

## The Influence of World Oil Prices and Economic Growth on the Composite Stock Price Index through Foreign Exchange Rates on the Indonesia Stock Exchange

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### ABSTRACT

This study uses the foreign exchange rate to investigate how the Indonesia Stock Exchange's Composite Stock Price Index is affected by growing oil prices and economic growth. The study's population consists of all data on the Indonesia Stock currency's Composite Stock Price Index (JCI), as well as all data on foreign exchange rates, GDP, and worldwide oil prices from Bank Indonesia for the quarters ending in 2010 and 2020. The analysis technique uses path analysis which is an extension of multiple linear analysis, or path analysis is the use of regression analysis to estimate the causal relationship between variables (causal model), the population used is all composite stock price index data and the sample used is a saturated sample of all combined stock price index data. The results of the study show that the Composite Stock Price Index is influenced by the World Oil Price. There is no contribution from Economic Growth to the Composite Stock Price Index. Foreign exchange rates have an effect on the Composite Stock Price Index based on the price of oil globally. Through foreign exchange rates, economic progress affects the composite stock price index.

## INTRODUCTION

The Indonesian Composite Stock Price Index fluctuates fairly wildly. An indicator of a nation's economic health is the movement of the Composite Stock Price Index (JCI). The rising trend of the stock price index suggests that the nation's economy is doing well. Conversely, it might be presumed that the nation's economic conditions are deteriorating if the movement of the stock price index keeps declining. The index is one of the guidelines that investors should follow while making capital market investments, especially in stocks. (idx.co.id). All stock classes are included in the JCI composite index, which is provided by the Indonesia Stock Exchange (IDX). According to Sunariyah (2012), "JCI is a series of historical information about the movement of the price of a composite stock, up to a certain date and reflects a value that functions as a measure of the performance of a composite stock on the stock exchange" .

The JCI in Indonesia will be impacted by several economic factors, either directly or indirectly. As a result, the goal of the study is to determine how much and to what extent macroeconomic factors affect JCI changes. The research will examine several macro variables, such as global oil prices, economic growth, and the exchange rate between dollars and other currencies.

Table. 1 Inflation, JCI Economic Growth for the 2017 - 2022 Period

<b>Years</b>	<b>Economic Growth</b>	<b>IHSG</b>
	<b>(%)</b>	<b>(Unit)</b>
2017	5,03	5.296
2018	5,07	6.355
2019	5,17	6.194
2020	5,02	6.299
2021	-2,07	5.979
2022	3,69	6.581

Source : BPS, BEI, Tahun 2023

Macro variables such as economic growth also fluctuated throughout the period. The highest economic growth in 2012 reached 6.49%, followed by 2013 and 2011, 6.26% and 6.22%, respectively, and the lowest economic growth in 2021 experienced negative growth, of 2.07%.

Naturally, this unstable economic growth will have an impact on the JCI. The Jakarta Composite Stock Price Index (JCI) is a yearly indicator that affects the capitulation of the Republic of Indonesian stock market and the distribution of investment money to different investment vehicles.

Based on some of the tables and notes given above, researchers are interested in extensively evaluating whether macro variables, such as global oil prices, economic development, and the dollar exchange rate, will have an influence on Indonesia's Composite Stock Price Index (JCI) between 2011 and 2022.

World crude oil takes an important role in the world economy because it is considered an important factor in the production function. The world's high dependence on oil makes changes in world oil prices important to pay attention to because the movement of oil prices can affect many aspects of the economic sector, both micro and macro.

Through the cash flow of the corporation, changes in oil prices may also have an effect on the capital market. Shocks to oil prices affect a company's profitability both directly and indirectly, according to Masih et al. (2010). The company's manufacturing expenses will rise as a direct result of the increase. In the meanwhile, the investor's indirect influence will predict the company's profit ceiling before determining how much of an impact the stock market index will have. According to Asteriou (2013), company performance and stock price can be related because stock prices depend on the market's assessment of the company's performance based on the expected profits by investors. Investments invested by investors in the capital market are a combination of company stocks engaged in various sectors. Fischel (1989), said it is important to pay attention to the risks posed by changes in oil prices in order to manage portfolios. Because the impact caused by changes in oil prices can be different for each sector. For this reason, it is necessary to conduct research to see the risks posed by each sector to help diversify assets. This also affects the decline in world oil prices as shown in figure 1 below.



Figure 1. World Oil Price Movements in 2008 - 2022 Source : data investing, 2023

The decline in world oil prices is due to an increase in unconventional oil production (shale oil) in North America (Canada) so that the world oil supply increases and experiences an oversupply. Despite the increase in oil supply in the world market, the member countries of the Petroleum Exporting Countries (OPEC) continue to maintain their production volume levels with the aim of suppressing the price of American shale oil. In addition, global oil demand in 2015 declined due to slowing global economic sentiment, mainly due to the

decline in China's economic growth from 7.3% (yoy) in the fourth quarter of 2014 to 7.0% (yoy).

The failure to achieve supply-demand equilibrium in the global market has resulted in oil prices continuing to weaken. The movements and shocks of oil prices that occur can affect real economic activities which ultimately affect the economy of a country (Adebiyi et. al, 2009). The transmission mechanism of the impact of oil price movements on real economic activity can be seen through two sides, namely the supply side and the demand side. In terms of supply, it can be seen in terms of the company's production cost which will affect the company's decision to increase or decrease the amount of production, while in terms of demand it can be seen from the purchasing power of consumers.

The sanctions imposed by Western countries on Russia for invading Ukraine have triggered an increase in world crude oil prices. The United States (US) and the European Union, which are discussing a ban on oil imports from Russia, have made the price of 'black gold' now transacted above US\$100 per barrel, the highest level in the last 14 years. Based on the data above, the price of West Texas Intermediate (WTI) crude oil for the April 2022 contract closed up 4.39% to a level of US\$120.76 per barrel. Crude oil prices have increased by 56.85% (year-to-date/ytd) over the end of the previous year when they were still trading at US\$76.99 a barrel. The rise in oil prices can have an impact on the high rate of world inflation, especially in the United States (US). In January 2022, the inflation rate in the superpower has reached 7.5% (yoy). It is also worth remembering that Russia is the second largest exporter of crude oil in the world. With sanctions from Western countries, the world's crude oil supply is also predicted to be disrupted.

Another gauge and representation of a nation's economic stability is its exchange rate. This rupiah exchange rate will decrease if the supply of rupiah is comparatively less than the demand for it, and vice versa. Investors might infer that Indonesia's economic prospects are deteriorating from the rupiah's devaluation versus the US dollar. Strong economic stability is typically accompanied by a stable currency and consistent exchange rates. Countries with unstable economies typically see irregular currency movements and weakening (Bappebti.go.id). Investors tend to be careful when making investments since this exchange rate is regarded as one of the factors that influences activity in the money and stock markets (Pratikno, 2009). Studies conducted by Pudji Astuty and Dwi Chandra Permana (2020) and Bin Raudha Hanoeboen (2017) suggest that the exchange rate has a positive effect on the Composite Stock Price Index, while Elvina Hartayu and R.A. Sista Paramita (2023) find that the exchange rate has a negative impact on the index.

This study employs the Random Walk hypothesis, which explains the randomly moving composite stock price index, in light of the aforementioned issues and research gaps. The receipt of fresh information in a composite stock price index that is randomly moving determines how much a stock will change in value. But neither the stock price nor the new information are predictable because it is hard to forecast when they will be obtained. Moreover, it's unclear

if the information is positive or negative. It is referred to as "today's information" and, if it is found, will have an instant impact on the stock price (Lestari, 2016). According to the Random Walk hypothesis, the Composite Stock Price Index will be impacted by changes in global oil prices, economic growth, and foreign currency rates.

Based on the background information provided above and the contradictory results of previous research, the research is interested in conducting a study with the title "The Influence of Oil Prices and Economic Growth on the Composite Stock Price Index Through Foreign Exchange Rates on the Indonesia Stock Exchange".

## LITERATURE REVIEW

A research titled "The Impact of World Crude Oil Price Fluctuations on Indonesia's Macroeconomy" was carried out in 2019 by Safira Qisthi. The objective of this research is to examine the effects of global changes in crude oil prices on Indonesia's macroeconomic indicators, which are classed as the country's GDP, Balance of Payments (BOP), and inflation. There are 44 samples in the quarterly data set, which spans from the first quarter of 2005 to the fourth quarter of 2015. Secondary data from Bank Indonesia (BI) and the Central Statistics Agency (BPS) were used in this study. The Vector Auto Regression (VAR) approach is applied in this investigation. The analysis's findings demonstrate the relationship between oil prices and GDP. In the meanwhile, Indonesia's inflation and balance of payments (BOP) are unaffected by oil prices.

The study "ANALYSIS OF THE INFLUENCE OF WORLD OIL PRICES, RUPIAH EXCHANGE RATE, INFLATION AND SBI INTEREST RATES ON THE COMPOSITE STOCK PRICE INDEX (JCI)" was carried out by Bin Raudha Hanoebon (2017). This study aims to determine and evaluate the impact of inflation, SBI interest rates, international oil prices, and the rupiah exchange rate on the Composite Stock Price Index (JCI). The Central Statistics Agency (BPS), Bank Indonesia (BI), and the Indonesia Stock Exchange (IDX) provided secondary data for this study between January 2011 and December 2014. Descriptive and statistical analysis are the techniques used for data analysis. The study's findings indicate that the JCI is negatively impacted by global oil prices, positively and significantly impacted by exchange rates, and negatively impacted by the inflation variable.

Pudji Astuty and Dwi Chandra Permana (2020) conducted a study entitled "Determinants of the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange". This study aims to test and analyze the influence of factors related to the Composite Stock Price Index, these factors include the rupiah exchange rate, world gold prices and oil prices. In this study, secondary data from national and world macroeconomic data for the period of 2013 – 2019 (7 years) was used. The data analysis method used is based on the observation of a number of variables used in multiple linear regression analysis. The results of the study show that the exchange rate of the Rupiah against the US Dollar partially significantly has a positive effect on the size of the Composite Stock Price Index (JCI), the price of

World Gold partially has a positive effect on the size of the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange, the world oil price partially has a negative effect on the size of the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange.

Elvina Hartayu and R.A. Sista Paramita (2023) conducted a study entitled "The Influence of Macroeconomic Indicators, World Oil Prices and Asian Exchange Indices on the JCI for the 2015-2019 Period". This study aims to examine the influence of macroeconomic indicators (BI Rate, Inflation, and Gross Domestic Product), World Oil Prices, and Asian Stock Indices (Nikkei 225 Index and Straits Times Index) on the Composite Stock Price Index (JCI). This study uses monthly data with a total of 44 samples during the period of the Fed Fund Rate hike from December 2015 to July 2019. Data analysis method using multiple linear regression with IBM SPSS 23 software. The results of the study showed that the exchange rate had a significant negative effect on the JCI, the BI rate had no effect on the JCI, Inflation did not have a significant effect on the JCI, GDP did not have a significant effect on the JCI, and world oil prices did not have a significant effect on the JCI during the 2015-2019 period.

Veny Mayasari (2019) conducted a study entitled "The Effect of Inflation and the SBI Rate on Stock Prices in Food and Beverage Sub-Sector Manufacturing Companies that Go Public on the Indonesia Stock Exchange". The purpose of this study is to find out and analyze the influence of Inflation and SBI on Stock Prices in Food and Beverage Manufacturing Companies that go public on the Indonesia Stock Exchange. The population used in this study is all Food and Beverage Manufacturing Companies that go public on the Indonesia Stock Exchange. The method used in this study is quantitative research. Based on the results of regression analysis, it was found that: Inflation and SBI rate have a significant effect on the Stock Price of Food and Beverage Manufacturing Companies that go public on the Indonesia Stock Exchange.

Ridwan Maronrong and Kholik Nugrhoho (2017) conducted a study entitled "THE EFFECT OF INFLATION, INTEREST RATES AND EXCHANGE RATES ON STOCK PRICES: A CASE STUDY ON AUTOMOTIVE MANUFACTURING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE IN 2012 - 2017". This study aims to examine the effect of Inflation, Interest Rates and Exchange Rates on Stock Prices Case study on automotive manufacturing companies listed on the Indonesia Stock Exchange in 2012 - 2017. This study uses a quantitative approach method. The research sample used is PT. Astra Internasional Tbk. and PT. Indomobil Sukses Internasional Tbk. The data analysis used was multiple linear regression analysis using SPSS 24.00. The results show that partially Inflation and Interest Rates do not have a significant effect on stock prices and Exchange Rates affect stock prices, while simultaneously Inflation, Interest Rates, and Exchange Rates have a significant effect on the price of stocks.

Agnes Theresia Dabukke (2017) conducted a study entitled "THE EFFECT OF BANK INDONESIA INTEREST RATES (BI RATE) AND WORLD OIL PRICES ON INFLATION IN INDONESIA". This study aims to analyze the influence of Bank Indonesia interest rates (BI Rate) and world oil prices on inflation in Indonesia for the period 2001-2015. The scope of this research was carried out in Indonesia with the year of the research period from 2001 to 2015. The method used in this study is quantitative. This study uses secondary data obtained from Bank Indonesia, the Central Statistics Agency and the International Energy Administration website. This study uses multiple linear regression analysis using the Ordinary Least Square (OLS) method with SPSS version 21.0. The results of the study show that the Bank Indonesia interest rate (BI Rate) and world oil prices have a positive and significant influence on inflation in Indonesia for the period 2001-2015.

## **METHODOLOGY**

Intervening variables (Z), exogenous variables (X), and endogenous variables (Y) were the variables used in this investigation. The only dependent variable is the Composite Stock Price Index (Y). The economic growth (X2), oil prices (X1), and other factors make up the three independent variables. Furthermore, the foreign exchange rate variable (Z) is the only variable in the intervening variable.

### ***Population and Sample***

This study's population include all data on the Composite Stock Price Index (JCI) for the Indonesian stock market, as well as all data on international oil prices, the GDP, and foreign exchange rates from Bank Indonesia. The quarterly data from the Combined Stock Price Index, Inflation, and Interest Rate data set for the years 2010 through 2020 comprise the sample used in this study. The year used was selected to provide more accurate results depending on the current situation.

### ***Data Collection Techniques***

The methods used for data collection in this study include secondary data from reports released by Bank Indonesia, the Indonesia Stock Exchange, and WTI, as well as literature reviews in the form of publications, journals, prior research, and published reports to gain an overview of the issue under investigation.

### ***Data Collection***

The data collection technique in this study uses literature and documentary study methods. This literature study is a data collection technique obtained by studying and reading literature, journals and research articles or notes related to the problems that are the object of this research. Meanwhile, documentary is a data collection technique by studying and understanding company documents that have been published by the Indonesia Stock Exchange (IDX) obtained through [www.idx.co.id](http://www.idx.co.id) and [www.id.investing.com](http://www.id.investing.com).

## Data Analysis Techniques

### Descriptive Statistical Test

The world oil price, economic growth, foreign exchange rate, and composite stock price index are all determined using descriptive analysis. The metrics that are employed include variance, standard deviation, mean, minimum and maximum values.

### Normality Test

The statistical test used to test residual normality is the Kolmogorov Smirnov (K-S) statistical test. The basis for decision-making uses a significance level of 5%, if the probability value (Sig.) > 0.05, then the data distribution is declared normal. If the probability value (Sig.) < 0.05, then the data distribution is declared abnormal.

### Autocorrelation Test

The hypotheses that will be tested in this study are:

- 1)  $H_0$  : No autocorrelation ( $r = 0$ )
- 2)  $H_a$  : There is an autocorrelation ( $r \neq 0$ )

Decision-making whether there is an autocorrelation in the table is as follows:

Table 2 Autocorrelation Decision Table

Hypothesis zero	Decision	If
No positive autocorrelation	Reject	$0 < d < dl$
No positive autocorrelation	No decision	$dl \leq d \leq du$
No negative correlation	Reject	$4 - dl < d < 4$
No negative correlation	No decision	$4 - du \leq d \leq 4 - dl$
No autocorrelation, Positive and negative	Tidak ditolak	$du < d < 4 - du$

Source: (Santoso, 2012)

### Hypothesis Testing

The following methods will be used in this study's hypothesis testing of the impact of global oil prices and economic growth on the IDX's composite stock price index through foreign exchange rates on mining sector firms:

### Mediation Test

#### Path Analysis

The Path Analysis method is used to test the influence of mediation variables. Path analysis is an extension of multiple linear regression analysis, or path analysis is the use of regression analysis to estimate causal relationships

between variables that have been predetermined based on theory. To determine the effect of this mediation, it was tested using a sobel test (Ghozali, 2011). The model of the path diagram has two equations, which are as follows:

- i. First Model Equation  $Z = P_{ZX1} + P_{ZX2} + \epsilon_1$
- ii. Second Model Equation

$$Y = P_{YX1} + P_{YX2} + P_{YZ} \epsilon_2$$

With the caption:

- P = Regression Coefficient
- $X_1$  = World Oil Prices
- $X_2$  = Economic growth
- Z = Foreign Exchange Rate
- Y = Composite stock price index
- $P_{ZX1}$  = Coefficient of the World Oil Price path to the Exchange Rate.
- $P_{ZX2}$  = Coefficient of the World Oil Price path to the Exchange Rate.
- $P_{YX1}$  = The correlation coefficient between the Composite Stock Price Index and the Oil Price trend.
- $P_{YX2}$  = The Composite Stock Price Index's coefficient for the course of economic growth.
- $P_{YZ}$  = The correlation between the Composite Stock Price Index and the Foreign Exchange Rate path coefficient.
- $\epsilon_1$  = An additional element influencing the foreign exchange rate.
- $\epsilon_2$  = An additional element influencing the Composite Stock Price Index.

**Calculating the Path Coefficient**

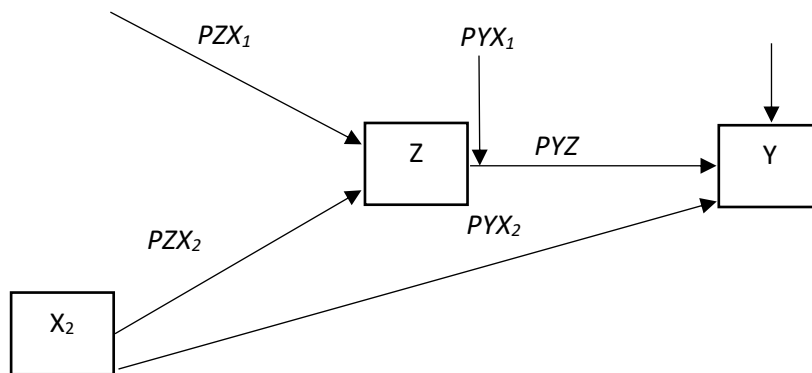


Figure 2 Path Diagram

Figure 3.1's path chart demonstrates how the Composite Stock Price Index (Y) is directly impacted by oil prices (X1) and economic growth (X2). However, there is also an indirect relationship between foreign exchange rates (Z), economic growth (X2), oil prices (X1), and the Composite Stock Price Index (Y). Each P value denotes a path and its path coefficient's value, as seen in the

preceding figure. The "beta" or route coefficient, a normalized regression coefficient, indicates how one independent variable directly affects the dependent variable in a given path model. Structural equations may be used to compute the route coefficient.

## RESEARCH RESULT

Based on the results of the data tabulations that have been carried out, the data collected is obtained to be used as analysis material in this study. The data collected is as follows:

### *World Oil Prices*

Based on table 3 shows the average World Oil Price, namely in the period 2010 - 2020 with the following data:

Table 3 World Oil Prices for the Period 2010 - 2020

Years	Quarter I	Quarter II	Quarter III	Quarter IV
2010	81,51	83,18	82,52	79,65
2011	109,92	108,15	113,93	103,88
2012	99,58	97,61	98,67	103,24
2013	93,12	93,56	96,24	92,54
2014	93,43	91,66	96,73	97,49
2015	45,89	46,23	50,48	44,84
2016	32,78	37,84	41,45	36,79
2017	53,26	51,08	53,99	50,28
2018	60,37	64,73	65,61	64,15
2019	55,26	52,64	55,48	56,79
2020	26,08	22,41	12,34	52,36

Source: data processed, 2023

Based on Table 3 shows that the highest World Oil Price was obtained in 2011 in the first quarter to the fourth quarter showing the highest price between 103.88 and 109.92. Meanwhile, the lowest World Oil Price was obtained in 2020 in the third quarter of 12.34. This indicates that rising oil prices will drive up the cost of mining supplies generally, which will raise the share prices of mining businesses and ultimately up the JCI.

### *Economic Growth*

Based on table 4 shows the average Economic Growth, namely in the period 2010 - 2020 with the following data:

Table 4 Economic Growth Period 2010 - 2020

Years	Quarter I	Quarter II	Quarter III	Quarter IV
2010	6,22	6,18	6,2	6,22
2011	6,17	6,15	6,11	6,18
2012	6,03	5,93	6,11	6,05

2013	5,56	5,61	5,52	5,51
2014	5,01	5,01	5,01	5,01
2015	4,88	4,32	4,81	4,78
2016	5,01	5,21	5,12	5,01
2017	4,88	4,72	4,86	4,85
2018	5,03	5,21	5,13	5,02
2019	5,07	5,21	5,12	5,05
2020	5,04	5,11	5,02	5,03

Source: data processed, 2023

Based on Table 4 showing Economic Growth, the highest obtained in 2010 in the first quarter of 6.22. Meanwhile, the lowest economic growth was obtained in 2015 in the second quarter of 4.32. An economy is said to experience growth if the current economic activity is higher than the previous year (Adisetiawan, 2009). This economic growth is characterized by an increase in the physical number of goods or services produced, resulting in an increase in people's income. Increasing GDP has a positive influence on consumer purchasing power so that it can increase demand for the company's products which then increases the company's revenue. As the country's economy grows, investors will be willing to invest large amounts of their capital in the hope of getting a large return. So increasing GDP is a good (positive) signal for investment and vice versa.

### *Foreign Exchange Rate*

Based on table 5, it shows the average Foreign Exchange Rate, namely in the period of 2010 – 2020 with the following data:

Tabel 5 Kurs Valuta Asing Periode 2010 - 2020

Years	Quarter I	Quarter II	Quarter III	Quarter IV
2010	8,991	8,952	9,012	9,365
2011	9,068	8,578	8,574	9,057
2012	9,672	9,485	9,182	9,212
2013	12,189	10,924	9,722	9,698
2014	12,44	11,717	11,532	12,226
2015	13,795	14,027	12,937	12,625
2016	13,436	13,321	13,204	13,846
2017	13,343	13,321	13,351	13,548
2018	13,413	13,877	14,413	14,339
2019	14,072	14,215	14,141	13,901
2020	13,662	15,157	14,653	14,105

Source: data processed, 2023

Based on Table 5 shows the Foreign Exchange Rate, the highest obtained in 2020 in the second quarter of 15,157. Meanwhile, the lowest Foreign Exchange

Rate was obtained in 2011 in the second quarter of 8.578. Foreign Exchange rates are also another macroeconomic factor that affects stock price movements. According to Tandelilin (2008:214), the strengthening of the rupiah exchange rate against foreign currencies is a positive signal for investors. Where when the rupiah exchange rate against foreign currencies strengthens, many investors will invest in stocks.

### *JCI Value*

Based on table 6 shows the average JCI value in the period 2010 - 2020 with the following data:

Table 6. JCI Value for the Period 2010 - 2020

Years	Quarter I	Quarter II	Quarter III	Quarter IV
2010	3,703	3,652	3,588	3,482
2011	3,821	3,645	3,846	3,482
2012	4,316	4,212	4,301	4,312
2013	4,274	4,271	4,251	4,265
2014	5,226	5,212	5,222	5,225
2015	4,593	4,525	4,588	4,599
2016	5,296	5,296	5,296	5,296
2017	6,355	6,321	6,347	6,352
2018	6,194	6,192	6,188	6,191
2019	6,291	6,285	6,267	6,291
2020	5,979	5,968	5,972	5,961

Source: data processed, 2023

Table 6 displays the JCI value, with the highest value of 6,355 recorded in the first quarter of 2017. On the other hand, 2010 saw the quarter with the lowest JCI value, 3,482. There is a lot of flexibility in the movements of the Indonesian Composite Stock Price Index. The Composite Stock Price Index (JCI) can be used to measure changes in a country's economic health. The stock price index's upward tendency indicates that the country's circumstances are favorable. On the other hand, a negative movement in the stock price index indicates a declining status of the nation's economy. The index is one of the guidelines for investing in the capital market, especially in stocks.

## **DISCUSSION**

### *The Influence of World Oil Prices on JCI*

Based on the results of the study, it shows that World Oil Prices have a Significant Positive Effect on the Composite Stock Price Index. This shows that every increase in world oil prices, the JCI will experience an increase World oil prices have a significant influence on the JCI, which means that every increase or decrease in world oil prices will affect the value of the JCI. This theory is supported by the computation's results in this instance since global oil prices

affect the JCI and movements in those prices will be followed by changes in Indonesia's fuel oil pricing (BBM). Because crude oil is required for economic activity, the price of oil around the world also reflects the state of the global economy. This occurs because investors in the capital markets interpret the increase in the price of crude oil as a sign of rising demand, which suggests that the world economy is recovering from the crisis.

The price increase of crude oil would have a significant effect on businesses who use it as their main source of product or only as an energy source to run their operations or make goods. Because there is no alternative input to crude oil, Basher and Sadorsky (2016) contend that rising oil prices should result in higher production costs in nations that import oil. In distributing, for example, companies need oil as fuel for their means of transportation and also as an energy source for machines used in the production process. The increase in oil will affect operating costs which will later have an impact on the company's profits. The consequence of rising crude oil prices will reduce the company's profit, thus making the company's return rate decrease. This condition can affect investor interest in stocks in Indonesia and lead to a decline in the value of the JCI.

According to research by Kilian and Park (2017), the US Composite Stock Price Index is significantly and favorably impacted by global oil prices. Research conducted by Movahedizadeh., et al (2014) also showed a positive influence on the Tehran Composite Stock Price Index. Research conducted by Bin Raudho Hanoboeh (2017) changes in oil prices have a negative effect on the Composite Stock Price Index. Likewise with research conducted by Witjaksono, (2020), Hayo and Kutan, (2004), Yulianti and Yusra, (2019) and research conducted by Suharno and Indarti, (2014). This is due to the fact that a nation's capital market may be impacted by changes in global oil prices. Rising worldwide oil prices can boost business profits, especially for mining companies.

### *The Influence of Economic Growth on JCI*

The study's findings suggest that economic development has no influence on the Composite Stock Price Index. In the short term, the computation's findings confirm this notion. This is so because a nation's economic growth will have an impact on the growth of investment in that nation. A nation's citizens enjoy more prosperity in proportion to its economic standing. An rise in people's income levels is often indicative of this greater degree of prosperity. The more individuals who have extra money as a result of this income growth might invest it in assets like stocks that are traded on the capital market or utilize it to save money. Thus, an increasing number of people are spending their. As a result of the rise in economic prosperity, an increasing number of people are investing their money in stocks. It follows that the composite stock price index will rise as well. Furthermore, investors only make short-term investments in the capital market due to the low rate of economic development.

Meanwhile, in the long term, based on the results of the calculation, it is not in accordance with the hypothesis in this study, namely that economic growth in the long term is negative. This is due to the short-term effect that has

been described earlier, namely because economic growth during the research period is not too high. As a result, investors are less interested in the investment climate in the country, so investors only invest in the capital market in the short term, which then results in the long term. The insignificance of the results of the calculation in the long term indicates that economic growth is not too much used as a reference for investors in investing their capital in Indonesia.

Research from 2021 by Ahmad Firdausi Akmal Al Haytami demonstrates that economic progress has no bearing on the Composite Stock Price Index (JCI), supporting Haytami's findings from 2021 that there is no link between the two. According to Untono's research (2019), the Indonesia Stock Exchange's Composite Stock Price Index (JCI) did not significantly increase between 2010 and 2015 because the nation's economic progress was unpredictable and inconsistent.

### *Foreign Exchange Rates and the Impact of Oil Prices on Composite Stock Price Indices*

The study's findings demonstrate that, through foreign exchange rates, world oil prices have a significant positive impact on the composite stock price index. This illustrates how rising oil costs around the world will encourage an increase in the stock price index by pushing the economy toward greater levels of welfare and aggregate demand. With a high level of public welfare, people tend to invest in stock instruments. Additionally, a rise in the demand for oil will have an impact on the foreign exchange rate, which in turn will have an impact on the domestic currency exchange rate relative to the US dollar and raise the Composite Stock Price Index. This is reinforced by the results of research conducted by Park and Ratti (2008:2587-2608) who said "there is a positive relationship between world oil prices and stock price indices". The increase in world oil prices, which was also followed by an increase in the price of mining products, increased the price of oil and gas products, increasing the company's revenue.

Variations in the price of oil around the world have an effect on the corporation's Composite Stock Price Index. The rise in international oil prices could have an effect on the company's financial performance. The corporation may incur higher production costs due to the increasing cost of oil. The increase in manufacturing costs and product selling prices will have an effect on the company's ability to manufacture goods since they will reduce the company's performance and profitability, which will then have an effect on the stock price and returns received. Nonetheless, oil exporting companies may profit from the trend as increased oil prices can improve an organization's finances and earnings. (Oktavia, 2015).

The most important thing for capital market participants in Indonesia is the determination of the rupiah exchange rate against foreign exchange. This is because changes in the exchange rate will result in changes in the company's revenues and expenditures, which will affect the size of the company's profit and loss (Widaryanti et al., 2021). This change in foreign exchange rates will also

affect various fields in the company, especially will have a major impact on the company's internal performance. Based on market forces, the foreign exchange rate will always change whenever the values of the two components of the currency change. When the foreign exchange rate strengthens, it will result in an increase in the profit of a company. Investors will be interested in investing if the company's profit yield is high and the company's return will increase. The strengthening exchange rate also affects the debt of a company. The company's debt becomes lower and increases the company's ability to pay its debts. Investors will choose to invest in companies that can afford to pay all the obligations.

### *The impact of economic Development and foreign Currency rates on the Composite Stock Price Index*

The study's findings demonstrate that through changes in foreign exchange rates, economic expansion significantly increases the composite stock price index. This indicates that a rise in GDP, the indicator of economic expansion, would result in an increase in the stock price of the firm. When foreign currency rates function as an intervening variable, this will therefore have an effect on the movement of the JCI. This is due to the fact that stable currencies usually move in lockstep with stable economies. Weakening and erratic currency movements are common in nations with unstable economies (Bappebti.go.id). Given that this exchange rate is seen to be one of the variables influencing activity in the money and stock markets, investors typically exercise caution when making investments (Pratikno, 2009).

As a result, this study uses the foreign exchange rate as a moderating variable. Variables that have the ability to either increase or diminish the link between two variables are known as moderation variables. The foreign exchange rate is a representation of the economic stability of a nation. The equities market suffers from the rupiah's depreciation as it makes the stock market less appealing. Risk averse investors will almost probably sell and hold onto their money until they perceive an improvement in the economy. These investors' sell-off will promote a drop in IDX stock prices (Joesoef, 2007).

The equities market is negatively impacted by the rupiah's depreciation as it makes the equity market less appealing (Ang, 1997). Risk averse investors will almost probably sell and hold onto their money until they perceive an improvement in the economy. These investors' sell-off will promote a drop in IDX stock prices (Joesoef, 2007).

## **CONCLUSIONS**

Based on the results and discussion of world oil price variables, economic growth, and foreign exchange rates as a moderator of the Composite Stock Price Index, the following conclusions can be drawn from the analysis:

1. The study's conclusions show that the Composite Stock Price Index is influenced by the World Oil Price. This suggests that the JCI will climb in tandem with every increase in the price of oil globally. fluctuations

in these prices will affect the value of the JCI since the index is highly impacted by fluctuations in the price of oil globally.

2. The study indicates that the Composite Stock Price Index is not significantly impacted by the research period's sluggish economic development. Investors only make short-term capital market investments due to their lack of interest in the nation's investment climate, which has long-term consequences. The calculation's modest short- and long-term results show that when allocating capital in Indonesia, investors do not primarily utilize economic advancement as a heuristic.
3. The study's findings demonstrate how foreign exchange rates and oil prices around the world affect the composite stock price index. This demonstrates how the global increase in oil prices will drive up the stock price index by driving the economy toward higher levels of aggregate demand and welfare. Individuals that prioritize the well-being of the general public are inclined to make equity investments.
4. The study's findings demonstrate how changes in foreign exchange rates have an impact on the composite stock price index as a measure of economic development. This suggests that an increase in GDP, a measure of economic expansion, will raise the company's stock price. The movement of the JCI will thereafter be impacted when foreign exchange rates act as an intervening variable. This is because stable economies and stable currencies typically follow each other.

## **RECOMMENDATIONS**

1. The study's findings demonstrate how changes in foreign exchange rates have an impact on the composite stock price index as a function of economic growth. This suggests that an increase in GDP, a measure of economic expansion, will raise the company's stock price. The movement of the JCI will thereafter be impacted when foreign exchange rates act as an intervening variable. This is because stable economies and stable currencies typically follow each other.
2. Global oil prices and foreign exchange rates have an impact on the movement of the composite stock price index; thus, stability in these variables is required to guarantee that the composite stock price index's value remains constant.
3. Since both economic growth and foreign exchange rates affect the movement of the composite stock price index, stability in both areas is necessary to maintain the index's worth.
4. Additional factors, particularly micro variables like profitability, liquidity, and leverage, should be used in future studies to better demonstrate how these impact the Composite Stock Price Index (JCI).

## ADVANCED RESEARCH

There are undoubtedly boundaries to any study project. There are several types of limitations in research, including those related to time and resource constraints, restrictions on the data that may be researched, and limitations on the types of data that are now available. Therefore, additional investigation is required to make this research flawless.

## REFERENCES

- Achmad, Ath Thobarry. 2009. Tesis: Analisis Pengaruh Nilai Tukar, Suku Bunga, Laju Inflasi Dan Pertumbuhan GDP Terhadap Indeks Harga Saham Sektor Properti (Kajian Empiris Pada Bursa Efek Indonesia Periode Pengamatan Tahun 2000-2008), Universitas Diponegoro Semarang.
- Alfianti, D., & Andarini, S. (2017). Pengaruh Pertumbuhan ekonomi Terhadap Harga Saham Pada Perusahaan Makanan dan Minuman Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Bisnis Indonesia*, 8(1), 45.
- Ang, Robert, 1997. *Buku Pintar Pasar Modal Indonesia (The Intelligent Guide to Indonesian Capital Market)*, Mediasoft Indonesia, Jakarta.
- Angkoso, Nandi, 2006. *Akuntansi Lanjutan*, Penerbit BPFE, Yogyakarta
- Anwar. (2007). *Mengembangkan Hubungan Industrial yang Baik di Industri Minyak dan Gas Indonesia*. Organisasi Perburuhan Internasional. Jakarta
- Anwar, Muhadjir. Dan Annisa, 2022. Analisis Pertumbuhan ekonomi Dan Pertumbuhan Perusahaan Dengan Kebijakan Deviden Sebagai Variabel Moderasi Terhadap Nilai Perusahaan, *REVITALISASI: Jurnal Ilmu Manajemen* Vol. 11, Nomor 1, Juni 2022
- Azis, Musdalifah, dkk. 2015. *Manajemen Investasi: Fundamental, Teknikal, Perilaku Investor dan Indeks harga saham gabungan*. Yogyakarta: Deepublish.
- Blanchard, Oliver. 2006. *Macroeconomic 4 Edition*. Pearson Prentice Hall. New Jersey.
- Fauzannissa, R.A., Yasin, H., Ispriyanti, D., Peramalan Harga Minyak Mentah Dunia Menggunakan Metode Radial Basis Function Neural Network, *Jurnal Gaussian*, Volume 5, Nomor 1, Tahun 2015, Halaman 193-202, ISSN: 2339-2541.
- Ghozali, I. (2016) *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 23*. Edisi 8. Semarang: Badan Penerbit Universitas Diponegoro.

- Ghozali, Imam. 2018. Aplikasi Analisis Multivariate dengan Program IBM SPSS 25. Badan Penerbit Universitas Diponegoro: Semarang.
- Hamid, Marwan. 2019. ANALISIS JALUR DAN APLIKASI SPSS VERSI 25. Aceh: SEFA BUMI PERSADA
- Husnan, Suad., Enny Pudjiastuti, 2004. Dasar-Dasar Manajemen Keuangan. Edisi Keempat, Yogyakarta, UPP AMP YKPN
- Jogiyanto. 2008. Metodologi Penelitian Sistem Informasi. CV. Andi Offset. Yogyakarta.
- Kasmir, 2016. Analisis Laporan Keuangan. Jakarta : PT. RajaGrafindo Persada
- Kewal, S. S. 2012. "Pengaruh Inflasi, Suku Bunga, Kurs, Dan Pertumbuhan PDB Terhadap Indeks Harga Saham Gabungan." Jurnal *Economia* 8 (1): 53- 64.
- Kusumawati, D. A., & Asandimitra, N. (2017). Impact of Global Index , Gold Price and Macro Economic Variable for Indonesia Composite Index, 8(2), 53-62.
- Mankiw, N. Gregory. 2006. *Pengantar Teori ekonomi Makro*. Edisi Ketiga. Jakarta : Salemba Empat
- Mishkin, Frederic S. 2008. *Ekonomi, Uang, Perbankan dan Pasar Keuangan*. Edisi 8. Buku 2. Salemba Empat : Jakarta.
- Mulyani, N. 2014. "Analisis Pengaruh Inflasi, Suku Bunga, Kurs valuta asing, Dan Produk Domestik Bruto Terhadap Jakarta Islamic Index." Jurnal *Bisnis Dan Manajemen Eksekutif* 1 (10)(1-13).
- Mulyani, S. (2020). Menkeu: Dampak Covid-19, pertumbuhan ekonomi Indonesia 2020 bisa minus 0,4 persen. *voaindonesia.com*. Retrieved from <https://www.voaindonesia.com/a/menkeu-dampak-covid-19-pertumbuhan-ekonomi-indonesia-2020-bisa-minus-0-4-persen/5355838.html> on 2 April 2020.
- Mustanda, I. K. (2016). Pengaruh Car, Ldr Dan Npl Terhadap Roa Pada Sektor Perbankan Di Bursa Efek Indonesia. *E-Jurnal Manajemen Universitas Udayana*, 5(5), 253810.
- Nor Hadi. 2013. *Pasar Modal : Acuan Teoretis dan Praktis Investasi di Instrument Keuangan Pasar Modal*, Graha Ilmu, Yogyakarta.

- Paranita, E. S., Setyawan, D. J. and Program, M. (2017) 'Pergerakan Indeks Harga Saham Gabungan Dan Faktor-Faktor Yang Mempengaruhinya', *Pergerakan Indeks Harga Saham Gabungan Dan Faktor-Faktor Yang Mempengaruhinya*, 14(2), p. 10. doi: 10.14710/jsmo.v14i2.21376
- Pratikno, Deddy. 2009. Analisis Pengaruh kurs valuta asing, Inflasi, SBI dan Indeks Dow Jones Terhadap Pergerakan IHSG(IHSG) Di BEI (BEI). *Jurnal Economic Universitas Sumatra Utara Medan*, pp: 16-99.
- Rahardja, Pratama dan Manurung, Mandala. 2008. *Teori Ekonomi Makro*. Edisi Keempat. Lembaga Penerbit FE UI
- Riyadi. 2014. "Pengaruh kegunaan, kualitas informasi dan kualitas interaksi layanan web E-Commerce terhadap keputusan pembelian online", <http://administrasibisnis.studentjournal.ub.ac.id/index.php/jab/article/view/633>(diakses 10 Mei 2023)
- Rohmah, Rita. Mochamad Muslich. Dedi Rianto Rahadi. 2017. Pengaruh Keputusan Investasi, Keputusan Pendanaan, Dan Kinerja Keuangan Terhadap Harga Saham (Studi Pada Perusahaan Manufaktur Yang Terdaftar Di BEI). *Jurnal Kewirausahaan, Akuntansi dan Manajemen*. Vol 1 No 1.
- Salim, A., & Chrisnawati, L. 2013. "Effect of Interest Rates and Inflation of Reference Bank." *E-Jurnal Manajemen Dan Bisnis* 1 (1): 1-15.
- Samsul. 2006. *Pasar Modal Dan Manajemen Portofolio*. Penerbit Erlangga, Jakarta.
- Sukirno, Sadono. 2004. *Makro Ekonomi Teori Pengantar*. Edisi III. Jakarta: PT Raja Grafindo Persada.
- Sumantoro, 1990, *Pengantar Tentang Pasar Modal Di Indonesia*, Ghalia Indonesia, Jakarta. Hal. 9.
- Sunariyah. (2011). *Pengantar Pengetahuan Pasar Modal*, edisi keenam. Yogyakarta : Unit Penerbit dan Percetakan STIM YKPN.
- Sunariyah. 2006. *Pengantar Pengetahuan Pasar Modal*, Edisi 5. Yogyakarta: UPP AMP YKPN
- Tandelilin, Eduardus 2010, *Portofolio dan Investasi Teori dan Aplikasi*, Edisi 1, Kanisius, Yogyakarta.

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Yuliman, Yulius (2003) *Analisis Pengaruh Kurs U.S Suku Bunga Dan Price Earning Ratio, Terhadap Indek .Lq 45 Di Bursa Efek Jakarta (Studi Kasus bulan Januari 2003)*. Masters thesis, program Pascasarjana Universitas Diponegoro.

Yusgiantoro, Purnomo. 2009. *Ekonomi Energi Teori dan Praktik*. Jakarta: LP3ES