

Review Article

The Effect of Macroeconomics on Stock Index

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Abstract - This study aims to examine and analyze the influence of macroeconomics, namely inflation, foreign exchange rates, bank interest rates, and world oil prices, on the stock index of basic and chemical industry sectors. This research is a causality research with linear regression analysis. The results showed that the independent variables simultaneously influence the dependent variable. Partially, the results showed that inflation had a significant negative effect on the stock index, foreign exchange rates, and world oil prices had a significant positive effect on the stock index, while bank interest rates had no effect on basic and chemical industry stock indexes.

Keywords - Inflation, Foreign Exchange Rates, Bank Interest Rates (BI Rate), World Oil Prices (WTI), Basic and Chemical Industry Sector Stock Indexes.

I. INTRODUCTION

The capital market has a big role in the economy of a country because it performs two functions at once, economic function and financial function. The Indonesian state still has a great opportunity to spur the competitiveness of the industrial sector despite the uncertainty in global conditions. This potential is in line with an increase in investment and manufacturing productivity so as to increase the added value of domestic raw materials and added value for investors. Therefore the development of the stock market needs to be observed in order to minimize risk in investing.

In September 2019, Marjudin, a stock observer at Indo Premier securities, detected a weakening of the composite stock price index when the majority of major stock exchanges in the Asian region were moving in the green zone. Only two stock indexes in the Asian region weakened, namely JCI and KLCI in Malaysia. However, the correction posted by the JCI was much deeper, making it the worst-performing stock index in the Asian region. The decline of the Jakarta Composite Index (JCI) is thought to have an impact on the decline of some sector indices, as mentioned in the table below:

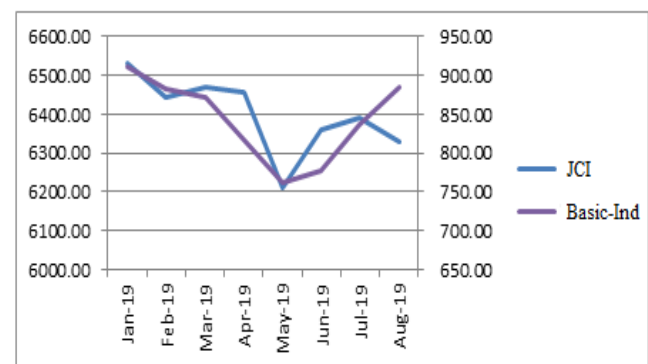
Table 1. The Decline of Sectoral Index on September 2019

Index	Index Decline (%)
Mining	-0,88
Basic and Chemical Industry	-1,25
Miscellaneous Industry	-0,79
Consumer Industry	-0,40
Infrastructure	-0,97
Trade & Services	-0,31

Source: Marjudin (2019)

The decline is in line with the deepening threat of recession in the manufacturing sector and slowing growth momentum in the service sector. This caused the entire index of the manufacturing sector to experience a slowdown, especially in the basic industrial and chemical index, which fell by 1.25 percent.

Fluctuations in the basic and chemical industry index have a different pattern when compared to the Jakarta Composite Index. Figure-1 shows the movement chart of the Jakarta Composite Index (JCI) and Basic-Ind from January to August 2019.



Source: Fusion Media Limited (processed. November 2019)

Fig. 1 JCI and Basic-Ind Fluctuations in 2019

Based on Figure 1 shows that there are several months whose movements are not in line between Basic-Ind and JCI. In August 2019, when the composite index experienced a decline, the basic industrial and chemical sectors actually experienced an increase. In addition, the increase in the composite index in April and June 2019 did not necessarily have a positive impact on the basic industrial and chemical sectors.

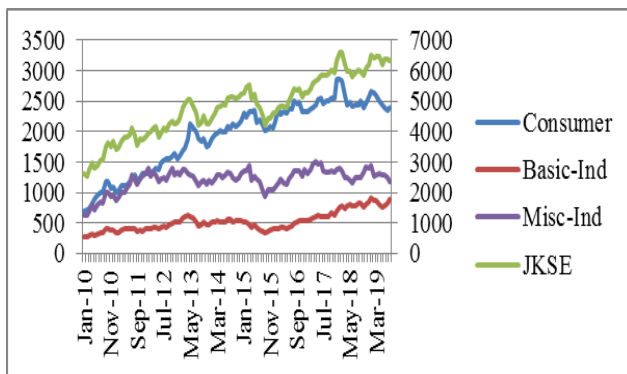
Brama and Hidayat (2019) stated that the decline in the industrial and chemical sectors in April was the lowest at 6.29 percent. The decline was due to the general election momentum, which caused investors to tend to exercise restraint. The domestic political situation, which was heating up enough to be filled with demonstrations, made market players reluctant to transact on Indonesia's financial markets. In addition, the basic and chemical industry sectors supported by large cement-based issuers are experiencing famine, so the index has fallen.

After the 2008-2009 crisis, economic recovery began in 2010. The performance of the domestic economy has continued to improve. According to Yani and Rakhmanto



(2019), the driving factor of economic growth is not only public consumption, but the investment also grows, besides the relatively low-interest rates, credit risk continues to decline, and the prospect of high economic growth causes investment to increase rapidly.

Indonesia's economic growth up to Quarter III grew by 5.82 percent (y-o-y), and the non-oil processing industry sector grew by 4.69 percent (y-o-y). The growth of the non-oil processing industry sector at the end of 2010 increased significantly compared to the same period in 2009, which only reached 1.54 percent. This illustrates the industrial sector has become a source of high growth in overall GDP growth. The export performance of manufacturing industry commodities as of September 2010 reached USD 68.8 billion, or 62.07 percent of total exports. Compared to the same period in 2009, an increase of 34.10 percent (Ministry of Industry, 2010).



Source: Fusion Media Limited (processed, November 2019)

Fig. 2 Fluctuations Index of Secondary Sector in 2010-Aug 2019

Figure 2 shows that from the beginning of 2010 to August 2019, among the secondary sectors listed on the Indonesia Stock Exchange, the Basic-Ind Index had the lowest value. The fluctuation in the Basic-Ind Index is the lowest when compared to other manufacturing sector indices.

The change in the stock market is influenced by internal and external factors. Internal factors are also called fundamental factors that originate within the company and can be controlled by company management. External factors are non-fundamental factors and are usually caused by economic conditions such as interest rates, and other government policies (Natarsyah, 2000).

The development of a country's stock market can be seen from its economic activities. If the economy is advanced, the stock market will develop well. That is because of the number of companies releasing shares to the public with the aim of wanting more expansion, there will be many choices of companies for investors to invest their capital. But on the contrary, if the economy is sluggish, then the stock market will also be slow.

II. LITERATURE REVIEW

Signaling theory is one of the pillar theories in understanding financial management. In general, the signal is interpreted as a signal made by the company (manager) to outside parties (investors). These signals can take the form of various forms, both those can be directly observed and that need to be examined in more depth to be able to find out (Gumanti, 2009).

Ross, in 1976 formulated a balance model called the Arbitrage Pricing Theory (APT), which states that two investment opportunities that have the same identical properties cannot be sold at different prices. The law adopted by APT is the law of one price or the law of one price (Suad, 2015). There are three markets that reflect the law of one price, namely the capital market, money market, and foreign exchange market. All three markets have the same balance and are identical, so that they cannot be sold at different prices.

Regarding the capital market, the APT model states that the rate of profit of shares traded in the capital market consists of two components, namely the normal level of profit or expected level of profit and the level of uncertain or risky profit (Suad, 2015).

Investors face two kinds of risks, namely systematic risk, and unsystematic risk. Both of these risks can affect the level of profit expected by investors. The unsystematic risk of one company does not correlate with other companies. Conversely, systematic risk will correlate with each company (stock). Systematic risk can be known as a market risk because it affects the entire market. Factors that influence systematic risk, for example, inflation, exchange rates, interest rates, and other variables or often referred to as macroeconomic variables. Therefore changes in macroeconomic variables will have an impact on company stocks and cause shifting stock performance in each sector.

Shares which means of investor transactions in companies in certain sectors, can be defined as a mark of ownership/entity in a company / limited liability company. The form of shares is a piece of paper that explains that the owner of the paper is the owner of the company that issued the securities (Dewi and Vijaya, 2018).

Benchmarks on the Indonesia Stock Exchange are known by the word index expressed in numbers, and measure of investment to see the performance of the investments under management. Stock Index or Stock Price Index is a statistical measure of changes in price movements of a group of shares selected based on certain criteria and used as a means of investment objectives.

The inflation condition is an increase continuously. Inflation needed is moderate inflation that is in accordance with the country's economic capabilities (Putong, 2013). Hasyim (2016) mentions the adverse effects of inflation on individuals and society, including reducing real income for people with fixed income, reducing the value of wealth in

the form of money, and worsening the distribution of wealth or widening the distribution gap between income groups.

The nominal exchange rate is the value someone uses when exchanging a country's currency with another country's currency. While the real exchange rate is the value, someone uses when exchanging goods and services of a country with goods and services from other countries. Foreign Exchange (FOREX) is a foreign currency or other payment instrument used to conduct or finance international financial, economic transactions and has an official exchange rate record at a central bank (Putong, 2013).

Bank interest, according to Kasmir (2016), is defined as a remuneration for services provided by banks based on conventional principles to customers who buy or sell their products. Conventional banking activities daily have two types of interest given to its customers (Ismail, 2013), namely, deposit interest and loan interest.

There are two reference prices for petroleum that are most widely used in the world, namely the price of Brent oil and WTI (West Texas Intermediate). Brent (Brent Crude) is a designation for mining oil from the North Sea (Europe). The price of Brent oil has been the basis of price formation since 1971 for nearly 40 percent of the value of oil worldwide, and continues to be used today. However, in its development, United States oil production has increased and contributed greatly to the world market share, so that the price of WTI oil began to be used as a reference since around 2007. West Texas Intermediate (WTI) is petroleum produced in North America. This type of oil is lighter and easier to process, so it is in great demand, especially in the US and China.

A. Macroeconomic Factors Affecting The Stock Index

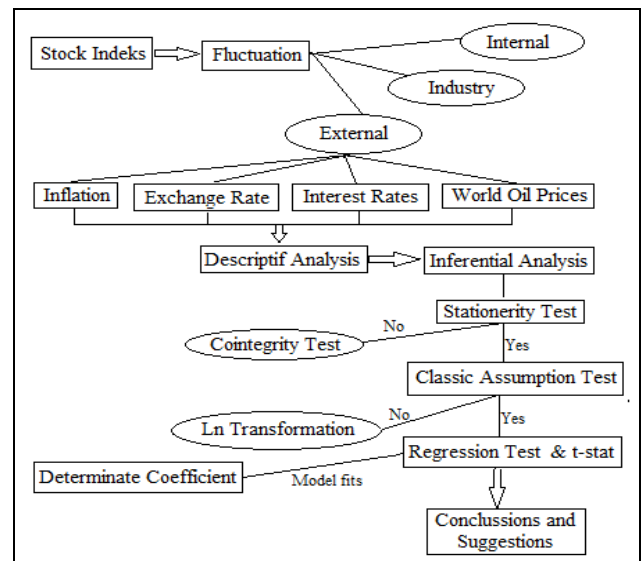
Results of research conducted by Rusbariand et al. (2012), and Siregar et al. (2014) find inflation has a negative effect on the stock price index. In contrast, the research of Rahman P et al. 1 (2017) found that inflation has a positive effect on the stock price index. But Lukisto and Anastasia (2014) find that inflation has no effect on the stock price index.

The results of the study of Febrina at all (2018) found that foreign exchange rates have a positive influence on the stock price index. In contrast, Rahman P et al. 1 (2017) find that foreign exchange rates negatively affect stock price indexes. But Maryanne (2007) finds that the exchange rate has no effect on stock indexes.

The results of Febrina et al. (2018) find that interest rates have no influence on the stock price index. However, research by Lukisto and Anastasia (2014) found that interest rates have a negative influence on stock price indexes. In contrast, research by Rahman P et al. (2017) found that interest rates have a positive effect on the stock price index.

Even though world oil prices are more inclined to influence on sectors related to crude oil processing or mining, some researchers continue to conduct research with varied results. The research results of Andiantyo et al. (2018) found that crude oil prices had a significant positive effect on stock indexes. On the contrary, according to Fatah et al. 1 (2017), oil prices have a significant negative effect on stock indexes. While Pamungkas and Prasetonio's research (2018) found that world oil prices had no significant effect on stock indexes.

Based on the study of theory to identify various factors causing the index to fluctuate. The theoretical framework of thinking used in research is shown in Figure 3 below:



Source: processed for research (November 2019)

Fig. 3 Framework

Figure 3 explains that stock prices can fluctuate due to internal, industry, and external factors. Fluctuations in stock prices will indicate the company's performance. The external factors used in this study are inflation, foreign exchange rates, bank interest rates, and world oil prices. After ascertaining the factors causing a stock index movement, descriptive and inferential analysis is performed. After testing, it can be concluded that the biggest factor which is the root cause of stock index movements.

B. Research Statistics Hypothesis

Sukirno (2015) said when inflation was high, the purchasing power of the people fell. When high inflation causes the price of raw materials and production costs to increase, the return obtained will decrease. A lower return indicates a declining stock index performance as well. This opinion is in line with the results of Rusbariand et al. 1 (2012), and Siregar et al. 1 (2014).

H₁ : Inflation has a negative effect on the stock price index of basic and chemical industry sectors

Sukirno (2015) said the low price of imported goods would increase the number of imports. Conversely, high prices for imported goods will reduce imports. Companies

in sectors that often do export and import, such as basic and chemical industries, will feel the impact of the exchange rate fluctuates. The burden of production costs due to the weakening of the rupiah will cause the stock price to be more expensive. The statement is in line with the results of Rahman P et al. 1 (2017) found that foreign exchange rates negatively affect the stock price index.

H₂ : Foreign exchange rates have a negative effect on the stock price index of basic and chemical industry sectors.

High-interest rates cause investments in the basic and chemical industry sectors to fall, because entrepreneurs in these sectors cannot afford to make investments at high-interest costs. When investment decreases, it will have an impact on the performance of the basic and chemical industry sectors. The theory is in line with the results of Lukisto and Anastasia (2014) found that interest rates have a negative influence on the stock price index.

H₃ : Interest rates have a negative effect on the stock price index of the basic and chemical industry sectors.

Pamungkas and Prasetiono's research (2018) states that companies with sales in the form of processed crude oil will tend to increase their profits due to increased revenue from the sale of refined oil products. Investors will tend to sell off non-mining shares, and buy actions against mining stocks to get more profit. As a result, the mining stock index will increase, while the stock index of other sectors will experience a decline or weakening.

H₄ : World Oil Prices have a negative effect on the stock price index of basic and chemical industry sectors.

III. RESEARCH METHODS

This research is a causality study that aims to find empirical evidence of the influence of macroeconomic factors, namely inflation, the exchange rate (USD), the interest rate (BI rate), and World Oil Prices (WTI/West Texas Intermediate) on basic and chemical industry stock indexes. The data used in this study are secondary data in the form of monthly data from January 2010 to August 2019 (time series). Data were obtained from various sources, namely Bank Indonesia, the Central Statistics Agency, and Investing. The analysis was done descriptively and inferentially. Inferential analysis is done by a regression approach.

Because the research data is time series, stationary tests are needed to find out that the research data is not affected by time and variance. Stationarity test using the Augment Dickey-Fuller (ADF). If the absolute value of t-ADF is greater than the absolute value of the MacKinnon Critical Values, the data has been stationary at a predetermined real level, so that it can proceed to the next research stage.

The regression equation used must be the BLUE (Best Linear Unlimited Estimator). Therefore classic testing of assumptions must be done, which includes normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test.

After the classical assumptions are fulfilled, a model feasibility test is based on the coefficient of determination and F test. If the model is fit, the effect of each independent variable is analyzed on the dependent variable based on the value of the regression coefficient and t-test.

IV. RESULTS AND DISCUSSION

The results of the sample calculation obtained from the independent variables (inflation, exchange rate, interest rate, and world oil prices) as well as one dependent variable (Basic-Ind) as follows:

Table 2. Descriptive Statistics Variables

	INFLATION (%)	EXCHANGE RATE (Rp)	INTEREST RATE (%)	WORLD OIL PRICES (USD)	BASIC-IND (Rp)
Mean	4.87	11,725.36	6.21	73.29	528.96
Median	4.42	12,168.97	6.50	73.07	513.83
Maximum	8.79	15,178.87	7.75	113.93	911.97
Minimum	2.48	8,532.00	4.25	33.62	277.64

Source: reviews 10 (processed for research. 2019)

Based on Table 2, the inflation rate is good because the mean value is under 10 percent. Inflation needed is moderate inflation, which is in accordance with the country's economic capabilities (Putong, 2013). A moderate inflation rate is better than the absence of inflation in a country because it can indicate no positive movement in the economy where prices are relatively unchanged, and this will obviously weaken the industrial sector. The maximum value of the inflation variable is 8.79 percent occurred in August 2013. The occurrence of high inflation is due to Eid al-Fitr on the second week of August, where supply and demand are not in line. More detail, the increase in inflation was caused by international gold prices rising, as well as some demand for household needs that exceeded supply. In addition, the increase in electricity tariffs that are categorized as administered prices (prices are controlled by the Government, and the increase is indeed the Government's decision) at the time also contributed to the high inflation increase. The minimum value of the inflation variable is 2.48 percent occurred in March 2019. The low inflation is referred to as weakening people's purchasing power, but as it is known that food is a primary need of the community so that the level of consumption will tend to be stable. The occurrence of inflation is 2.48 percent should be interpreted as a success of the government in efforts to control supply throughout the country.

The foreign exchange rate variable has a mean value of Rp.11,753 and a median of Rp.12,219. The maximum value of Rp.15,179 occurred in October 2018, this is due to the occurrence of a trade war between the United States and China, as well as a statement from Bank Indonesia (BI) that revised the projected economic growth to 5.1 percent. However, the depreciation of the rupiah is still under controlled volatility due to an average weakening of the rupiah of Bank Indonesia by 2.07 percent and depreciated by 10.65 percent year-to-date until October 2018. The

minimum variable value of the exchange rate is Rp.8,532, which occurred in July 2011 was considered stable in its time because its movements in 2011 only ranged from Rp.8,508 to Rp.9,170. The stability of the value of the foreign exchange is due to US policies that will continue to cover the deficit due to the 2008 global crisis by reducing their consumption. This declining consumption will reduce US imports, and the effect will be a weakening dollar.

The Interest Rate variable has a mean value of 6.21 percent and a median of 6.50 percent. The BI-Rate maximum value of 7.75 percent that occurred in November 2014 was carried out to respond an inflation expectations, maintain current account deficit conditions, maintain bank liquidity, and increase credit growth due to the issue of rising fuel prices announced by President Joko Widodo. In addition, the BI-Rate minimum value of 4.25 percent occurred in September 2017 in line with inflation forecasts and future macroeconomic conditions that improved in line with increased government spending and easing Bank Indonesia's monetary policy. The non-oil and gas trade balance also experienced an increase in the surplus beyond the increase in the oil and gas trade balance deficit of US \$ 9.11 billion, which is much higher than the same period the previous year of US \$ 5.13 billion. Meanwhile, foreign capital inflows into the Indonesian financial market were also recorded to have increased to the US \$ 9.17 billion as of August 2017.

The variable world oil prices have a mean value of \$ 73.29 and a median of \$ 73.07. The maximum value of \$ 113.93 occurred in April 2011 due to a prolonged political crisis in the Middle East and North Africa, especially the war in Libya that raised market concerns over the stability of crude oil supplies from the region and a decline in US commercial oil stocks. In addition, OPEC members are also considered unable to replace the loss of crude oil supply from Libya. This is indicated by the decline in OPEC production by 1 million barrels per day in March and the weakening of the US dollar exchange rate against other international currencies due to the US Federal Reserve's decision to maintain a low-interest rate policy. Then, the minimum value of world oil prices of \$ 33.62 occurred in January 2016 due to the oil supply at the time flooding the world market. On the contrary, demand had declined. One of the world's largest producers, it has been able to sell its oil production to the world market. World crude oil supply increased by 500,000 barrels per day, especially after the lifting of economic sanctions in western countries against Iran was lifted on January 16th, 2016.

The basic industrial and chemical sector index variables have a mean value of Rp.528.96 and a median value of Rp.513.83. The maximum value of Rp.911.97 occurred in January 2019, along with the entry of foreign funds (foreign inflow) with a total fund or net buy of foreign investors reaching Rp.14.36 trillion. The reason is the Fed's policy of not raising interest rates between 2.25-2.50 percent. While the minimum value of this stock index

amounting to Rp.277.64, which occurred in February 2010 due to the economic recovery due to the global crisis that occurred in 2008.

Stationarity test of research variables shows that all variables are not stationary at the level test, but stationary at the first difference level means that the data process uses differenced lag which is regressed, so the data can be used in estimating the research model.

Table 3. Results of Unit Root

Variabel	t-ADF	t- MacKinnon			Prob	Decision
		1%	5%	10%		
Inflation	Level	-2.51	-3.49	-2.89	-2.58	0.12 Non stationary
	First Diff	-8.03	-3.49	-2.89	-2.58	0.00 Stationary
Exchange Rate	Level	-0.48	-3.49	-2.89	-2.58	0.89 Non stationary
	First Diff	-8.53	-3.49	-2.89	-2.58	0.00 Stationary
Interest Rate	Level	-10.74	-3.49	-2.89	-2.58	0.00 Stationary
World Oil Prices	Level	-1.32	-3.49	-2.89	-2.58	0.62 Non stationary
	First Diff	-9.26	-3.49	-2.89	-2.58	0.00 Stationary
Basic-Ind	Level	-0.41	-3.49	-2.89	-2.58	0.90 Non stationary
	First Diff	-9.32	-3.49	-2.89	-2.58	0.00 Stationary

Source: reviews 10 (processed for research. 2019).

Based on Table 3, it is known that the absolute value of t-ADF is smaller than the absolute value of MacKinnon Critical Values at all confidence levels (99%, 95%, 90%). Therefore the data is not stationary, and retesting is needed with the first difference test. Thereafter, the absolute value of t-ADF is greater than the absolute value of MacKinnon Critical Values at all confidence levels (99%, 95%, 90%). Therefore the data does not contain unit root problems and has stationary data conditions at the first difference level or one integration and can be continued to the next research. This means that there is a significant (cointegrated) relationship in the long run between the macroeconomic variables and the basic-and index.

The data does not contain a unit root problem and has a stationary data condition at the degree of one integration, followed by testing the classical assumptions. The normality test is as follows:

Table 4. Results of Normality Test

Jarque-Bera	1.800654
Probability	0.406437

Probability values obtained $0.406 > 0.05$ indicate that the data used were normally distributed.

Table 5 Results of Multicollinearity Test

Variable	Centered VIF
Inflation	1.2148
Exchange Rate	2.3955
Interest Rate	1.0197
World Oil Prices	2.6107

Source: reviews 10 (processed for research. 2019)

Results of the Multicollinearity test in Table 5 found that the centered VIF value of each variable is less than 10. It can be concluded that the variables in this study do not have multicollinearity problems.

Table 6. Results of Heteroskedasticity Test

F-statistic	2.04 Prob. F(4,66)	0.093
Obs*R-squared	7.95 Prob. Chi-Squa	0.093

Source: reviews 10 (processed for research. 2019)

Results of the Heteroscedasticity test in Table 6 obtained the value of Prob. F 0.0934 is greater than the alpha level of 0.05 (5%). It can be concluded that the regression model does not experience heteroscedasticity problems.

The autocorrelation test yields the Durbin-Watson stat value of 1.8318. If a significance level of 5% is used with n (the amount of data) as much as 116 and k (number of variables) as much as 5, a dU value of 1.7690 is obtained. The test results show the value of $dU < dW < 4-dU$ or $1.7690 < 1.8318 < 2.231$. It can be concluded that there is no autocorrelation.

The next analysis consists of the fit model test, and the regression test as follows:

Table 7. Results of Regression Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-574.21	112.926	-5.0848	0.0000
Inflation	-3696.95	564.571	-6.5482	0.0000
Exchange Rate	0.07876	0.00629	12.5225	0.0000
Interest Rate	-15.1887	17.9664	-0.8454	0.3997
World Oil Prices	4.9320	0.62827	7.85017	0.0000
R-squared	0.6725 F-statistic			56.9900
Adjusted R-squared	0.6607 Prob(F-statistic)			0.0000

Source: reviews 10 (processed for research. 2019)

The coefficient of determination R^2 can be seen in the R-squared value of Table 7 of 0.6725. This means that the independent variable affects the dependent variable by 67%, the remaining 33% is influenced by other factors. Because the model used in this study is appropriate as for 67%, then the results of the simultaneous F test or F-statistic are 56.99 with a probability result of $0.0000 < 0.05$. It means that inflation, the exchange rate, Interest Rate, and World Oil Prices simultaneously have a significant effect on the stock index of the industrial and chemical sectors.

Referring to Table-7 this research regression formula is as follows:

$$Y_t = -574.21 - 3,696.95(\text{Inflation})_t + 0.0787(\text{Exchange Rate})_t - 15.1887(\text{Interest Rate})_t + 4.9320(\text{World Oil Prices})_t$$

- Constant value of -574.21 with a significance of 0,000. That is, if inflation, the exchange rate, Interest Rate, and World Oil Prices are constant, and there is no movement at all, then the stock index value will be minus 574.21. A minus sign (-) indicates if there are no macroeconomic variables, the stock index runs from minus. That is, macroeconomic variables greatly influence the performance of a sector. When there is no monetary chaos, there is no race for investors to transact, so that sector performance declines.
- The value of the inflation coefficient of -3,696.95 with a significance of 0,000. That is, if inflation has increased by one percent -ceteris paribus- then the stock index will decrease by 3,696.95.
- The value of the exchange rate coefficient is 0.0788, with a significance of 0.000. That is, if the exchange rate weakens by one percent - ceteris paribus - then the stock index will increase by 0.0788.
- The Interest Rate coefficient value is -15.1887 with a significance of 0.3997. This means that if the Interest Rate increases or decreases by one percent - ceteris paribus - the stock index will have no impact.
- The world oil prices coefficient value of 4.9320 with a significance of 0.000. That is, if world oil prices increase by one percent - ceteris paribus - the stock index will increase by 4.9320.

Discussion

Inflation has a significant negative effect on stock indexes. Sukirno (2015) said when inflation was high, the purchasing power of the people fell. When high inflation causes the price of raw materials and production costs to increase, the return obtained will decrease. Returns down indicate the stock index performance also declined. This finding is in line with the results of research by Rusbariand et al. (2012), who examined the effect of inflation on the Jakarta Islamic Index on the Indonesia Stock Exchange. According to him, high product prices will reduce demand and unsettle investors, so it is likely that investors will divert investments into savings deposits (money markets).

The exchange rate has a significant positive effect on stock indexes. The results are different from the hypothesis because if viewed from the types of products sold by the basic industrial and chemical sectors, raw material products can be sold for export or local, so that if the rupiah depreciates causing the price of the product will increase. The increase in selling prices will bring high returns for investors, so that sector performance increases. Therefore, basic and chemical industry sector indexes will

continue to experience improved performance. This finding is not in line with the hypothesis but in line with the results of the research by Lukisto and Anastasia (2014), who examined the macroeconomic impact of the property stock index on the Indonesia Stock Exchange.

Interest Rate has no influence on stock indexes. That is, even if a high or low-interest rate does not affect a sector's stock index. That is because investors consider interest rates, not as an alternative income other than stocks. An increase in interest rates (0.09%) is considered to be quite low when compared to the increase in stock price index return of basic and chemical industry sectors (1.17%). Then if there is an increase in interest rates does not affect the price and stock returns. This finding is not in line with the hypothesis but in line with the results of research by Febrina et al. (2018), who examined the effect of macroeconomic variables on the composite stock price index on the Indonesia Stock Exchange.

World oil prices have a significant positive effect on stock indexes. The results of the study are different from the hypotheses but are in line with the results of the study of Andiantyo et al. (2018), who examined the movement of an agricultural index on the Indonesia Stock Exchange. That is because rising world oil prices will cause an increase in raw material prices. Because the basic and chemical industries are focused on providing raw materials that must be used as finished goods, an increase in the sales price of these products will automatically increase company profits and have an impact on increasing the performance of shares in the basic and chemical industry sectors.

V. CONCLUSION

Based on the analysis and discussion in the previous chapter, it was concluded that simultaneously all independent variables (inflation, exchange rate, Interest Rate, and World Oil Prices) significantly influence the dependent variable. While partially inflation has a negative effect on stock indexes of basic and chemical industry sectors, the exchange rate and World Oil Prices have a positive effect on stock indexes of basic and chemical industry sectors. And the Interest Rate has no effect on stock indexes of basic and chemical industry sectors.

Suggestion: For Shareholders, based on the results, even the influence of macroeconomics on the index is 67 percent with a significant F value. However, if it is seen from the regression coefficient marked with a minus, it indicates that without economic turmoil, the stock index will run in the minus area. Investors should pay more attention to macroeconomics, including the movement of inflation, the greater intervention between performance and risk. To follow up on investment decisions going forward. For companies able to get to know more about the causes of fluctuating stock indexes and anticipate

economic chaos so as not to affect the company's profits to reduce company performance. For future researchers, the research conducted is not yet comprehensive because it only looks at the sector's stock performance based on macroeconomic factors. Other additional variables that can be used as research such as company internal factors, industrial factors, or other external factors, as well as an additional longer research period.

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