (BI 7-Day Reverse Repo Rate).

3.1. Data Source

In this study, the type of data source used was secondary data. Secondary data is obtained from publications and documentation. The secondary data in this study has the structure of the

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data panel properties. Panel data is a combination of cross sectional and time series. All the variables in this study, have different groupings of data objects and have time series elements also in the form of observation time spans so that the research data can be classified as panel data. The form of data in this study is a metric for all variables. Secondary data used in the research is obtained from the official website, namely:

- Indonesia Stock Exchange (IDX), for stock listing data, and financial statements of consumer goods industry sector companies.
- Yahoo Finance, for closing price data from the share price of consumer goods industry sector companies.
- Central Bank of The Republic of Indonesia (BI), for Rupiah exchange rate data against USD, interest rate (BI 7-Day "Reverse" Repo Rate), and Indonesia economic performance report.
- Central Statistics Agency (BPS), for inflation data, and household consumption levels.

3.2. Population and Sample

The population in this study is a consumer goods industry sector company listed on the Indonesia Stock Exchange a total of 59 companies. Sample selection is done purposively sampling. Purposive or judgmental sampling is a sample that researchers choose based on who or what is appropriate for the study by setting several criteria or conditions.

The sample of selected companies is companies that meets the criteria in the form of being listed on the main board of the Indonesia Stock Exchange (IDX), already listed and has financial statements in the period 2015 to 2019, and not stock split or delisting in the period 2015 to 2019. Based on these criteria, the sample data used is 20 companies in the consumer goods industry sector in the period 2015 to 2019.

3.3. Hypothesis Testing

The research data were analysed using multiple linear regression analysis methods aimed at measuring the intensity of the relationship between two or more variables and making predictions of estimated Y values over X. The existence of multiple linear regression models as follows:

$$Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$$

Description:

Y	=	Stock Price Index
X1	=	Inflation
X2	=	Exchange Rate (Rupiah against USD)
X3	=	Interest Rate
α	=	Constant (Y value if X1, X2, X3..... Xn = 0)
β 1.2.3	=	Coefficient of Variables
ε	=	error

Classic assumption testing was also carried out in this study aimed to find out if the regression model is a good regression model or not. The classic assumption tests used are multicollinearity test, heteroscedasticity test, normality test, and autocorrelation test. However, autocorrelation test is only done on time series data. Autocorrelation testing on data that is not time series (cross section or panel data) will be futile or meaningless. This study used a regression of panel data so that not all classical assumption tests had to be met.

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After classical assumption testing, multiple linear regression tests are performed to determine the impact of independent variables on dependent variables. Then continued with hypothesis testing that is to test the coefficient of regression simultaneously (Test F) to find the influence of the three variables (X) together on variables (Y), test the coefficient of determination (R^2) to calculate the value of the influence of independent variables on dependent variables, and lastly test the coefficient of regression partially (Test t) to make decisions on the lack of significant partial influence of each variable (X) against the variable (Y).

The first hypothesis test aims to find out if simultaneously Inflation, Exchange Rate, and Interest Rate negatively affect the Stock Price Index. The second hypothesis test aims to determine whether partially inflation has a significant negative influence on the stock price index. The third hypothesis test aims to determine whether partially the exchange rate has a significant negative influence on the stock price index. The fourth hypothesis test aims to determine whether partially interest rates have a significant negative influence on the stock price index.

4. Result and Discussion

4.1. *Classic Assumptions Test*

Based on the data test results processed (2020), the data used in this study successfully passed the classic assumption test of multicollinearity, heteroskedasticity, and normality except autocorrelation. Because the data used in this study uses panel data regression so that not all classical assumption tests must be met, for example autocorrelation tests that do not pass the test.

Because the results of the classic assumption test, it can be concluded that the regression model in this study is a good regression model and can be used for hypothesis testing.

4.2. *Multiple Linear Regression Test*

Table 3. Multiple Linear Regression Test Result (Source: Processed Data, 2020)

Model		Unstandardized Coefficients		T	Sig.
		B	Std. Error		
1	(Constant)	383.360	41.487	9.241	.000
	Inflation	-5.533	1.706	-3.242	.002
	Exchange_Rate	-.019	.003	-6.215	.000
	Interest_Rate	-.710	1.901	-.373	.710

Based on the results of the multiple linear regression tests in Table 5, it can be noted that the results of the estimation model equation obtained are as follows:

$$\text{Stock Price Index} = 383.360 - 5.533\ X1 - 0.019\ X2 - 0.710\ X3 + \varepsilon$$

The above regression equations can be explained as follows:

- $\alpha = 383.360$
  This means that if the inflation rate (X1), exchange rate (X2) and interest rate (X3) is 0, then the stock price index (Y) is Rp. 383,360.
- Coefficient of variable regression inflation (X1) of – 5,533.
  Stating that any increase in Rp.1 inflation will lower the share price index by Rp.5,533.
- Coefficient regression variable exchange rate (X2) of – 0.019.

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Stating that any increase in Rp.1 exchange rate will lower the stock price index by Rp.0,019.

- Variable regression coefficient of interest rate (X3) of –0.710.
  Stating that any increase of Rp.1 interest rate will lower the stock price index by Rp.0,710.

Based on the regression equation, it can be concluded that the three macroeconomic variables, namely inflation (X1), exchange rate (X2) and interest rate (X3) have a negative impact on the stock price index (Y), where every value increase (X1,2,3) will occur a decrease in the value of the stock price index (Y).

4.3. Determination of Significance Level (F – Test)

Table 4. The F -Test Result (Source: Processed Data, 2020)

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6696.817	3	2232.272	19.178	.000[b]
	Residual	6518.423	56	116.400		
	Total	13215.240	59			
a. Dependent Variable: Stock Price Index						
b. Predictors: (Constant), Interest_Rate, Exchange_Rate, Inflation						

The significance value (Sig.) of the output of the test result against the coefficient in Table 4, indicating the value (Sig.) or probability of 0.000. According to Basuki (2016:51), Test F in multiple linear regression analysis aims to determine the simultaneous influence of independent variables on dependent variables. If the probability value - significance (Sig.) is less than < alpha (α) = 5% or 0.05, then it means that the independent variable (X) simultaneously or jointly affects the dependent variable (Y). The criteria of the simultaneous test (F Test) used are as follows:

- If the value of > significance is 0.05 then the decision is to accept Ho or inflation, Exchange rates and interest rates simultaneously have no effect on the stock price index and if the < is 0.05 then the decision is to reject Ho or inflation, the rupiah exchange rate and the interest rate simultaneously affect the stock price index.
- Ho: β1=β2=β3=0; Independent variables have no effect on dependent variables.
- H_a: At least one βi (i = 1,2,3) ≠ 0 ; Independent variables affect dependent variables.

A significance value of less than < 0.05 states that the F test result is significant so that H_0 is rejected. Therefore, H_a or the first hypothesis (H1) is accepted, it explains that there has been a significant influence between inflation (X1), exchange rate (X2), and interest rate (X3) as a simultaneous independent variable against the stock price index (Y) in consumer goods industry sector companies as dependent variables.

The results are in accordance with empirical test results by (Simbolon and Purwanto, 2018), which explained that interest rates, inflation, and exchange rates as composite variables have a significant influence on stock prices, which will generally affect capital market movements and the stock price index as a whole.).

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4.4. Coefficient of Determination (R2) Test

Table 5. The Coefficient of Determination (R^2) Result (Source: Processed Data, 2020)

Model Summary[b]			
Model	R	R Square	Adjusted R Square
1	.712[a]	.507	.480
a. Predictors: (Constant), Interest_Rate, Exchange_Rate, Inflation			
b. Dependent Variable: Stock Price Index			

The result of the coefficient of determination test (R^2) shown in Table 5, describes the acquisition of R square value of 0.507. The value indicates that according to the first hypothesis (H1) there is a significant influence between inflation (X1), exchange rate (X2), and interest rate (X3) as an independent variable simultaneously against the stock price index (Y) in consumer goods industry sector companies as dependent variables with an influence value of 50.7%.

Meanwhile, the remaining 49.3% was influenced by other variables outside the regression model studied.

4.5. T – Test

Table 6. The T – Test Result (Source: Processed Data, 2020)

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	383.360	41.487		9.241	.000
	Inflation	-5.533	1.706	-.507	-3.242	.002
	Exchange_Rate	-.019	.003	-.681	-6.215	.000
	Interest_Rate	-.710	1.901	-.054	-.373	.710
a. Dependent Variable: Stock Price Index						

The test results in Table 6 describe the acquisition of the t value and the value of significance (Sig.) or probability as follows:

- Inflation (X1) is -3,242 and 0.002, with a value (Sig.) less than < 0.05
- The exchange rate (X2) is -6.215 and 0.000, where the value (Sig.) is less than < 0.05
- The interest rate (X3) is -0.373 and 0.710, where the value (Sig.) is more than > 0.05

In a partial test (T Test) the criteria used is if the t-count of each regression coefficient is more than > t - table or if the probability or significance value (Sig.) is less than < alpha (α) = 5% or 0.05, it means that each independent variable affects the dependent variable. Otherwise, each independent variable has no effect on dependent variables. Based on the test results in table 6 mentioned earlier, it can be concluded that:

- H_a of Hypothesis two (H2) which states there is a partially significant negative influence between inflation (X1) on the stock price index (Y) on consumer goods industry sector companies is accepted, and H_0 is rejected. The results are in accordance with research

by (Šimáková et al., 2019), which states that there is a significant negative influence between the rising inflation rate on the decline in the share price of food and beverage industry companies.

- H_a of Hypothesis three (H3) which states there is a partially significant negative influence between the exchange rate (X2) on the stock price index (Y) on consumer goods industry sector companies is accepted, and H_0 is rejected. The results are in accordance with research by (Mroua and Trabelsi, 2019), which revealed that exchange rate movements have a significant negative effect on short-term and long-term market index yields in all BRICS countries.
- Meanwhile, for H_a of Hypothesis four (H4) which states there is a partially significant negative influence between interest rates (X3) on the stock price index (Y) on consumer goods industry sector companies is rejected. This is due to a value (Sig.) of more than 0.05 which means H_0 is accepted, so there is no partial negative influence between interest rates (X3) on the stock price index (Y) in consumer goods industry sector companies. The results are in accordance with research by (Nengah Aryasta and Sri Artini, 2019), on "The Effects of Indonesian Macroeconomic Indicators and Global Stock Price Index on the Composite Stock Prices Index in Indonesia", which states that interest rates have an insignificant negative effect on the Indonesia Stock Market (JCI).

Based on the results of empirical studies from the research presented above, it can be concluded that there needs to be macroeconomic considerations for investors who want to invest in the Indonesian capital market both for the short and long term, especially for stocks in the consumer goods industry sector companies. Stock movements in the capital market can be seen through the movement of the stock price index. Stock price indices fluctuate according to the internal and external conditions of a country. External influence is more caused by global factors such as macroeconomics due to globalization, especially in the field of trade and international economic cooperation. Fundamental analysis is required to estimate the performance of stocks before investors engage in investment activities (Nengah Aryasta and Sri Artini, 2019).

Investors can focus more on two macroeconomic variables namely inflation and exchange rates that are proven to have a partially significant effect. Considering both factors, especially for long-term investment, it is expected that the risk of stock cut loss will be reduced. On the other hand, for policy makers, consideration of 2 macroeconomic factors is also necessary because the performance of the capital market will affect the growth of a country's overall performance.

5. Conclusion

Research on, The impact of macroeconomic variable movements on stock price index performance in consumer goods industry sector companies, with sample data of 20 companies listed on the main board in the period 2015 to 2019, was created to answer the phenomenon that exists in the world of capital markets in Indonesia. At the beginning mentioned there are several gap problems that need to be the focus of research in the Indonesian capital market related to macroeconomic variables. Therefore, it was decided to use the stock price index owned by consumer goods industry sector companies as dependent variables influenced by macroeconomic variables, namely inflation, exchange rate (USD to Rupiah), and interest rate.

The result of the study, which has been presented in the discussion successfully answered the question of the existing phenomenon as follows:

- Comparatively or simultaneously macroeconomic variables namely inflation, exchange rates and interest rates can give a significant negative influence on the stock price index in industrial companies of consumer goods (P value 0.000). This means that any

increase in the value of macroeconomic variables, the value of the stock price index in consumer goods industry sector companies will be reduced. In fact, any decrease in the value of macroeconomic variables, the value of the stock price index in consumer goods industry sector companies will increase so that its performance will also improve.

- Macroeconomic variables namely inflation, exchange rate and interest rate contribute to the movement of the stock price index by 50.7%
- Partially macroeconomic variables namely inflation and exchange rate have a significant effect on the stock price index with negative relationship direction. This negative relationship is expected to arise given the nature of investors who are always wary of macroeconomic factors. The company in the food and drink industry (FMCG) operates in an open system where the company can be influenced by various internal and external factors, so that the company's profit trend following the large market demand resulted in its share price which also rose and fell according to the amount of market demand (Šimáková et al., 2019). In the event of inflation, the price of goods in the market will rise, the increase in the price of goods makes market demand will decrease in accordance with supply and demand laws. Declining market demand will result in reduced corporate profits. So, the company is feared to be experiencing losses. Such sentiment ultimately makes investors reluctant to choose stocks in consumer goods industry companies at a time when the value of inflation is high, resulting in the stock price index in the sector declining. In connection with the limited rupiah exchange rate of USD, the exchange rate has a significant negative effect on the stock price index which means that the higher the rupiah exchange rate against the USD, the stock price index rate will tend to fall and vice versa. When the rupiah exchange rate against the USD is high, it means that the rupiah depreciates (decreases) compared to the USD value. For investors, the weakening of the rupiah indicates that economic growth is slowing down triggered by the declining purchasing power of the public. In addition, the decline in the rupiah will result in an increase in the cost or debt burden in USD, which erodes the company's profit, further lowering investor interest. Declining interest has caused demand for the company's shares to wane and the share price index to weaken. Meanwhile, there was no significant correlation between the interest rate imposed by the BI 7-Day (Reverse) Repo Rate and the stock price index.

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