

THE ANALYSIS OF GLOBAL STOCK INDICES AND INDONESIA'S MACRO CONDITIONS ON THE INDONESIA STOCK EXCHANGE COMPOSITE STOCK PRICE INDEX

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Abstract

This study aims to examine the influence of global stock indices and macroeconomic conditions in Indonesia on the Jakarta Composite Index (JCI). The global stock indices analyzed in this study are the Dow Jones Industrial Average (DJIA), Nikkei 225 (N225), Shanghai Stock Exchange Composite (SSE), Strait Singapore index. The macroeconomic indicators that analyzed in this study are the inflation rate, the US dollar exchange rate against the Indonesian rupiah, and the BI rate. This study was conducted using secondary data. The research period was 3 years for 36 months from January 2018 to December 2020. The data used in this study are secondary data with a sample collection method using Purposive Sampling against JCI. Data analysis in this study was carried out using Microsoft Office Excel 2016, as well as hypothesis testing using panel data regression analysis with the EViews program version 10.0 with a significance level of 5%. Research Results The results showed that in the short term, Index DJIA , Nikkei Index 225, Interest rates have a positive effect on the movement of JCI. This suggests that an increase in the DJIA index, Nikkei 225 Index, interest rates will result in an increase in the JCI, While, Shanghai Index, STI, Inflation has no effect on the JCI

Keywords: Global Stock Indices, Inflation, Interest rates

INTRODUCTION

The Capital Market is not only useful only limited to the business world, it also has an important role for the community as a means to invest. The capital market is a place for long-term capital transactions, where demand is represented by companies and supply is represented by investors (Widoatmodjo, 2015). Law of the Republic of Indonesia No. 8 Year 1995 on the capital market has a strategic role in national development. This makes the Indonesian capital market part of the economic instrument, so that its development can be used to see the picture of the Indonesian economy. Nevertheless throughout 2021, JCI experienced an increase of 10.08%. However, at the end of December it had decreased by 0.29% last 2021 JCI fell 029 percent but so far this year it rose 1008 percent. Darmadji and Fakhruddin in Sutej a and Gunardi (2016:7) state

that the capital market is a place in the sale of various long-term financial instruments (securities) such as debt, equity (shares), derivative instruments and other instruments. The capital market serves as a forum to bring together parties issuing securities (issuers) with parties who have funds (investors). The transfer of investment that occurs in the capital market because the investor as a rational party will consider the element of risk (*risk*) and the rate of return (*return*) of an investment. This caused a shock to the capital markets where it would be transmitted elsewhere.

Stock prices on world exchanges are not always fixed, sometimes they increase and may also decrease, depending on the forces of demand and supply. The occurrence of fluctuations in stock prices in the capital market makes the stock exchange attractive to some investors (investors). On the other hand, the increase and decrease in stock prices can occur due to fundamental, psychological, and external factors. There are several macro factors that affect stock investment activities on the IDX, including the inflation rate, BI rate, American stock market index, Shanghai Stock Exchange, Japan Exchange Group, Hong Kong Exchanges international interest rate and others. The high rate of inflation can reduce people's purchasing power.

The increase in inflation will reduce investor confidence in capital market conditions, resulting in investors withdrawing their funds so that the value of stocks decreases. Meanwhile, the increase in the BI rate will make the tendency of capital owners to shift their capital to the capital market, which will certainly have a positive impact on the capital market which is marked by an increase in the stock price index. Capital Markets in the world have a very large correlation especially the American capital market which has the most influence, although there are from Asia and Europe, but not as large as the United States because their investors enter the global market around the world. If the Indeks Dow Jones rises it will result in a worldwide stock price reaction as well as a share price on the IDX. Changes in the level of the Dow Jones index have an impact on the economy and capital markets. It can be seen that The United States (US) stock exchange or wall street rose to touch a record high in stock trading Friday, July 9, 2021. At the close of trading on Wall Street, the Dow Jones index rose 448.23 points or 1.3 percent to 34,870.16. The S&P 500 index rose 1.1 percent, and touched a record high of 4,369.55. The Nasdaq stock index rose 1 percent to 14,701.92. The S&P 500 index rose in six weeks. Gains in Friday trading this week brought the main benchmark stock index higher during the week. The Dow Jones index rose 0.2 percent. The S&P 500 and Nasdaq indices climbed 0.4 percent. The capital market is one of the means for companies that want to increase the need for long-term funds to support business continuity, in addition, the capital market can also be an alternative for investors who want to invest their funds with various levels of return and the level of risk faced (Hartono, 2015). Law of the Republic of Indonesia No. 8 In 1995 concerning the capital market, the capital market has a strategic role in national development. This makes the capital market in Indonesia has become part of the economic instrument, so that its development can be used to see the picture of the Indonesian economy. Overall, it can be said that the Indonesian capital market is an emerging market. This can be seen from the JCI trading in 2021 closed down 19.1 points (0.29%) to 6,581.4. Nevertheless, in the last 10 years, JCI closed higher on the last day of trading. Based on data from the Indonesia Stock Exchange (IDX), in the last 10 years or since 2011, seven times JCI was able to perch in the green zone at the close of trading at the end of the year. Thus, only three times JCI was mired in the red zone. JCI increase when trading closes occurred in 2011 (+0.3%), 2012 (+0.8%), 2013 (+1.5%), 2014 (+0.9%), 2015 (+0.5%), 2017 (+0.7%), and 2018 (+0.1%). Nevertheless, capital market conditions in Indonesia are still relatively vulnerable to general world economic conditions or events. The Jakarta Composite Index (JCI) successfully rose 0.5% to 6,118.15, after previously slumping 0.78%. Foreign capital inflows into the country were able to

boost JCI performance, because foreign investors made a net buy of Rp. 1.12 trillion in the regular market, but in Wednesday trading (19/8/2021) the risk of JCI slump was greater, because the United States (US) or Wall Street stock exchanges declined for 2 consecutive days. In 2018 China, which is in a trade war with the US, has had a negative impact on the global economy. China as one of Indonesia's largest export destination countries certainly has a negative impact in terms of Indonesia's own economy, plus the global economic slowdown then causes the price and demand for commodities that are the mainstay of Indonesia's exports to decline. To describe the condition of the capital market and the Chinese economy, the Shanghai Stock Exchange Composite Index (SSEC) is used. Another index used for investors' decision-making is the Nikkei 225 (N225), which is a composite stock price index of Japan. As of July 2019, Japan is one of the largest non-oil and gas export destinations after the US and China with a portion of 8.99% (BPS), which means that the Nikkei 225 Index has a positive effect on the JCI on the Indonesian Stock Exchange (Immanuel and Wirawan 2017). Index Straits Times Singapore (STI) is another index that can be used in decision making by investors where Index Straits Times Singapore is the main index of Singapore which is one of the countries included in the Indonesian export destination. In addition to global stock indices, the development of a country's capital market is also influenced by a country's economic conditions. For this reason, macroeconomic indicators are needed that can describe the overall economic condition of a country. The macroeconomic indicators used in this study are the Inflation rate of the rupiah exchange rate against the United States dollar, and the interest rate .

Problem of the Research

1. Does the Dow Jones Index affect the Composite Stock Price Index on the Indonesia Stock Exchange
2. Does the Dow Jones Index affect the Composite Stock Price Index on the Indonesia Stock Exchange
3. Does Shanghai Stock Exchange Composite Index affect the Composite Stock Price Index on the Indonesia Stock Exchange
4. Does the Straits Times Singapore Index affect the Composite Stock Price Index on the Indonesia Stock Exchange
5. Does the Straits Times Singapore Index affect the Composite Stock Price Index on the Indonesia Stock Exchange
6. Does the Straits Times Singapore Index affect the Composite Stock Price Index on the Indonesia Stock Exchange

LITERATURE REVIEW

1. Shares

Shares are proof of capital deposits or proof of ownership of a company that arises as a result of investment (investment) made to the issuer (issuer). By owning shares of a company, investors will have rights to the company's income and wealth after deducting the payment of all company obligations

2. JCI reflects the movement of changes in the daily stock price of all stocks listed on the Jakarta stock exchange (Gumanti, 2011: 72).
3. Dow Jones Index

The Dow Jones Industrial Average (DJIA) is one of the stock market indices founded by The Wall Street Journal editor and Dow Jones & Company founder Charles Dow. Dow created this index as a way to measure the performance of industrial components in the American stock market

4. The Nikkei 225 Index is a representation/reflection of the share prices of the 225 leading issuers on the Tokyo Stock Exchange, Japan. The Nikkei 225 index has existed since September 1950. The Nikkei 225 index is a stock market index for Tokyo Stock Exchange (*Tokyo Stock Exchange*- TSE).
5. The Straits Times Index(abbreviated: STI; English:Straits Times Index) is aindexstock market by capitalization on the Singapore Stock Exchange. This index is used to record and monitor the daily changes of the 30 largest companies in the stock market Singapore and as a leading indicator of market performance in Singapore
6. In general,inflation rateis a scale of price increases in goods and services over a period of time. If the price of goods and services increases, theninflationwill also increase

RESEARCH METHODS

IDX Composite Stock Price Index

The Composite Stock Price Index describes a series of historical information about the movement of the price of a composite stock of all stocks, up to a certain date.

$$IHSG = \frac{\text{Nilai Pasar (P1. Q1 + P2. Q2+ ... +Pi. Qi + Pn. Qn)}}{(\text{Nilai Dasar})} \times 100$$

- a. Dow Jones Index (X_1)
The Dow Jones Index (DJIA) is an index that can be used to measure the performance of companies engaged in the industrial sector in the United States.
- b. Nikkei 225 Index (X_2)
The Nikkei 225 index (N225) is a combination of 225 selected companies, with certain requirements. The selected company is a company that has large assets and has good credibility in the market.
 $DJIA = \Sigma /$
- c. SSE Index *Composite* (X_3)
Shanghai Stock Exchange Composite Index terdiri dari semua shares tercatat di Shanghai Stock Exchange, Indeks ini bertujuan to mencerminkan keseluruhan kinerja Shanghai stock market.
Market Cap/ Base Period x Base Value
- d. Straits Times Index (X_4)
The Straits Times Index Singapore is a stock market index based on capitalization on the Singapore stock exchange. The index is used to record and monitor the daily changes of the 30 largest companies in the Singapore stock market and as a key indicator of market performance in Singapore
 $STI = \Sigma s /$
- e. Inflation (X_5) , increases in the price of goods and services in general and continuously over a period of time. $\text{Inflation} = \frac{\text{CPI} - \text{CPI } n-1}{\text{CPI } n-1} \times 100\%$
- f. Interest rate (X_6), cost of funds incurred by financial institutions, in particular bank, for funds entrusted to

$$\text{Interest rate} = r = (1 + i/n)^n - 1$$

Population and Samples , Data Retrieval

The population that is the object of this study is the monthly price data of JCI, DJIA, SSEC, N225, Inflation and interest rates during the period January 2019 - December 2021 (36 months). The technique in determining the sample used is a saturated sample, which is a technique in determining a sample where all members of the population are used as a sample, namely monthly price data of DJIA, SSEC, N225 and JCI, Inflation and interest rates during the period January 2019 - December 2021 (36 months)..

The data collection technique in this study uses the documentation method, namely by recording or documenting the monthly closing price

Panel Data Regression Analysis Methods

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + e$$

There are three methods that can be used to consider panel data, including:

- a. *Common Effect Model* (CEM) or *Pooled Least Square* (PLS)
- b. *Fixed Effect Model* (FEM)
- c. *Random Effect Model* (REM)

There are several methods to be used

- a. *Test F Restrighed* (Test Chow)
- b. *Test Haussman*
- c. *Test Langrange Multiplier*

Hypothesis Test

Hypothesis testing is carried out to make decisions from the results of data analysis. The hypothesis test used in the study was a partial test (Test T) and a coefficient of determination test (R^2) using the program *E-Views* version 10. Partial test or t test is hypothesis testing that aims to find out how far each independent variable partially affects the dependent variable

Some of the following characteristics are used as a decision to reject or accept hypotheses, namely:

- a. Decision making based on the comparison of the values of t_{count} and t_{table} as follows:
 - 1) If $t_{count} > t_{table}$, then it can be concluded that H_0 is rejected and H_a is accepted which means it has an effect.
 - 2) If $t_{count} < t_{table}$, then it can be concluded that H_0 is rejected and H_a is accepted which means it has an effect.
- b. Decision making based on probability or significance values, as follows:
 - 1) If the significance value > 0.05 , then it can be summed up that H_0 is accepted and H_a is rejected which means it has no effect.
 - 2) If the significance value > 0.05 , then it can be summed up that H_0 is accepted and H_a is rejected which means it has no effect.
- 3) **Determination Coefficient Test (Test R^2)**

The coefficient of determination is used to determine the overall extent to which the independent variable can explain the dependent variable (Basuki & Prawoto, 2015, p. 14). In this study, the coefficient of determination test is used to determine how much the effect of stock price is explained by the independent variable of profitability, liquidity, and solvency. The value of the coefficient of determination is usually between 0 and 1. If the coefficient of determination number is closer to 1, it is a good result because the variables used are more accurate and able to explain the actual data.

RESULTS AND DISCUSSION

The objects used in this study are the Global stock index: DJIA, N225, SSE, STI and also objects that describe Indonesia's macro conditions, namely the inflation rate and interest rate as well as the Composite Stock Price Index (JCI).

Descriptive Statistics

Descriptive statistics of the data are carried out to describe the results of the processing of the research data used. From this static, the mean, meadian, maximum, minimum, and standard deviation values of the research variables used will be explained. The following are the descriptive statistical results on the study treated with EViews 12:

Table 1. Descriptive Analysis Results

	IHSG	C	DJIA	N225	SSE	STI	INFLATIO N	TRIBE INTEREST
Mean	5900.366	1.000000	29076.91	24346.63	3189.242	3.030833	2.208333	4.472222
Median	6040.935	1.000000	27916.56	23162.44	3154.405	3.165000	1.915000	4.125000
Maximum	6591.350	1.000000	36338.30	29452.66	3639.780	3.410000	3.490000	6.000000
Minimum	4538.930	1.000000	21917.16	18917.01	2584.570	2.460000	1.320000	3.500000
Std. Dev.	601.0608	0.000000	3947.127	3388.886	303.7074	0.289999	0.745947	0.955768
Observations	36	36	36	36	36	36	36	36

Source: Data processed with EViews 12

Based on the results of descriptive statistical tests in Table 1, it can be explained as follows:

a. Composite Stock Price Index (JCI) Variables

JCI price data in this study has an average of 5,900 while the highest JCI price is 6,591 which is the JCI price in October 2021. While the lowest JCI value was 4,538 which is the price in March 2020. Furthermore, there is a median value of 6,040 and a standard deviation value of 6,0106.

b. Dow Jones Index Variables (DJIA)

The Dow Jones stock index price data in this study has an average of 27,916 while the highest Dow Jones stock index price is 36,338 which is the price of the Dow Jones stock index in December 2021. Meanwhile, the price value of the Dow Jones stock index is the lowest at 21,917, which is the price in March 2020. Furthermore, there is a median value of 27,916 and a standard deviation value of 3,947.

c. Nikkei Index Variables (N225)

The Nikkei stock index price data in this study has an average of 24,346 while the Nikkei stock index price is the highest at 29,452 which is the price of the Nikkei stock index in September 2021. Meanwhile, the price value of the Nikkei stock index is the lowest at 18,917, which is the price in March 2020. Furthermore, there is a median value of 23,162 and a standard deviation value of 3,388.

d. Shanghai Index Variable (SSE)

The SSE price index data in this study had an average of 3,189. Meanwhile, the price of the SSE index was 3,639 which is the price of the SSE index in December 2021. Meanwhile, the lowest SSE index price value was 2,584 which was the price in January 2019. Furthermore, there is a median value of 3.154 and a standard deviation value of 303.7.

e. Straits Times Index Variable (STI)

The STI index price data in this study had an average of 3,030. While the price of the highest STI index was 3,410 which was the price of the STI index in April 2019. While the lowest STI index price value is 2,460 which is the price in October 2020. Furthermore, there is a median value of 3.165 and a standard deviation value of 0.289.

f. Inflation Rate Variable

The level of inflation in this study has an average of 2.208 while the highest level of inflation is 3.49 which is the level of inflation in August 2019. While the lowest inflation rate is 1.32 which is the value in August 2020. Furthermore, there is a median value of 1,915 and a standard deviation value of 0.74.

g. Interest Rate Variable

The interest rate data in this study had an average of 4,472. While the highest interest rate value was 6.00 which was the value in January 2019. While the lowest interest rate value is 3.50 which is the price in January 2020. Furthermore, there is a median value of 4.125 and a standard deviation value of 0.955.

Chow Test Panel Data Regression Analysis Method

Table 2 Chow test

Test cross-section fixed effects			
Effects Test	Statistic	df	Prob.
Cross-section F	2.410903	(16,13)	0.0580
Cross-section Chi-square	49.610772	16	0.0000

Source: Data processed with EViews 12

Based on Table 2, it can be seen that the results of the chow test indicate that H_0 was rejected and H_1 was accepted. This can be seen from the probability value of *cross-section chi-square* < 0.05 which means *fixed effect model* (FEM) used.

Table 3 HAUSSMAN TEST

The use of the wear test was carried out for the selection between the model *Fixed Effect Model* (FEM) and also *Random Effect Model* (REM) with the following hypotheses:

Correlated Random Effects - Hausman Test

Summary	Chi-Sq. Statistic	Chi-Sq. df	Prob.
Random cross section	6.187984	6	0.4025

Source: Data processed with EViews 12

Based on the above results, it is known that the value of prob. *Cross-cetion* of 0.4025 which means greater than 0.05 so that H_0 is accepted and a multiplier lagrange test will be performed to determine the selected model.

Table 4 Multiplier Lagrange Test

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	3.266957 (0.0707)	0.976402 (0.3231)	4.243359 (0.0394)

Source : Eviews Ver 12

Based on Table 4, the results of Breush Pagan $0.0394 < 0.05$, then H0 is rejected and H1 is accepted so that the selected model is *random effect model* (REM).

Regression Results with Rem Model

After carrying out three tests to determine the most appropriate model for this study, it is known that *Random Effect Model* is the most appropriate model for the regression model. The following are the results of the regression with the BRAKE model:

Table 5. Regression Test Results

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	-4889.613	1023.657	-4.776611	0.0000
DJIA	0.068928	0.034709	1.985858	0.0566
N225	0.126204	0.046177	2.733050	0.0106
SSE	0.457050	0.302335	1.511736	0.1414
STI	219.5902	429.4284	0.511355	0.6130
Inflation	130.9270	119.0489	1.099776	0.2805
SUKU_BUNGA	736.5344	146.1720	5.038821	0.0000

Source: Data processed with EViews 12

Based on the results of regression with THE BRAKE model above, the equation can be made:

$$JCI = -4889 + 0.068928 \text{ Dow Jones} + 0.126204 \text{ Nikkei} + 0.457050 \text{ SSE} + 219.5902 \text{ STI} + 130.9270 \text{ Inflation} + 736.5344 \text{ Interest Rate}$$

Based on the equation above, it is explained as follows:

- The C constant value of -489 indicates that if it is assumed that the variables Dow Jones stock index, Nikkei stock index, Shanghai stock index, Straits Times stock index, inflation rate, interest rate are considered equal to zero, then the JCI value will be value of -489.
- The Dow Jones index (DJIA) coefficient value of 0.06892 indicates a positive correlation between DJIA index and JCI. In other words, when there is a one percent increase in the DJIA index and other variables are assumed to be the same/constant value, there will be an increase of 6.89 percent in JCI.
- The value of the Nikkei 225 (N225) index coefficient of 0.12620 indicates a positive correlation between the N225 index and JCI. In other words, when there is a one percent increase in the N225 index and other variables are assumed to be the same/constant value, there will be an increase of 12.62 percent in JCI.

- d. The Shanghai index (SSE) coefficient value of 0.45705 indicates a positive correlation between the SSE index and JCI. In other words, when there is a one percent increase in the SSE index and other variables are assumed to be the same/constant value, there will be an increase of 45.70 percent in JCI.
- e. The value of the Straits Times index (STI) coefficient of 219,5902 indicates a positive correlation between the STI index and JCI. In other words, when there is a one percent increase in the SSE index and other variables are assumed to be the same/constant value, there will be an increase of 219 percent in JCI.
- f. The value of the inflation rate coefficient of 130.9270 indicates a positive correlation between the inflation index and the CSPI. In other words, when there is a one percent increase in inflation and other variables are assumed to be the same/constant value, there will be an increase of 130 percent in CSP.
- g. The value of the interest rate coefficient of 736,5344 indicates a positive correlation between interest rates and CSPI. In other words, when there is a one percent increase in interest rates and other variables are assumed to be the same/constant value, there will be an increase of 736 percent in the CSP.

Test Hypothesis (TEST T)

Table 6. T Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4889.613	1023.657	-4.776611	0.0000
X1	0.068928	0.034709	2.985858	0.0466
X2	0.126204	0.046177	2.733050	0.0106
X3	0.457050	0.302335	1.511736	0.1414
X4	219.5902	429.4284	0.511355	0.6130
X5	130.9270	119.0489	1.099776	0.2805
X6	736.5344	146.1720	5.038821	0.0000

Source: Data processed with EViews 12

Based on the results of the regression test above, it can be interpreted that:

- a. The Influence of the Dow Jones Index (DJIA) on the Composite Stock Price Index (CSPI)
The value of t_{count} is $2.985858 > 2.04532$ which makes H_0 rejected and H_a accepted. The probability value of $0.0466 < 0.05$ which also makes, H_0 accepted and H_a rejected, so it can be concluded that the Dow Jones Index (DJIA) partially affects the Composite Stock Price Index (CSPI).
- b. The Influence of the Nikkei 225 Index (N225) on the Composite Stock Price Index (CSPI)
The value of t_{count} is $2.773050 > 2.04532$ which makes H_0 rejected and H_a accepted. While the probability value of $0.0106 < 0.05$ which also makes, H_0 is rejected and H_a is accepted, so it can be concluded that the Nikkei 225 index partially affects the Composite Stock Price Index (CSPI).
- c. The Influence of the Shanghai Index (SSE) on the Composite Stock Price Index (CSPI)
The value of t_{count} is $1.511736 < 2.04532$ which makes H_0 accepted and H_a rejected. While the probability value of $0.1414 > 0.05$ which also makes, H_0 is accepted and H_a is rejected, so it can be concluded that the Shanghai Index (SSE) partially has no effect on the Composite Stock Price Index (CSPI).

d. The Influence of the Straits Times Index (STI) on the Composite Stock Price Index (CSPI)

The value of t_{count} is $0.511355 < 2.04532$ which makes H_0 accepted and H_a rejected. While the probability value of $0.6130 > 0.05$ which also makes, H_0 is accepted and H_a is rejected, so it can be concluded that the Strait Times Index partially has no effect on the Composite Stock Price Index (CSPI).

e. Inflation Influence on the Composite Stock Price Index (CSPI)

The value of t_{count} is $1.009776 < 2.04532$ which makes H_0 accepted and H_a rejected. While the probability value of $0.2805 > 0.05$ which also makes, H_0 is accepted and H_a is rejected, so it can be concluded that the level of inflation partially has no effect on the Composite Stock Price Index (CSPI).

f. The Influence of Interest Rates on the Composite Stock Price Index (CSPI)

The value of t_{count} is $5,038821 > 2,04532$ which makes H_0 rejected and H_a accepted. While the probability value of $0.000 < 0.05$ which also makes, H_0 is rejected and H_a is accepted, so it can be concluded that the interest rate partially affects the Composite Stock Price Index (CSPI).

Hypothesis Test (Determination Coefficient Test)

Determination Coefficient Test result value (R^2) : R Square 0.933170 and Adjusted R Square 0.919343 . The results of this test indicate that this value indicates the effect of the Dow Jones Index, Nikkei 225 Index, Shanghai Index, Srtaits Time Index, Inflation and Interest rates on the stock price of 0.919343 or 91.93% where the remainder of this index or 8.07% (100% -91.93%) is influenced by other variables outside this study.

Influence Of Dow Jones Index on JCI

In the test results in the t-test table it is known that the Dow Jones index has a probability value of < 0.05 which is $0.0466 < 0.05$. Hypothesis testing is accepted in carto prove that the Dow Jones Index has an effect on JCI. The significance of the effect of the Dow Jones index on JCI shows that there is an integration between the capital market in the United States and the capital market in Indonesia in the research period.

This can occur due to several factors, such as Indonesia's economic recovery also depends on the Global economic recovery such as the United States economy in the aftermath of the global financial crisis, and the strong integration of the Indonesian capital market with adjacent capital markets (Singapore or Malaysia Index). The effect of the Dow Jones index on JCI is in line with research from (Katti, 2015) which states that the Dow Jones Index has an effect on the movement of JCI. Conversely, research from (Herlianto & Hafizh, 2020) actually states that the Dow Jones index has no effect on the movement of JCI.

Influence of Nikkei Index on JCI

In the test results in the t test table, it is known that the Nikkei index has a probability value of < 0.05 , namely $0.0106 < 0.05$. The second hypothesis test is accepted because it can prove that the Nikkei index has an effect on JCI. The Nikkei 225 index had a positive effect on JCI at BEI. This condition can occur because the Nikkei 225 index is the largest market index in the Asian region.

Foreign capital flows from companies listed on the Nikkei 225 index that enter through the capital market, will certainly have an influence on changes in JCI at IDX (Nugraha & Dewi, 2015). The effect of the Nikkei index on JCI is in line with research from (Nugraha & Dewi, 2015) and

(Oktarina, 2016) which states that the Nikkei index 225 has a positive effect on the movement of JCI. Conversely, research from (Wicaksono & Yasa, 2017) actually states that the Nikkei 225 index has no effect on the movement of JCI.

Influence of Shanghai Index on JCI

In the test results in the t test table, it is known that the SSE index has a probability value of $0.1414 > 0.05$. The third hypothesis test was rejected because it had not been able to prove that the SSE Index had an effect on JCI. This condition can occur due to the trade war that occurred in China with other countries so that this condition slows the economy of China which will ultimately also have an impact on the condition of the capital market in China, in this case investors are likely to see that this condition is a risk in investing in Shanghai index issuers.

Especially during the Covid-19 pandemic where the economy was unstable and reduced investor confidence. The non-influence of the SSE index on JCI is in line with the research from (Wicaksono & Yasa, 2017) which states that the SSE index has no effect on the movement of JCI. Conversely, research from (Oktarina, 2016) actually states that the SSE index has an effect on the movement of JCI.

Influence of Straits Times Index on JCI

In the test results in the t test table, it is known that the Straits Times index (STI) has a probability value greater than 0.05, namely $0.6130 > 0.05$. The second hypothesis test was rejected because it had not been able to prove the position of the Strait Times Index had an effect on JCI. The insignificant effect of the Strait Times Index on JCI shows that there is no relationship between the capital market in Singapore and the capital market in Indonesia in the research period. This also shows that price movements on the Singapore capital market, especially on the Straits Times index, are not the basis for consideration of capital market investors in Indonesia.

This can happen due to several factors, such as the increasing confidence of investors in Indonesia towards domestic companies. This phenomenon is supported by the fact quoted by the Indonesia Stock Exchange in 2020 where there was an increase in investors in the capital market of up to 90% indicating that public interest in becoming an investor in domestic companies increased. In addition, the phenomenon of the Covid-19 Pandemic which limits the export activities and also the tourism of Indonesian people to Singapore is limited so that this condition makes Indonesia not dependent on economic activities in Singapore.

The non-influence of the Straits Times Index on HSG is in line with research from (Hartantio & Yusbardini, 2020), (Budi, 2019), (Herlianto & Hafizh, 2020) which states that the Straits Times Index has no effect on the movement of HSG. Conversely, research from (Situngkir, 2019) which states that the Straits Times index has an effect on the movement of JCI.

Influence of Inflation on JCI

In the test results in the t test table, it is known that inflation has a probability value greater than 0.05, which is $0.2805 > 0.05$. The second hypothesis test was rejected because it had not been able to prove the inflationary position that had an effect on JCI. The insignificance of the Inflation effect on JCI shows that there is no relationship between the amount of money circulating in the community and capital market conditions in Indonesia in the research period

This could happen due to several factors, such as for example *range* inflation changes during 2019-2021 are considered not too large. The CPM even recorded inflation conditions in Indonesia when the pandemic missed below the target of 1.68% in 2020 which is far from the

government target of at least 3%. The Covid-19 pandemic certainly decreased people's purchasing power due to the decrease in money owned by the community due to many limitations such as layoffs, lock-down policies, and restrictions on activities offline.

The non-inflation of the Combined Stock Price Index is in line with research conducted by (Akua Miyanti & Wiagustini, 2018), (Tammu, 2020), (Zuhri et al., 2019). While this is contrary to research from (Ningsih & Alert, 2018), (Sari, 2019), (Setiawan & Mulyani, 2020) which states that there is a significant effect between inflation and the Combined Stock Price Index.

Influence of Interest Rate on JCI

In the test results in the t test table, it is known that inflation has a probability value smaller than 0.05, which is $0.000 < 0.05$. The second hypothesis test was accepted because the test results were able to prove the interest rate position that had an effect on JCI. The influence of interest rates proxied by *BI Rate* shows that interest rate movements are able to influence public investment interest in the capital market.

The interest rate during 2019 to 2021 was always decreased where in 2019 the interest rate set by BI was 6% but at the end of 2021 the interest rate was at 3.5%. This decrease in interest rates is one of the initiations made by Bank Indonesia in dealing with economic conditions during the Covid-19 pandemic. Due to the relatively low interest rate, investors are more interested in investing in the stock market than investing in SBI. The decrease in the interest rate makes the assumption from investors that investing in SBI is not considered to provide a high *return* compared to investing in stock instruments. Thus, this makes an increase in stock transactions that have a direct effect on the movement of the Composite Stock Price Index.

The effect of interest rates on the Combined Stock Price Index is in line with research conducted by (Subagyo et al., 2018), (Ratnaningtyas, 2020), (Zuhri et al., 2019). While this is contrary to research conducted by (Anggraini & Nurhadi, 2019), (Ningsih & Alert, 2018) states that there is no effect between interest rates and the Composite Stock Price Index.

CONCLUSION

Based on the results of the analysis and discussion that have been put forward, then in the short term, global stock index variables and macro indicators that have a significant effect on JCI. DJIA Index, Nikkei 225 Index, and Interest rate rate have a significant effect on JCI while Inflation, Shanghai Index (SSE), Singapore Straits Index (STI), Inflation has no significant effect on JCI. The Dow Jones Index has an effect on stock prices, this shows that an increase in the Dow Jones Industrial Average Index will result in an increase in JCI, and vice versa if the Dow Jones Industrial Average Index decreases, it will result in a decrease in JCI. The second hypothesis shows that the Nikkei 225 Index has a positive effect on the movement of JCI. This shows that an increase in the Nikkei 225 index will result in an increase in JCI, and vice versa, if the Nikkei 225 index decreases, it will result in a decrease in JCI. Furthermore, for the third hypothesis, the Shanghai Composite Index has no effect on the movement of JCI. This shows that the increase in the Shanghai Composite Index will result in a decrease in JCI, and vice versa, if the Shanghai Composite Index decreases, it will result in an increase in JCI. STI has no influence on the combined share price. The final hypothesis is that inflation has a positive effect on the movement of CSPI. This shows that an increase in inflation will result in a decrease in CSHG, and vice versa, if inflation decreases, it will result in an increase in CSHG.

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