# DETERMINANTS OF THE COMPOSITE STOCK PRICE INDEX (JCI) ON THE INDONESIA STOCK EXCHANGE (IDX) BASED ON THE NIKKEI STOCK EXCHANGE 225 INDEX (N225), BRENT CRUDE OIL PRICE, AND RUPIAH EXCHANGE RATE FOR THE PERIOD 2020-2023

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## Abstract

The movement of the Indonesia Composite Stock Price Index (JCI) on the Indonesia Stock Exchange (IDX) is influenced by various domestic and global factors. This study aims to analyze the impact of the Nikkei 225 Index, Brent Crude Oil Prices, and the Rupiah Exchange Rate on JCI during the period 2020-2023. The research adopts a quantitative approach by employing multiple linear regression analysis to process secondary data obtained from Investing.com and Bank Indonesia. The findings indicate that, simultaneously, the three independent variables significantly influence JCI movements. However, when analyzed individually, the Nikkei 225 Index and Brent Crude Oil Prices exert a positive and significant effect on JCI, whereas the Rupiah Exchange Rate does not show a substantial impact. These results suggest that JCI fluctuations are more responsive to global economic changes than to domestic monetary dynamics. The implications of this study highlight the necessity for investors to consider international market conditions as a crucial factor when making investment decisions on the Indonesian stock market. This research contributes to the existing body of literature by providing empirical evidence on the relationship between global and domestic economic indicators and JCI, particularly in the post-pandemic period. The originality of this study lies in its focus on recent economic conditions, offering valuable insights for policymakers, investors, and financial analysts. By addressing the influence of global market trends on JCI, this research underscores the importance of macroeconomic awareness in investment strategies and economic policymaking.

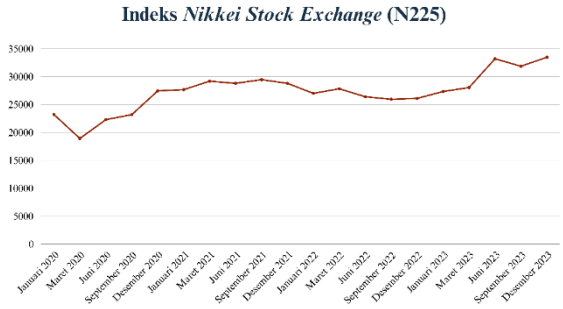
**Keywords:** Nikkei 225 Index, Brent Crude Oil Prices, Rupiah Exchange Rate, JCI, Indonesia Stock Exchange

## INTRODUCTION

The capital market serves as a source of funds to provide companies with the possibility of carrying out massive development in technology, business segmentation, and corporate infrastructure. Capital market instruments such as stocks and bonds rank first and second as the instruments with the largest market share in Indonesia. Reporting from IDX *Yearly Statistics* 2023, the market capitalisation value of stocks in Indonesia touched Rp. 11,674 trillion which was the highest market capitalisation value in the Southeast Asia region at that time. This condition was influenced by the better economic recovery process after the COVID-19 pandemic. The impact of the COVID-19 pandemic has also affected the economic conditions of one of the three countries with the largest economic capabilities, Japan.

Japan plays an important role during the pandemic as a provider of demand for electronic devices, technology, agriculture and automobiles, which has a consequential impact on the increase and decrease in world economic conditions. Reporting from the *World Economic Outlook* by the *International Monetary Fund* (2021) explains that projected fluctuations in a country's economic conditions can have an impact on capital market conditions. *The Nikkei Stock Exchange* Index as the largest stock market index on the *Tokyo Stock Exchange* (TSE) is one of the indices that experienced this. The Japanese government immediately implemented several policies to overcome the impact of COVID-19 such as reducing interest rates, flexibility in monetary policy, and reducing taxes and subsidies (Nugrahaningsih & Nuzulian, 2020). Previous research conducted by (Darmawan & Haq, 2022) and (Roofica & Pertiwi, 2021) explained that the Nikkei Index has a positive effect on JCI. On the other hand, the results of research conducted by Herlianto et al (2020) show that the Nikkei Index has a negative effect on the JCI. Based on several previous studies, the *Nikkei Stock Exchange* 225 Index (N225) needs to be studied further in the latest period to ensure its impact on the JCI.

**Figure 1.**
**Chart of the Nikkei Stock Exchange Index (N225) 2020-2023**



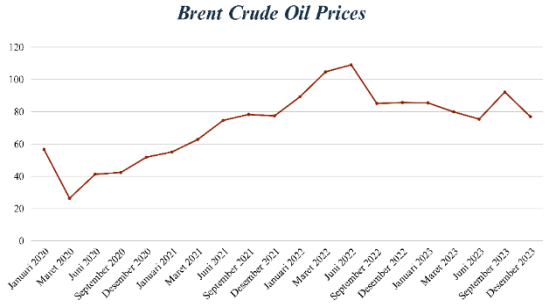

Source : www.investing.com (2024)

The lowest value was recorded in the first quarter (March) of 2020 reaching 18,917.01 JPY and the highest value was recorded in the fourth quarter (December) 2023 reaching 33,464.17 JPY. This is due to the COVID-19 pandemic which provides obstacles to Japan's economic activities. Japan's monetary policy and various kinds of state cooperation

programmes, especially in Asia, are planned to restore the economy after the COVID-19 Pandemic.

*Crude* oil is one of the world's main commodities when compared to several other commodities. One type of crude oil, *Brent Crude Oil*, Investopedia, 2020). is used as a preference for world crude oil prices (On the other hand, the *Indonesian Crude Oil Price* (ICP) uses *Brent Crude Oil Prices* as a reference in determining prices in the market. *Brent Crude Oil* as a commodity variable has a vital role in several sectors in JCI such as the energy and commodity sectors. In research conducted by Lutfiyah (2022), and Sari & Nugroho (2024) there is a partial positive significant influence between *Brent Crude Oil Prices* on JCI.

**Figure 2.**
**Chart of Brent Crude Oil Prices in 2020-2023**

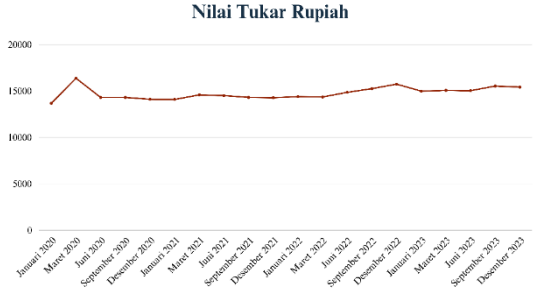



Source : www.investing.com (2024)

The lowest value was recorded in the first quarter (March) of 2020 reaching $26.35 USD and the highest value was recorded in the fourth quarter (December) 2023 reaching $109.03 USD. This is due to the COVID-19 restriction regulations that have decreased, causing an increase in demand for crude oil needs but limited supplies. Not only that, the heated conflict between Russia and Ukraine has an indirect impact on the availability of energy supplies globally.

In an effort to fulfil commodity needs, the Rupiah Exchange Rate must also be considered in influencing the decision to purchase or export certain raw materials. The rupiah exchange rate can also be an indicator in indicating how the economic conditions in the country. This allows the influence caused by the Rupiah Exchange Rate on a country's Stock Index. Research conducted by Sutandi et al (2021) indicates that the Rupiah Exchange Rate has an insignificant positive effect on the Composite Stock Price Index (CSPI). On the other hand, research conducted by Istinganah & Hartiyah (2021) indicates a positive significant effect on the JCI. Based on several previous studies, the Rupiah Exchange Rate needs to be further investigated in the latest period.

**Figure 3.**
**Chart of Rupiah Exchange Rate in 2020-2023**




Source : www.bi.go.id (2024)

The lowest value was recorded at Rp. 14,084.00 and the highest value was recorded at Rp. 13,662.00. This is due to optimism for recovery against the COVID-19 pandemic with the COVID-19 vaccine that has begun to be applied in several countries. On the other hand, Bank Indonesia (BI) maintains interest rates to remain low as well as the withdrawal of foreign capital using the state securities instrument (SBN) which results in an increase in demand for rupiah.

Based on the explanation of the background that has been submitted regarding the impact that has the possibility of being caused by the *Nikkei Stock Exchange* 225 Index (N225), *Brent Crude Oil Prices,* and the Rupiah Exchange Rate on the condition of the Indonesian money market through the Composite Stock Price Index (JCI) which is the result of the inconsistency of several research results that have been conducted previously. The purpose of this study is to determine and analyse whether the *Nikkei Stock Exchange* 225 Index (N225), *Brent Crude Oil Prices* and the Rupiah Exchange Rate both simultaneously and partially have a significant effect on the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange (IDX) for the period 2020-2023.

## REVIEW OF LITERATURE

### Jakarta Composite Index (JCI)

The Jakarta Composite Index (JCI) is one of the largest stock market indices listed on the Indonesia Stock Exchange (IDX). On 1 April 1983, the Jakarta Composite Index (JCI) officially became a statistical measure of stock price movements on the Indonesia Stock Exchange, which at that time was still called the Jakarta Stock Exchange (BEJ). It was only on 10 August 1982 that it was determined as the initial period of calculation of the stock index starting from the number 100 with a total listing of 13 issuers. The Composite Stock Price Index (JCI) has recorded an all time high on 19 September 2024 at 7,906.29. The movement of the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange (IDX) is heavily influenced by macroeconomic aspects (Nurwulandari, 2020). On the other hand, financial market conditions also play a vital role in fluctuating company stock prices (Anisa et al., 2022).

### Nikkei Stock Exchange 225 (N225)

*The Nikkei Stock Exchange* 225 (N225) is Japan's premier stock index and a benchmark for stock market performance. *The Nikkei Stock Exchange* 225 (N225) is also an

index of the 225 largest capitalised companies listed on the Tokyo Stock Exchange (TSE). In 1950, the Nihon Keizai Shimbun published a news page that featured many industry sectors such as technology and automotive. Many of the issuers listed on the *Nikkei Stock Exchange* have expanded their business in several countries, including Indonesia. In terms of performance, the *Nikkei Stock Exchange* 225 Index (N225) recorded an all-time high (ATH) on 29 December 1989 at 38,957.44 (N. F. Saputri & Zulfa Irawati, 2023). Currently, the *Nikkei Stock Exchange* index (N225) is around the normal 18,000 per day. This index calculation method lists the average prices of various related aspects with revisions every year.

**Brent Crude Oil**

*Brent Crude Oil* is a type of crude oil that has gone through a production process in the North Sea and is set as a benchmark for world oil prices. The extraction process is carried out near Europe so that many oils on the continent are part of Brent such as *Ekofisk*, *Forties*, and *Obsberg*. Currently, *Brent* crude oil plays a major role as an oil supplier for Europe and Asia, so its price fluctuations will have an impact on global stock market conditions. *Brent crude oil* is a type of oil with low sulphur content. Sulphur content. Sulphur content and oil density are used as standard provisions that have been carried out by the *American Petroleum Institute* (API) (Rahayu, 2022). *Brent crude oil* has 0.37% sulfur content and 38.06 degrees so that *brent* crude oil is a sweet and light type of crude oil that can be easily moved and reprocessed.

**Exchange Rate**

Exchange Rate or Exchange Rate is the total amount of funds needed to redeem another country's currency (Firdaus et al., 2024). The same thing was also expressed by Widianita et al (2023) that the exchange rate is a benchmark in knowing how strong the value of a country's currency is when compared to other countries. An indication of a country's stronger economic conditions can be seen from its exchange rate (Saputri & Hanase, 2021). In the current era, the exchange rate acts as a business object that can be transacted in the form of *foreign exchange transactions*. Global market conditions that allow each country to be interrelated with each other. Countries that tend to close themselves off from global economic developments will tend to be isolated from the economic intervention of other countries (Cazachevici et al., 2020).

The exchange rate, which plays a vital role in the financial sector, functions as a facilitator to respond to the amount of *supply* and *demand in* the market. The exchange rate also has an impact on several segments of the economy without exception on microeconomic strata such as companies. In some companies with a high import-export business line, the exchange rate will determine the amount of the company's development orientation towards the world market. This is believed to be able to influence the determination of the price of goods marketed by the company.

## RESEARCH METHOD

This research implements an associative type of research using a quantitative approach. The quantitative approach is used to be able to identify interrelationships, relationships, or combinations between variables without any manipulation of related variables. Associative research can be interpreted as a study intended to determine the extent of the relationship between two or more variables (Sugiyono, 2020: 105). The independent

variables (X) in this study consist of other countries' stock indices which will be interpreted by the *Nikkei Stock Exchange* 225 Index (N225) (X1), world macroeconomic variables, namely *Brent Crude Oil Prices* (X2), and domestic macroeconomic variables, namely the Rupiah Exchange Rate (X3). On the other hand, the Jakarta Composite Index (JCI) acts as the dependent variable (Y) in this study.

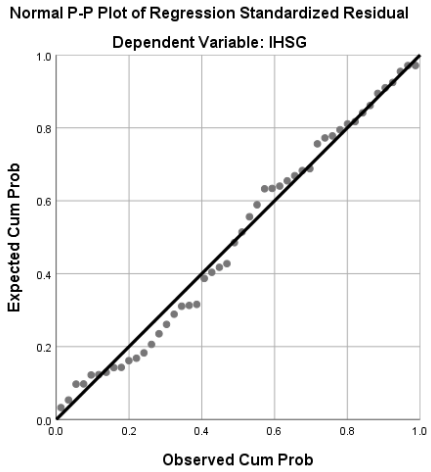
The purpose of this study is to determine and analyse whether the *Nikkei Stock Exchange* 225 Index (N225), *Brent Crude Oil Prices* and the Rupiah Exchange Rate both simultaneously and partially have a significant effect on the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange (IDX) for the period 2020-2023. In this study, the data used is secondary data or data that has been processed by other parties so that it can be displayed in the form of a *timetable* or diagram. Data collection is done by the documentation method or it can be said by accumulating available data. Data sources were obtained from the investment information pages www.investing.com and www.bi.go.id. The entire data was downloaded in the time period 2020 to 2023 with a total of 48 data.

The data analysis technique used is to conduct a classical assumption test and multiple linear regression analysis test. The classical assumption test is carried out to ensure that the data has met the requirements of a regression model. For this reason, the data needs to fulfil the *Base Linear Unbiased Estimator* (*BLUE*). There are several tests on classical assumptions such as multicollinearity, autocorrelation, heteroscedasticity, and normality tests. Multiple linear regression analysis tests are also carried out to determine the projected increase or decrease in the *dependent variable* which is influenced by the *independent variable*. The F test and t test were also carried out in this study to find out about the effect of the *independent variable* on the *dependent variable*, both partially and simultaneously.

## RESULTS AND DISCUSSION

In this study, a classic assumption test was carried out to ensure that the data used in the study met the requirements to achieve BLUE (*Base Linear Unbiased Estimator*). There are several tests in the classical assumption test, namely Normality Test, Heteroscedasticity Test, Multicollinearity Test, and Autocorrelation Test. Normality test is a series of tests on the regression model used to see the residual value can have been distributed properly or can be said to be normal. The normality test can be seen from the *scatter plot* graph which displays the profitability plot compared to the cumulative distribution. The following is a *scatter plot* graph in this study:

**Figure 5.**
**Normality Test Results**

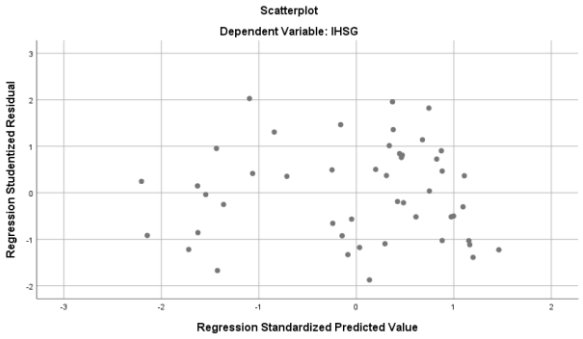



Source: SPSS Statistic 25 Output (2024)

It can be seen in Figure 5., the points circulate around the diagonal line or extend in the direction of the line. This can be interpreted that in this study there are symptoms of normality or the data obtained can be normally distributed.

The heteroscedasticity test is used to determine the difference between the variance values of the research residuals. The heteroscedasticity test is carried out using the *scatter plot* method. *The scatter plot* method is a visualisation of the predicted value (ZPRED) plotted against its residual value (SRESID). In this study, the *scatter plot* is used to display the possibility of forming a certain pattern on the *scatter plot* to indicate that there are symptoms of heteroscedasticity. A good heteroscedasticity test is a test that displays dots on the *scatter plot* that do not visualize the formation of certain patterns or gather in several parts or spread thoroughly below the number 0 on the Y axis. The results of the heteroscedasticity test are shown in the following figure:

**Figure 6.**
**Heteroscedasticity Test (Scatter Plot)**




Source: SPSS Statistics 25 Output (2024)

The multicollinearity test is carried out by looking at the scale of the relationship between the independent variables in a multiple linear regression model. The occurrence of

multicollinearity will cause the variables in the study to be unorthogonal. In a regression model, the *Variance Inflation Factor* (VIF) value is used to see the possibility of multicollinearity symptoms. The multicollinearity test results can be seen in the following table:

**Table 1.**
**Multicollinearity Test Results**

Coefficients[a]

| Model | | Unstd. Coef. | | Stndrd. Coef. | t | Sig. | 95,0% Confidence Interval for B | | Correlations | | | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | Low. Bound | Up. Bound | Zero Order | Partial | Part | Tol. | VIF |
| 1 | (Constant) | 1049.851 | 926.654 | | 1.133 | .263 | -817.697 | 2917.39 | | | | | |
| | Nikkei 225 | .064 | .012 | .283 | 5.151 | .000 | .039 | .089 | .743 | .613 | .225 | .632 | 1.581 |
| | Brent Crude Oil Prices | 26.528 | 1.951 | .746 | 13.599 | .000 | 22.597 | 30.460 | .926 | .899 | .594 | .634 | 1.578 |
| | Nilai Tukar Rupiah | .107 | .062 | .076 | 1.731 | .091 | -.018 | .232 | .199 | .252 | .076 | .982 | 1.019 |

a. Dependent Variable: IHSG (Y)

Source: SPSS Statistic 25 Output (2024)

It can be seen from table 1, the multicollinearity test results provide a visualisation of the *Variance Inflation Factor* (VIF) indicator in the *Collinearity Statistics* column of the Nikkei 225 Index (X1), *Brent Crude Oil Prices* (X2), and Rupiah Exchange Rate (X3) variables, each <10, so Ho is accepted, which means there is no relationship between the independent variables (no multicollinearity symptoms).

The autocorrelation test is conducted to provide a visualisation of the interrelationship of an observation in space and time. In order to be an independent regression model, autocorrelation symptoms must not be found. In this study, autocorrelation symptoms are determined based on the Durbin-Watson value in the model *summary* table. The results of the autocorrelation test are shown in the following figure:

**Table 2.**
**Autocorrelation Test Results**

Model Summary[b]

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | .957[a] | .916 | .910 | 234.712 | .824 |

a. Predictors: (Constant), Nilai Tukar Rupiah, Brent Crude Oil Prices, Nikkei 225

b. Dependent Variable: IHSG

Source: SPSS Statistic 25 Output (2024)

It can be seen from table 2., the results of the *summary* model autocorrelation test display the durbin-watson value in the regression model has a value of 0.824. In this study, the indicator used is to place the durbin-watson value between -2 < DW < 2 to say that there

are no symptoms of autocorrelation. Therefore, the durbin-watson value in this study is -2 < 0.824 < 2 so that the regression model in this study can be said to have no autocorrelation symptoms.

In this study, multiple linear regression analysis was carried out to find out about the influence exerted by the independent variables or independent variables (X1, X2, and X3) on the dependent variable or dependent variable (Y). The results of multiple linear regression analysis can be seen in the following table:

**Table 3.**
**Multiple Linear Regression Analysis Test Results**

**Coefficients[a]**

| Model | | Unstd. | Coef. | Stndrd Coef. | t | Sig. | Correlations | | | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | Zero Order | Partial | Part | Tol. | VIF |
| 1 | (Constant) | 1049.851 | 926.654 | | 1.133 | .263 | | | | | |
| | Nikkei 225 | .064 | .012 | .283 | 5.151 | .000 | .743 | .613 | .225 | .632 | 1.581 |
| | Brent Crude Oil Prices | 26.528 | 1.951 | .746 | 13.599 | .000 | .926 | .899 | .594 | .634 | 1.578 |
| | Nilai Tukar Rupiah | .107 | .062 | .076 | 1.731 | .091 | .199 | .252 | .076 | .982 | 1.019 |

b. Dependent Variable: IHSG (Y)

Source: SPSS Statistic 25 Output (2024)

By paying attention to the table of multiple linear regression analysis test results above, the following conclusions can be drawn:

a. $\beta 0$ or a constant value of 1049.851 which means that if all the independent variables in this study are constant or there is no change, the variable Y (JCI) is worth 1049.851 units.
b. The regression coefficient value of the Nikkei 225 variable (X1) of 0.064 indicates that if Nikkei 225 increases by one point then the JCI will increase by 0.064 points assuming other independent variables are constant.
c. The regression coefficient value of the *Brent Crude Oil Prices* variable (X2) of 26.528 indicates that if the *Brent Crude Oil Prices* increases by one point, the JCI will increase by 26.528 points with the assumption that the other independent variables are constant.
d. The regression coefficient value of the Rupiah Exchange Rate variable (X3) of 0.107 indicates that if the Rupiah Exchange Rate increases by one point, the JCI will increase by 0.107 points assuming other independent variables are constant.
e. (e) is interpreted as a confounding variable or standard error outside the model in the study.

Simultaneous testing can be done through the F test to be able to provide an overview of the influence given by all independent variables on the dependent variable simultaneously or together. The results of simultaneous testing or F test of the tested variables namely Nikkei 225 (X1), *Brent Crude Oil Prices* (X2), and Rupiah Exchange Rate (X3) on the Composite Stock Price Index (JCI) through the following table:

**Table 4.**
**F Test Results**

| Coefficients[a] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | | Unstd. | Coef. | Stndrd Coef. | t | Sig. | Correlations | | | Collinearity Statistics | |
| | | B | Std. Error | Beta | | | Zero Order | Partial | Part | Tol. | VIF |
| 1 | (Constant) | 1049.851 | 926.654 | | 1.133 | .263 | | | | | |
| | Nikkei 225 | .064 | .012 | .283 | 5.151 | .000 | .743 | .613 | .225 | .632 | 1.581 |
| | Brent Crude Oil Prices | 26.528 | 1.951 | .746 | 13.599 | .000 | .926 | .899 | .594 | .634 | 1.578 |
| | Nilai Tukar Rupiah | .107 | .062 | .076 | 1.731 | .091 | .199 | .252 | .076 | .982 | 1.019 |
| c. Dependent Variable: IHSG (Y) | | | | | | | | | | | |

Source: SPSS Statistic 25 Output (2024)

Taking into account these criteria, the value of $F_{(count)} > F_{table}$ is 160.132> 2.816 with a significance value of 0.00 <0.05, so H0 is rejected and H1 is accepted, meaning that all independent variables (X), namely the Nikkei 225 Index, *Brent Crude Oil Prices,* and the Rupiah Exchange Rate simultaneously or together have a significant effect on the dependent variable, namely the Composite Stock Price Index (IHSG) on the Indonesia Stock Exchange (IDX).

Partial testing can be done through the t test to provide an overview of the influence given by each independent variable on the dependent variable partially. The results of the partial test or t test of the tested variables namely Nikkei 225 (X1), *Brent Crude Oil Prices* (X2), and Rupiah Exchange Rate (X3) on the Composite Stock Price Index (JCI) through the following table:

**Table 5.**
**Results of the t-test**

| Coefficients[a] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | | Unstd. | Coef. | Stndrd Coef. | t | Sig. | Correlations | | | Collinearity Statistics | |
| | | B | Std. Error | Beta | | | Zero Order | Partial | Part | Tol. | VIF |
| 1 | (Constant) | 1049.851 | 926.654 | | 1.133 | .263 | | | | | |
| | Nikkei 225 | .064 | .012 | .283 | 5.151 | .000 | .743 | .613 | .225 | .632 | 1.581 |
| | Brent Crude Oil Prices | 26.528 | 1.951 | .746 | 13.599 | .000 | .926 | .899 | .594 | .634 | 1.578 |
| | Nilai Tukar Rupiah | .107 | .062 | .076 | 1.731 | .091 | .199 | .252 | .076 | .982 | 1.019 |
| c. Dependent Variable: IHSG (Y) | | | | | | | | | | | |

Source: SPSS Statistic 25 Output (2024)

By paying attention to the t test results table above, the following conclusions can be drawn:

a. The t test results on the Nikkei 225 Index (X1) obtained $t_{count}$ of 5.151. Therefore, if you look at the criteria used in this test, the value$t_{hitung} > t_{tabel}$ is 5.151> 2.01537 with a significance value of 0.00 <0.05, it can be concluded that the independent variable

Nikkei 225 / 225 Index (X1) partially has a significant effect on the Composite Stock Price Index / HSG (Y) on the Indonesia Stock Exchange (IDX) for the period 2020-2023.

b. The t test results on *Brent Crude Oil Prices* (X2) obtained t $_{count}$ of 13.599. Therefore, if you look at the criteria used in this test, the value$t_{hitung} > t_{tabel}$ is 13.599> 2.01537 with a significance value of 0.00 <0.05, it can be concluded that the independent variable *Brent Crude Oil Prices* (X2) partially has a significant effect on the Composite Stock Price Index (Y) on the Indonesia Stock Exchange (IDX) for the period 2020-2023.
c. The t test results on the Rupiah Exchange Rate (X3) obtained t $_{count}$ of 1.731. Therefore, if you look at the criteria used in this test, the value$t_{hitung} < t_{tabel}$ is 1.731 < 2.01537 with a significance value of 0.091 > 0.05, it can be concluded that the independent variable Rupiah Exchange Rate (X3) partially does not have a significant effect on the Composite Stock Price Index (Y) on the Indonesia Stock Exchange (IDX) for the period 2020-2023.

Price fluctuations in the Jakarta Composite Index (JCI) have the potential to be influenced by the three independent variables, namely the Nikkei 225 Index*, Brent Crude Oil Prices,* and the Rupiah Exchange Rate. Seen from the context of the global economy, geographical proximity and the many bilateral co-operations between the two countries cause the economic process to run with a certain scale of dependence. On the other hand, as reported by GoodStats (2022), Indonesia is the 27th largest importer in the world with an import value of US$ 237.4 billion, so Indonesia has a high risk due to fluctuations in crude oil prices. In connection with import and export activities, the Rupiah Exchange Rate also has an important role as one of the factors that affect the economic process in Indonesia. Companies that have a scale of dependence on import activities when foreign currency depreciation occurs can increase the increase in production costs, so that *profitability margins* have a risk of decline. A weak Rupiah exchange rate will also give investors a tendency to withdraw their investment interest. The intercorrelation between the Rupiah Exchange Rate and the Jakarta Composite Index (JCI) is dynamic, depending on internal and external factors that can have a significant influence.

If viewed individually, the characteristics of the two countries have some similarities in needs and demands, so that they can have an impact on each other. The two countries that often engage in bilateral cooperation can also be a reason why Indonesia and Japan are related. On the other hand, the Indonesian economy is also influenced by domestic factors that have an impact on fluctuations in economic conditions. These results are considered in line with research conducted by Darmawan & Haq (2022) that the Nikkei 225 Index (Japan Country Index) also has a significant positive influence on the JCI in the period January 2010 to December 2019. The same thing was also revealed by (Roofica & Pertiwi, 2021), explaining that the Nikkei Index had a positive effect on the JCI for the period January 2015 to December 2019.

*Brent* crude oil plays a major role as an oil supplier for Europe and Asia, so its price fluctuations will have an impact on global stock market conditions. *Brent Crude Oil* is used as an indicator in determining the condition of the world economy, especially in the type of crude oil commodity, due to the number of transactions that reach 2/3 of the world. On the other hand, the Indonesian Crude *Oil Price* (ICP) uses *Brent Crude Oil Prices* as a reference in determining market prices.

These results are considered in line with research conducted by Darmawan et al (2020) that *Brent Crude Oil Prices* affect the performance of the Indonesian stock market influenced by several factors such as Production Costs, Inflation Expectations, and the Economic Cycle. The same thing was also revealed by Lutfiyah (2022) that there was a partial positive significant effect between *Brent Crude Oil Prices* on JCI for the period March 2020 to January 2022. Not only that, research conducted by Sari & Nugroho (2024) showed a partial positive significant effect between *Brent Crude Oil Prices* on JCI for the period 2018 to 2023.

On the other hand, the rupiah exchange rate not having a significant effect could be due to the dominance of other domestic factors such as interest rates and inflation. If the presence of these factors is more influential than other variables, then the impact of the rupiah exchange rate will appear to have no significant impact on the JCI. On the other hand, government intervention in participating in maintaining the stability of exchange rate conditions can provide a reduction in the direct impact of exchange rate fluctuations on the JCI. These results are considered in line with research conducted by Liantanu et al (2023), which showed that the Rupiah Exchange Rate had no significant effect partially on the JCI for the period 2014 to 2021.

## CONCLUSION

The results of simultaneous testing (F test) obtained that the *Nikkei Stock Exchange* Index (X1), *Brent Crude Oil Prices* (X2), and the Rupiah Exchange Rate (X3) simultaneously affect the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange (IDX) for the period 2020-2023. This is due to the interconnection in the global economic scheme with a close relationship with a significant simultaneous effect on the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange. All three play a vital role in each part so that they are interrelated with each other. Thus, changes that occur in the independent variables can affect the movement of the Composite Stock Price Index (HSG) as a whole. On the other hand, the results of partial testing (t-test) obtained some conclusions that *The Nikkei Stock Exchange / N225* Index (X1) has a significant effect on the Composite Stock Price Index / HSG (Y) for the period 2020-2023. *Brent Crude Oil Prices* (X2) has a significant effect on the Composite Stock Price Index / HSG (Y) for the period 2020-2023. Otherwise, The Rupiah Exchange Rate (X3) has no significant effect on the Composite Stock Price Index (Y) for the period 2020-2023.

The research results obtained can provide an interpretation of the Nikkei Stock Exchange Index, Brent Crude Oil Prices, and the Rupiah Exchange Rate having a significant effect together on the Composite Stock Price Index (JCI) so that researchers hope that investors can make the research results as a consideration for investors in choosing or deciding investment decisions so that they can avoid losses or excessive price fluctuations. For other researchers who have the desire to conduct similar research, they can provide development as well as include material differentiation in terms of time periods and other variables in the study so that they can add insight and knowledge related to stock prices.

## REFERENCES

Ambarwati, F., & Nugroho, R. H. (2022). The Effect of Nikkei 225 Index, Inflation, USD/IDR Exchange Rate and BI Rate on the Composite Stock Price Index on the Indonesia Stock Exchange July Period. Indonesian Scientific Journal, 7(4). https://doi.

Basit, A. (2019). The Effect of World Gold and Oil Prices on the Price Index. Journal of Accounting Applications, 42-51.

Bodie, Z., Kane, A., & Marcus, A. J. (2021). Investments (11th ed.). New York: McGraw-Hill Education.

Brigham, E. F., & Houston, J. F. (2020). Fundamentals of Financial Management. Beijing: Cengage Learning.

Budi, A. D. A. S., Septiana, L., & Mahendra, B. E. P. (2024). Understanding Classical Assumptions in Statistical Analysis: An In-depth Study of Multicollinearity, Heteroscedasticity, and Autocorrelation in Research. West Science Multidisciplinary Journal, 03(01), 1-11.

Indonesia Stock Exchange. (2021). IDX Stock Index Handbook v1.2. Jakarta: Indonesia Stock Exchange.

Darmawan, I., Siregar, H., Hakim, D. B., & Manurung, A. H. (2020). The Effect of Crude Oil Price Shocks on Indonesia Stock Market Performance. Journal of Organisation and Management, 16(1), 11-23.

Darmawan, S., & Haq, M. S. S. (2022). Analysis of macroeconomic influences, global stock indices, world gold prices and world oil prices on the Jakarta Composite Index (JCI). Journal of Economic and Business Research, 15(2), 95-107.

Gunawan, A. (2020). COVID-19 Pandemic and the Challenge of Global Recession. Jakarta: Ministry of Finance.

Hattori, T., & Katano, M. (2020). Do Fiscal Policy News Shocks Affect JGB Yield? Evidence from COVID-19. Banque De France Research Paper.

Herlianto, D., & Hafizh, L. (2020). The Effect of the Dow Jones Index, Nikkei 225, Shanghai Stock Exchange, and Straits Times Index Singapore on the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange (IDX). INOBIS: Indonesian Journal of Business Innovation and Management, 3(2), 211-229.

Hidayat, A., Liliana, L., & Andaiyani, S. (2021). Factors Affecting the Composite Stock Price Index during Covid-19 Pandemic Crisis. Trace: Journal of Economics and Policy, 14(2), 333-344. https://doi.

IG International. (2020). The World's Biggest Oil Producers in 2020, Online, ( https://www.ig.com/en/trading-strategies/world-s-biggest-oil-producers-200722 , accessed on 27 September 2024).

Isbahi, M. B., Zuana, M. M. M., & Toha, M. (2024). The Multi-Social Relation of the Cattle Industry in the Plaosan Subdistrict Animal Market of Magetan Regency. *Malacca: Journal of Management and Business Development* , *1*(1), 31–46. https://doi.org/10.69965/malacca.v1i1.51

Indonesia Stock Exchange. (2023). IDX Yearly Statistics 2023, Online, ( https://www.idx.co.id/en/market-data/statistical-reports/statistics/ , accessed on 29 September 2024).

International Monetary Fund. (2021). World Economic Outlook Update, Online, ( https://www.imf.org/en/Publications/WEO/Issues/2021/01/26/2021-world-economic-outlook-update , accessed on 29 September 2024).

Investing. (2023). Historical Data Brent Crude Oil, Online, ( www.investing.com , accessed on 29 September 2024).

Istinganah, A., & Hartiyah, S. (2021). The Effect of Inflation, Interest Rates, Rupiah Exchange Rate, Gross Domestic Product and Money Supply on the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange (IDX) for the Period 2010 to 2019. Journal of Economic, Business and Engineering (JEBE), 2(2), 245-252. https://doi.org/10.32500/jebe.v2i2.1739.

Liantanu, A., Yanti, L. D., & Oktari, Y. (2023). The Effect of Interest Rates, Rupiah Exchange Rate (Kurs), Inflation, and Gross Domestic Product Growth on the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange for the period 2014-2021. Eco-Buss, 5(3), 1081-1094.

Lutfiyah, N. (2022). The Effect of Covid-19, Inflation Rate and Crude Oil Price on Investment Decisions on the Indonesia Stock Exchange. Journal of Social Science, Management, Accounting, and Business, 3(2), 83-91.

Mutiara, K., & Jojok Dwiridotjahjono. (2024). The Effect of National Macroeconomic Factors on the Composite Stock Price Index on the Indonesia Stock Exchange: Case Study 2018-2022. Al-Kharaj: Journal of Islamic Economics, Finance & Business, 6(10). https://doi.org/10.47467/alkharaj.v6i10.2844.

Nasution, N. K., Soemitra, A., & Batubara, M. (2023). Analysis of The Influence of Gdp, Exchange Rate, Gold Price, Bi Rate, And JCI on Jii Islamic Investment Perspective. Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE), 6(3). https://doi.org/10.31538/iijse.v6i3.3923.

Nidianti, E., & Wijayanto, E. (2019). Analysis of the Effect of Exchange Rate, BI rate and Inflation on JCI on the IDX 2014-2017 Period. Keunis Journal Scientific Magazine, 7(1).

Nugrahaningsih, N., & Nuzulian, U. (2020). Japan's Tourism Industry Policy during the Covid-19 Pandemic in 2020. Sovereign: Undergraduate Journal of International Relations. 1-15.

Nurwulandari, A. (2020). Effect of Covid-19 Pandemics on Asean Stock Exchange. International Journal of Innovation, Creativity and Change, 13(1), 1495-1504.

OECD. (2024). Economic Outlook for Southeast Asia, China and India 2024. OECD Publishing. https://doi.org/10.1787/3bbe7dfe-en.

Rahmawati, W. E., & Setyobudi. (2023). Analysis of Inflation-Exchange and BI Rate on the Composite Stock Price Index on the Indonesia Stock Exchange 2015-2019. Journal of Accounting and Financial Technology, 1(2), 52-61. https://doi.

Roofica, Y., & Pertiwi, T. K. (2021). Dow Jones Index, Nikkei 225, Inflation and Trading Volume: Analysis of the Effect on JCI. Ecobisma: Journal of Business Economics and Management, 8(2), 113-132. https://doi.

Sari, A. A., & Hidayat Nugroho, R. (2024). The Effect of World Gold Prices, Dow Jones Index, World Oil Prices (Brent Crude Oil) on the IHGS of Mining Companies: Empirical Study of Mining Sub-Sector Companies Listed on the Indonesia Stock

Exchange for the Period 2018 - 2023. Al-Kharaj: Journal of Economics, Finance & Sharia Business, 6(6), 3911-3927. https://doi.org/10.47467/alkharaj.v6i6.1287

Sugiyono. (2020). Quantitative Qualitative and R&D Methods. Bandung: Alfabeta.

Sutandi, Wibowo, S., Sutisna, N., Se Fung, T., & Januardi, L. (2021). The Effect of Inflation, Rupiah Exchange Rate (Kurs) and Interest Rate on the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange (IDX) for the 2016-2020 Period. Accountotechnology: Scientific Journal of Accounting and Technology, 13(2), 1-14. https://doi.org/10.31253/aktek.v13i2.891