

## COVID-19, INFLATION, AND INTEREST RATE: THEIR INFLUENCES ON THE JAKARTA COMPOSITE INDEX

Dwi Nita Aryani\* and Samuel Williem Maupula  
STIE Malangkucecwara, Malang, Indonesia

**Citation (APA 7<sup>th</sup>):** Aryani, D. N., & Maupula, S. W. (2021). Covid-19, Inflation, and Interest Rate: Their Influences on the Jakarta Composite Index. *Jurnal Minds: Manajemen Ide Dan Inspirasi*, 8(2), 339-354.  
<https://doi.org/10.24252/minds.v8i2.22942>

Submitted: 11 August 2021  
Revised: 04 October, 03 & 12 November 2021  
Accepted: 21 December 2021  
Published: 21 December 2021



**Copyright:** © 2021 by the authors.

**ABSTRACT:** This study aims to determine the effect of inflation, interest rates, and the Covid-19 pandemic condition on the Jakarta Composite Index (JCI) and the difference of the JCI before and after the Large-Scale Social Restrictions (LSSR). Data were collected from January to August 2020. This study evaluates the effect of inflation, interest rate, the Covid-19 Pandemic on the JCI by the t-test and regression, while the Wilcoxon Test tested the JCI before and after LSSR. The results revealed that inflation, interest rates, and the Covid-19 pandemic partially and simultaneously affected the JCI. All shares traded in the Indonesia Stock Exchange indexed by the JCI before LSSR are different from the JCI after LSSR.

**Keywords:** Covid-19; Index; Inflation; Interest rate; Large-scale social restrictions

\*Corresponding Author : [dwinita@stie-mce.ac.id](mailto:dwinita@stie-mce.ac.id)

DOI: 10.24252/minds.v8i2.22942

ISSN-E: 2597-6990

ISSN-P: 2442-4951

<http://journal.uin-alauddin.ac.id/index.php/minds>

Publisher: Program Studi Manajemen, Universitas Islam Negeri Alauddin Makassar 339

## INTRODUCTION

Indonesia's government officially confirmed a Corona pandemic on March 2, 2020. Beginning in China, the virus has been spread in many other countries. Coronavirus, or Covid-19, has rapidly ravaged various aspects of humans' lives in the medical, education, and economic sectors. One of the effects on the economic sector is the instability of the Jakarta Composite Index (JCI). This pandemic makes the economic activities are affected. IMF and the World Bank have predicted that the Covid-19 pandemic triggered a global economic recession. According to the Indonesia Ministry of Health, the existence of the Covid-19 virus also has influenced the Jakarta Composite Index (JCI). The stock price would fall off as the rising of market concerns towards the effect of the Covid-19 pandemic on the Indonesian economy.

Many factors influence the Jakarta Composite Index (JCI) fluctuation. Jefry and Djazuli (2020) asserted that inflation, interest rate, and exchange rate simultaneously affect share price; however, interest rate and exchange rate partially did not influence share price. Eldomiaty, Saeed, Hammam, and AboulSoud (2020) asserted that a negative association between inflation and stock price is proven. Meanwhile, interest rate positively affects share price at non-financial companies in the US. An insignificant effect of inflation on the Composite Stock Price Index (CSPI) and a negative influence of interest rate on CSPI are found by Suhadak and Suciary (2021).

In addition, Junaedi and Salistia's (2020) research concluded that internal and external conditions influenced the Jakarta Composite Index (JCI) movement in the Jakarta stock exchange. Internally, pandemic Covid-19 condition and social distancing policy manifested to the large-scale social restrictions (LSSR) have forced the public to study, work, and work from home (WFH). This domestic condition influenced the movement of the stock price in the capital market reflected on the movement of JCI in the stock exchange. On the other hand, the external; Covid-19 pandemic that happened in China and Spain has affected the movements of JCI not only in Indonesia Capital Market but also in Hong Kong (Hangseng), London (FTSE100), and New York (NASDAQ). Coronavirus pandemic in China, The dynamic of the stock market NASDAQ in New York, and Social distancing policy (WFH and LSSR) hurt the stock index movement of JCI in Indonesia. Meanwhile, pandemics happened in Spain, the dynamic of the capital market in Hong Kong (Hangseng) and London (FTSE100) precisely has a positive effect on the capital market in Indonesia (Atmoko, 2020).

Another factor that influences the share price is inflation. Inflation was a situation when the trend of rising prices of goods happened while the value of currency decreased. It makes peoples' purchasing power fall off, affecting stock price and JCI. The low number of demand stocks will influence stock price, and consequently, the JCI index will fall. Krisna and Wirawati (2013) mentioned that inflation negatively influences JCI, and other variables of inflation, exchange rate, and interest rate influence JCI in Indonesia Stock Exchange (IDX). Furthermore, Eldomiaty, Saeed, Hammam, and AboulSoud (2020) said inflation negatively influenced stock price; in contrast, the interest rate was positively affected.

Research conducted by Amin (2012); Alam and Uddin (2009) exhibited a negative influence of interest rate towards stock price in both developed and developing countries. On the other hand, the research done by Umi and Ayi (2017) showed different conclusions in which interest rates had a positive effect. However, it did not significantly affect the stock price index in property companies.

Based on the explanation above, the effect of inflation, the interest rate on JCI is still unclear; therefore, this research aims to analyze the influence of inflation and interest rate on the JCI. The Covid-19 virus outbreak has hit almost all countries globally, so very little research related to the impact of Covid-19 on stock prices. Therefore, this study added the impact of the Covid-19 outbreak on stock prices before and after the Large-Scale Social Restrictions (LSSR) implementation. This research also aims to find out the difference of JCI between before and after LSSR implementation.

This research will contribute to the literature regarding the capital market and factors affecting the share price. Moreover, the results can be a bridge for the current knowledge gap. This study will be a reference and source related to the Covid-19 outbreak condition and LSSR policy's influence on the Jakarta Composite Index. Finally, this study also provides data for the regulators before deciding on LSSR extension policies.

## **THEORETICAL REVIEW**

### *Signaling theory*

Spence (1973) finds signaling theory that explains that information owners can signal by sending news or information of company condition to the receiver. According to Brigham & Houston (2001), a manager can give clues or signals in information or news about a company as a director/hint for the stakeholder. When companies have a good performance, they will send positive signals to the stakeholder and then investors interested in buying shares and finally inducing share price increase.

Signaling theory discusses stock price fluctuations in the market, influencing investor decisions. Investors' responses to positive and negative signals can affect market share conditions. Investors will react differently to respond to the signals, such as hunting for shares. Investors will analyze information either excellent or bad signals. The information obtained will encourage a market reaction indicated by changes in market prices which can be reflected through the stock price index.

### *Inflation*

Inflation is one of the macroeconomics factors that might positively or negatively influence share price, but it might have an insignificant correlation. Khalwaty (2000) says inflation can happen if the goods price, especially peoples' basic needs and services, rises significantly for a long time; simultaneously, the

currency value decreases. This condition will affect purchasing power and savings ability decline. Consequently, the public income cannot be enough to buy goods anymore; therefore public will not be able to save money even for investing. The increasing inflation will affect the ability to invest, including buying shares, and finally, share prices will decline. Following Fama (1981)'s hypothesis, inflation negatively affects the share price.

Moreover, when inflation is high, the price of goods increases, influencing the company's profit. When a company's profitability declines, investors are reluctant to buy shares, which will lower stock prices. Setiawan (2020) tested the effect of inflation on the IDX composite and found that inflation did not influence the stock price; meanwhile, interest rate negatively affects the stock market index.

#### *Interest rate*

The interest rate of the Bank Indonesia Certificate is one of the monetary policy instruments whose fluctuation can affect the share price. The relationship between interest rates and stock prices has an opposite direction. Following the quantity theory of money, when money supply tends to increase, this condition will induce people to hold money and demand to buy share are incline, and finally encourage share price rise. Bissoon, Seetanah, Babajee, Ramdhany, and Seetah (2016); Setiawan (2020) asserted that interest rate negatively correlates with the share price. Alam and Uddin (2009) mentioned that share price negatively correlates with the interest rate. As the interest rate of time deposit is high, investors will withdraw their shares to change their investment and put the money to the banks; hence the share price tends to decrease.

#### *The influence of inflation on JCI*

Research conducted by Krisna (2013) found that inflation influences JCI negatively. When the inflation rate rises, goods or service prices tend to rise. The continuous rise in the price makes the demand for goods and services decrease; therefore, generally, it will affect the company sales rate. It somehow affects the company's turnover; therefore, financial performances fall. As a result, negative feedback surfaces due to decreasing company incomes, making the stock market run down.

This study is also supported by Thobarry's (2009) research that a high inflation rate makes company profitability fall. When a company's profitability drops, it is bad news for traders in the stock exchange, and it influences company stock price then lowers the stock price index. The same result was found by Arifin (2014). He stated that the high inflation rate affects public purchasing power, which tends to run down and influences company benefit. This condition gives a wrong signal for investors both for a short and extended period. However, Geetha, Mohidin, Chandran, and Chong (2011) argued that there is a relationship between inflation and the stock market in the long run in Malaysia and US. However, a short-run relationship happened in China. In addition, research was done by Akbar, Ali, and Khan (2012); Eldomiaty et al. (2020) concluded that the

inflation rate positively affects stock prices. Therefore, the proposed hypothesis is as follows:

*H1: there is an influence of inflation on JCI.*

*The influence of interest rate on JCI*

The stock exchange is a stock transaction place where the investor will buy or sell their stock when the stock movement happens to be beneficial for them. If the share price moves dramatically, it is positive and negative for the investor. Eldomiaty et al. (2020) say that inflation and interest rates are macroeconomic factors that significantly influence the economy and stock market. If a country experiences a high inflation rate, then its currency will drop, decreasing people's purchasing power, dropping companies' profit, and decreasing the real return on investment. It also explains that a rising interest rate will force a more significant fund to affect the lower profitability. However, the higher interest rate is a good signal for market players to invest more in the money market, giving higher profit than equity; therefore, the stock price drops. This research is in-line with Amin (2012), which states that interest rate positively and significantly on the movement of JCI. Along with that, the hypothesis formulated in this study is:

*H2: There is an influence of interest rate on JCI*

*The influence of pandemic Covid-19 on JCI*

Pandemic Covid-19 has had tremendous effects on the world economy, including Indonesia. The appearance of Covid-19 has forced the government to implement large-scale social restrictions, which have affected various business sectors and ended in business closure and job termination. This condition pushed the people's purchasing power to decrease. Rahmayani and Oktavilia (2020) revealed that for an extended period, the measurement of the total cases of pandemic Covid-19 in a day affects the capital market negatively but positively for a short time. In addition, Junaedi and Salistia (2020) mentioned that aside from the domestic policy, LSSR and Work From Home harm JCI, the dynamic movement of capital market in China, Spain, Hong Kong, London, and New York also has influenced the capital market in Indonesia. Hence, the following hypothesis was proposed:

*H3: There is an influence of Pandemic Covid-19 towards JCI.*

Gursida (2018); Zulfa and Tan (2009) manifested that inflation, interest rate, and money supply simultaneously influenced stock prices LQ45 in Indonesia. Eldomiaty et al. (2020) stated that inflation and interest rate hand in hand influenced stock prices. From the above explanations, it can be summarized that some factors such as inflation, interest rate, and pandemic can influence share price. Based on forgoing, the following hypothesis is:

*H4: Inflation, Interest rate, and Covid-19 pandemic simultaneously influence JCI.*

The government's effort to prevent the worsening of the effects of Covid-19 through LSSR policy could impact the condition of the JCI. Finally, this study suggests a hypothesis as follows:

*H5: There is a difference between JCI before LSSR and after the implementation of LSSR.*

Based on the suggested hypotheses, the conceptual framework can be drawn in Figure 1.

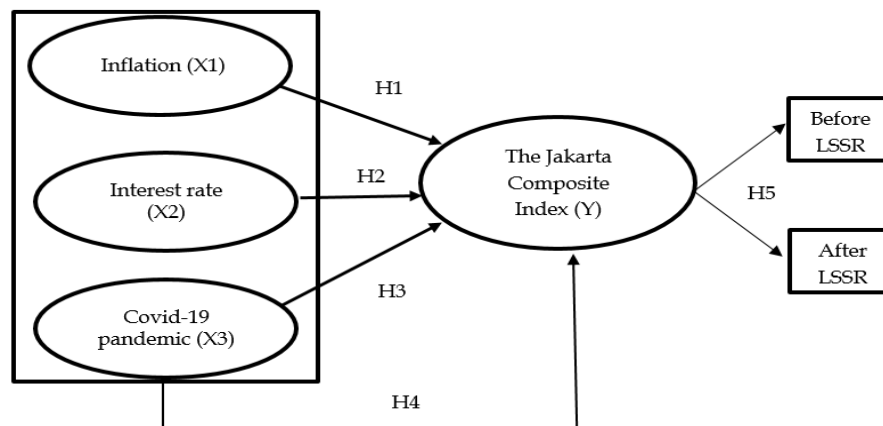


Figure 1. Conceptual Framework

## METHODOLOGY

This study is quantitative research. The researcher aims to examine the influence of independent variables (inflation, interest rate, and Covid-19 pandemic) on the dependent variable (JCI) and test the differences of JCI before and after the implementation of LSSR.

The data period is eight months which is divided into three terms, namely before LSSR implementation (January - March 2020), during LSSR (April and May 2020), and after LSSR (June- August 2020), as visualized in Figure 2.



Figure 2. Data Period of Research

The data of Inflation (X1) and Interest rate (X2) are retrieved from [www.bi.go.id](http://www.bi.go.id) started January until March 2020 (three months before LSSR), during the LSSR (April and May 2020), and three months after LSSR (June until August 2020). The implementation of LSSR data in Indonesia was taken from [www.wikipedia.co.id](http://www.wikipedia.co.id). In this current research, the interest rate refers to the interest rate taken daily for eight months. Meanwhile, the Covid-19 pandemic data in Indonesia is presented using a dummy variable, namely 0 represents data before LSSR and 1 represents data during and after LSSR. The Jakarta Composite Index (Y) was taken daily, while inflation and the Bank Indonesia Certificate

interest rate were taken monthly retrieved from the official website [www.idx.co.id](http://www.idx.co.id); [www.bi.go.id](http://www.bi.go.id).

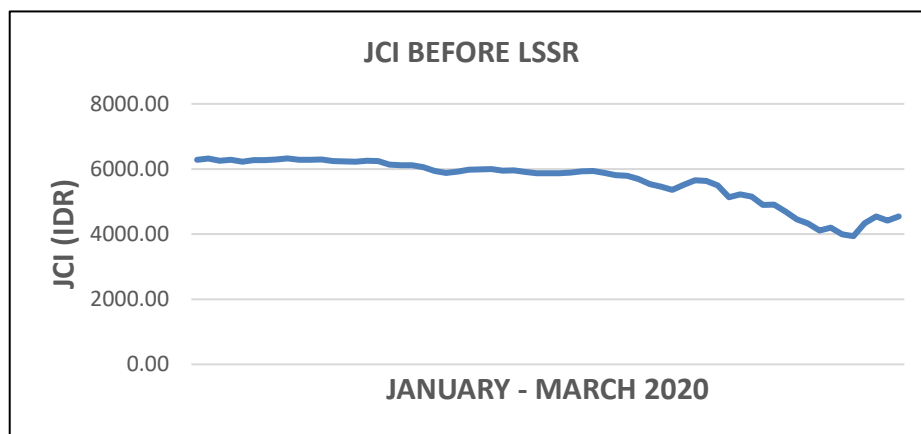
The individual effect of inflation (X1), Interest rate (X2), and Covid-19 pandemic (X3) towards Y (JCI) were tested by partial regression using the t-test with the level of significant  $\alpha=0.05$ . Meanwhile, the F test will examine the combined effect of X1, X2, and X3 on Y. The determination coefficient (adjusted R square) is employed to measure how far the Inflation, Interest rate, and Covid-19 pandemic explain the variation of JCI. Furthermore, the analysis of the difference between before and after the implementation of LSSR (lockdown) was examined using Wilcoxon Test.

The number of days from January to August 2020 is 210 days. During the holiday, the JCI transactions stopped; hence the data were excluded. The number of holidays during this study is 49 days. Therefore total data which is tested in this research is 161 days. Total data before LSSR, during LSSR, and after LSSR implementation is 63, 37, and 61, respectively.

## RESULTS

### *JCI before, during, and after the LSSR implementation*

In the period of January-March 2020 (before LSSR implementation), the highest value of JCI reached Rp6325.41 on January 14, 2020. The lowest value of JCI happened on March 24, 2020, which reached Rp3937.63. In January- March 2020 period, the movement of JCI tends to decrease, visualized in Figure 3. The average value of JCI in January 2020 was Rp6225.32, meanwhile in February 2020 ran down to Rp5885.488 and Rp.4786.916 in March 2020. From the data, it can be concluded that JCI in three months before LSSR is decreased.

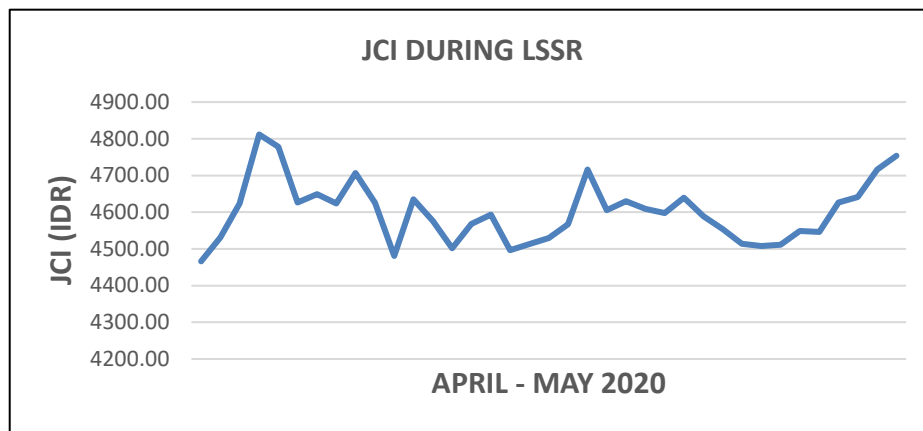


Source: [www.idx.co.id](http://www.idx.co.id) (processed data)

Figure 3. The movement of JCI before LSSR

During the implementation of LSSR, which happened from April to May 2020, the JCI value was relatively stable (Figure 4) in the range of Rp4400 to Rp4800. The lowest value touched Rp4466.04, while the highest reached Rp4811.83 on April 1, 2020, and on April 6, 2020, respectively. The phenomena of JCI movement during LSSR was not significantly decreasing and increasing; it is

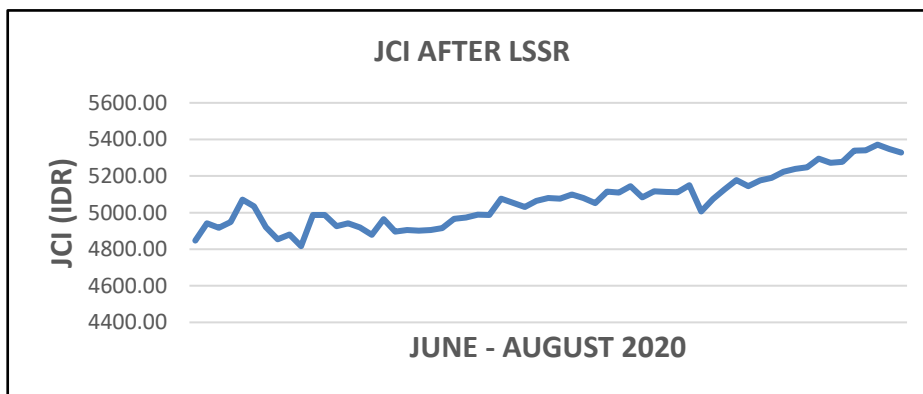
called Sideway. The average value of JCI in April- May 2020 was Rp4600.98 and Rp4599.33.



Source: [www.idx.co.id](http://www.idx.co.id) (processed data)

Figure 4. The movement of JCI during LSSR

The movement of JCI after the implementation of LSSR (June-August), as seen in Figure 5, showed an increasing trend. The highest JCI value in June - August 2020 reached Rp5371.47, and the lowest JCI value was Rp4816.34. The average value of JCI in June, July, and August in the sequence was Rp4925.86, Rp5062.85, and Rp5232.09. From the data, it can be concluded that the JCI value was rising slowly every month.



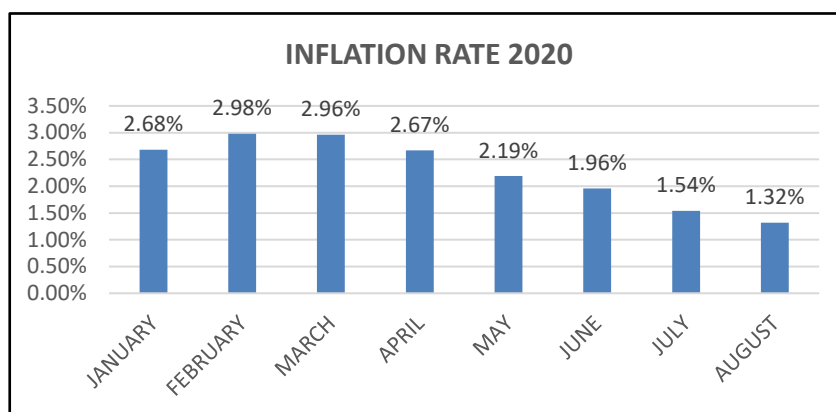
Source: [www.idx.co.id](http://www.idx.co.id) (processed data)

Figure 5. The movement of JCI after LSSR

*Inflation before, during, and after the LSSR implementation*

From Figure 6, it can be concluded that inflation in February 2020 had risen from January 2020, but later in February 2020 and so on, inflation had decreased continuously to August 2020. The highest inflation was in February 2020, with a rank of 2.98%, while the lowest score happened in August with 1.32%, as visualized in Figure 6.



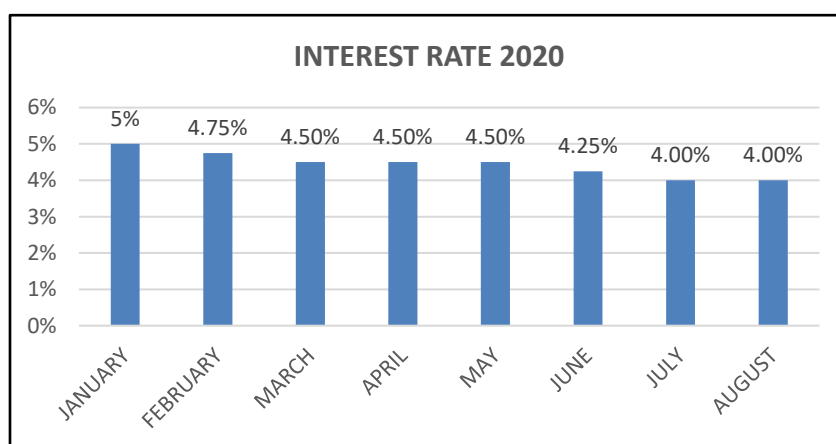


Source: [www.bi.go.id](http://www.bi.go.id)

Figure 6. The inflation before, during, and after LSSR

*Interest rate before, during, and after the LSSR implementation*

From Figure 7, it can be seen that the interest rate in January- August 2020 leaned to decrease. The highest interest rate happened in January with 5%, and the lowest happened in August with 4%.



Source: [www.bi.go.id](http://www.bi.go.id) (processed data)

Figure 7. The interest rate before, during, and after LSSR.

Table 1. Descriptive Statistic

Variable	N	Min	Max	Average	Std. Dev
Inflation	161	1.32	2.98	2.3020	0.59719
Interest Rate	161	4.00	5.00	4.4425	0.33101
Covid-19	161	0.00	1.00	0.6087	0.48957
JCI	161	3937.63	6325.41	5178.9171	602.05440

Source: SPSS (processed data)

*The result of the partial and coefficient determination test before LSSR*

The t-test is employed to seek the influence of inflation and interest rate towards JCI before LSSR, which shows in table 2. This test did not include the

Covid-19 variable because on January- March 2020 LSSR policy had not been implemented yet.

Table 2. The t-Test Table Before LSSR

Variable	Stdz. coef. Beta	t	Sig
Inflation	0.434	3.817	0.000
Interest Rate	1.215	10.696	0.000
Adj. Rsq =	0.768		

Source: The data were processed using SPSS

The t-test shows that the significant value of the inflation variable towards JCI before LSSR is  $0 < 0.05$ . The value of the t score is  $3.817 > 2.0$  (t-table), which means there is a partially positive influence of inflation on inflation JCI before LSSR. The influence of interest rate towards JCI before LSSR has a significance value  $0 < 0.05$  and t value score is  $10.696 > 2.0$  (t-table). Therefore, it shows a partially positive interest rate influence towards JCI before LSSR.

The Coefficient Determination test before LSSR (adjusted R square) is 0.768. It shows the independent (inflation) contribution on the dependent variable (JCI). Therefore, 76.8 % of JCI is influenced by inflation while the rest, 23.2%, is expected to be influenced by others factors.

*The result of the partial and coefficient determination test after the LSSR implementation*

The t-test on the influence of inflation, the interest rate on JCI after the implementation of LSSR in June- August 2020 are displayed in Table 3.

Table 3. The t Test Table After LSSR

Variable	Std. Beta	t	Sig
Inflation	-1.415	-7.067	0.000
Interest Rate	0.621	3.100	0.003
Adj R sq =	0.725		

Source: The data were processed using SPSS

Table 3 shows that the significance value of the influence of inflation towards JCI is  $0 < 0.05$ , and the t score is  $-7.067 > 2.0$  (t-table). The result displays the negative influence of inflation on JCI after the implementation of LSSR. On the other hand, the significance value of the influence of interest rate towards JCI after LSSR is  $0.003 < 0.05$ , and the t score is  $3.1 > 2.0$  (t-table). This analysis shows that interest rates positively influence JCI after the implementation of LSSR. The result of the coefficient determination test (Adj.R2) is 0.725, indicating that independent variables, namely inflation and interest rate, have contributed to the dependent variable (JCI) as much as 72.5%. In comparison, 27.5% is expected to be influenced by other factors. Moreover, this model is fit for predicting factors that affect the JCI index.

*Multiple linear regression results*

The result of simultaneous variables inflation, interest rate, and Covid-19 pandemic on JCI is presented in Table 4.

Table 4. The JCI Multiple Linear Regression Analysis Result

Variable	Std. Coef. Beta	t	Sig.
Inflation	-1.172	-14.272	0.000
Interest Rate	0.906	11.152	0.000
Covid19	-0.810	-11.871	0.000

F score = 140.151 sig. = 0.00

Source: The data were processed using SPSS

Table 4 exhibited that the F score (140.151) is higher than the F table (2.66), which means that Inflation (X1), Interest Rate (X2), and Covid-19 (X3) significantly have a combined effect on The Jakarta Composite Index (Y).

*Wilcoxon test*

Wilcoxon test is used for measuring the difference of JCI before and after the implementation of LSSR. The result shows that the value of Z is -4.4464 with zero asymptotic significance. This finding indicates the difference between the JCI before and after the implementation of LSSR. The average score for three months before LSSR is Rp5632.57; meanwhile, the average JCI index for three months after LSSR is relatively lower (Rp5073.6). The average index of JCI after LSSR tends to decrease (smaller than before LSSR implementation). Finally, the LSSR policy, made due to Covid-19, affected the JCI movement. To conclude, hypothesis 5 states that a difference in JCI before and after the implementation of LSSR is accepted.

**DISCUSSION**

Based on the partial calculation, it is found that inflation has a positive influence and significantly on JCI before LSSR. This result is in-line with the research from Zulfa and Tan (2009), which mentions that the inflation rate influence positively and significantly the composite stock price index. Inflation can positively influence JCI; however, keen observation is needed to see the inflation rate range (Sukanto, 2016). It is also supported by Thobarry (2009) if the inflation happens is mild/creeping inflation, it will affect the economy positively. Otherwise, if the inflation happens is hyper-inflation (high rate inflation), it will have an adverse effect. The prospective composite stock price index survives because of the domestic stability of the fundamental economic condition. The condition is also in-line with a mild/reasonable inflation rate targeted by Bank Indonesia, which is  $3\% \pm 1\%$  and based on the data visualized in Figure 6. Figure 6 presented that the inflation rate was nearly 3% from January-March 2020; therefore, it fully supports a good JCI environment. This report supports the

finding of Kaur (2017) because the condition is relatively standard. The investors would not speculate about selling or buying shares; therefore, JCI was stable.

The value in table 2 shows that the interest rate has a positive and significant influence on JCI before LSSR. If the interest rate rises, the JCI also increases. Puspitasari (2019) wrote that one of the factors which lead to the positive influence of interest rate is January Effect. January Effect believes that the share price will likely increase in January. This calendar effect creates an opportunity for a stock investor to buy stock with lower prices before January and then sell it when the price rises. The investors also invest in the stock instead of savings due to a higher interest rate.

The emergence of the January Effect is caused by an act of individual investors who tend to sell their shares to avoid year-end tax, later buy a new share in January, which increases stock price. As a reminder, January Effect only happens in January, while the one which raises the positive influence between interest rate and JCI in February- March period is the continuous rise on a total of investors in each year. In the first quarter of 2020 (January- March 2020), the market condition has experienced January Effect (Puspitasari, 2019). This result supports Amin and Herawati's (2012) research, which mentions that interest rate has a positive and significant influence on JCI. It is also supported by Panda (2008), which reveals that interest rate positively influences stock price for a short time. In addition, Amtiran, Indiasuti, Nidar, and Masyita (2017) explain that interest rate positively correlates with stock return. The Indonesian market is influenced by the macroeconomy, particularly the one related to exchange interest rate and exchange rate; moreover, the stability of countries' economies will lead investors to invest more shares.

Based on the t-test result in Table 3, it can be concluded that inflation negatively and significantly influences JCI after LSSR. If the interest rate rises, the JCI decreases, and vice versa. It is also supported by Thobarry (2009), which mentions that a high rate of inflation affects the company's decreasing profit, reducing the total of the dividend given. The decline of profit and dividend information can be seen as a wrong signal for investors and traders who are not interested in buying the share, and later the stock price will drop. This condition gives a wrong signal for investors either long-time or short-time period that can affect investors in making a decision. Eventually, the decrease of the JCI is unavoidable. It is in line with signaling theory; therefore, a company should give a good information signal of their financial report to users if the company wants to get the source of funds from investors. In addition, Arifin (2014) concludes that high rate inflation decreases people's purchasing power, affecting the declining company's sales and profits.

Besides that, pandemic Covid-19, which started at the beginning of 2020, also influenced rate inflation. Statistics Indonesia Board stated that the Covid-19 pandemic had interfered with Indonesia's inflation pattern (Thomas, 2020). One of the significant changes caused by Covid-19 was the inflation during the first semester of 2020. The inflation movement made people's purchasing power fall off; it was manifested in the number of investors who sold their shares without any buy-backs activity. The decreasing buying power influences company

profitability; therefore, decreasing dividend contribution is expected. It is a lousy signal either for investors or traders, which finally affected the market share index in Indonesia.

The variable of interest rate after LSSR has a positive and significant influence on JCI which means if the interest rate decreases, the JCI is also down and vice versa. This research found out that the interest rate decreased after the implementation of LSSR. The government purposively decreased the interest rate through Bank Indonesia (BI) policy. This relaxation policy was done to save the economic condition after the implementation of LSSR. It reduced the problematic credit risk (non-performing loan) and was expected to increase the number of total credits. Even though the interest rate decreased, many companies still faced a significant loss due to LSSR and Covid-19 pandemic. It happened because many factories and companies forcefully terminated their workers, working from home. Therefore it had made the companies unable to work maximally, later affected the company share price, and finally affected the share index. From the above finding, Hypothesis 1 and 2 are accepted.

Based on Table 4, the value of coefficient standard beta is -0.810 or -1 (rounding up due to dummy variable), which indicates that when the Covid-19 pandemic happened, the JCI index decreased. Otherwise, if the Covid-19 pandemic did not exist, the JCI would increase. This result supports the finding of Khan et al. (2020) entitled "The impact of COVID-19 pandemic on stock markets: An empirical analysis of world major stock indices". Khan et al. (2020) proved that Covid-19 negatively affected 16 main stock indexes from various countries. It is also in line with the research done by Junaedi and Salistia (2020) entitled "The impact of Covid-19 pandemic towards capital markets in Indonesia: A case study of the Jakarta Composite Index (JCI)". They found out that the Covid-19 case in Indonesia and China negatively influenced the development of JCI. In addition, Hong, Bian, and Lee (2021) stated that the Covid-19 pandemic also disrupted stock return stability and stock volatility in America.

The unsolved Covid-19 pandemic has made many people lose their jobs and source incomes; therefore, their money has washed up. Moreover, the restrictions of any social activities, including working, going on vacation, even studying, added another affected economic sector. When people lose their income, they will likely reduce their outcome, delay asset purchasing, and delay investing. It also makes people's purchasing power decrease, and the company sales and profitability are influenced. When a company has low profitability, many investors assume that the company is not in good condition. As stated in signaling theory, when a poor signal is detected from one's company, many investors will sell their shares and not buy-backs. This condition makes JCI decrease. Therefore, from the description mentioned, hypothesis 3 states that there is an influence of Covid-19 Pandemic towards JCI is accepted.

This study analyzes the influence of inflation, interest rate, and Covid-19's influence on JCI analysis. The result of the multiple regression analysis in Table 4 shows the significance value for the independent variable towards the dependent variable, which is  $0 > 0.05$  and F score  $140,151 > 2.66$  (F table). It means

inflation, interest rate, and Covid-19 simultaneously influenced JCI before and during the Covid-19 pandemic. In conclusion, hypothesis 4, which states that inflation, interest rate, and the Covid-19 pandemic simultaneously influence JCI, is accepted. This finding is in-line with Gursida (2018); Zulfa and Tan (2009) proven that inflation, interest rate, and money supply simultaneously affected the stock price of LQ45 in Indonesia. Covid-19 pandemic is a factor that influences JCI then leads to disruption. It happens because of the low inflation rate, leading to low purchasing power. The interest rate is reduced as a relaxation policy for business debtors who are stuck as an effect of the Covid-19 pandemic.

It is argued that during the Covid-19 outbreak, all economic sectors were stuck due to restrictions to gather, keep the distance, and WFH. Restaurants, cafés, transportations, malls were not to allowed open with total capacity and closed before 08.00 pm even most of them closed down. Eventually, people do not have any income, and the adverse impact on people's purchasing power significantly drops. Decreasing company profitability influences its share price, followed by the decline of the JCI index, as well as the share index was lower than before the Covid-19 pandemic started.

#### **FURTHER STUDY**

This study was subject to several limitations. First, the length of the study was only eight months. Future researchers may explore a more extended period of estimation before and after LSSR, as the Covid-19 pandemic is still recurring with no sign of stopping. Second, the Covid-19 pandemic is measured by a dummy variable in this study. It is suggested to employ a different method for measuring the Covid-19 pandemic, i.e., the number of survivors or patients.

One of the impacts of LSSR implementation is decreasing purchasing power. Therefore, the government should reduce LSSR tensions step by step on a smaller scale while considering the zonation level to give more opportunity for the economic sectors to run and live.

#### **REFERENCES**

- Akbar, M., Ali, S., & Khan, M. F. (2012). The relationship of stock prices and macroeconomic variables revisited: Evidence from Karachi stock exchange. *African Journal of Business Management*, 6(4), 1315-1322.
- Alam, M., & Uddin, G. S. (2009). Relationship between Interest Rate and Stock Price: Empirical Evidence from Developed and Developing Countries. *International Journal of Business and Management Tomorrow*, 4(3).
- Amin, M. Z., & Herawati, u. D. (2012). Pengaruh Tingkat Inflasi, Suku Bunga Sbi, Nilai Kurs Dollar (USD/IDR), Dan Indeks Dow Jones (DJIA) Terhadap Pergerakan Indeks Harga Saham Gabungan Di Bursa Efek Indonesia (BEI) (Periode 2008-2011). *Jurnal Ilmiah Mahasiswa Fakultas Ekonomi dan Bisnis*, 1(1).
- Amtiran, P. Y., Indiastuti, R., Nidar, S. R., & Masyita, D. (2017). Macroeconomic Factors And Stock Returns In APT Framework. *International Journal of Economics and Management Sciences*, 11(1).

- Arifin, T. M. (2014). *Pengaruh Inflasi, Suku Bunga Sbi, Perubahan Kurs, Dan Standard & Poor's 500 Terhadap Indeks Harga Saham Gabungan (Ihsg)*. UNY, Yogyakarta.
- Atmoko, C. (2020). IHSG melemah, pasar khawatir dampak COVID-19 terhadap ekonomi global. *Antaranews*. Retrieved from <https://www.antaranews.com/berita/1410058/ihsg-melemah-pasar-kuawatir-dampak-covid-19-terhadap-ekonomi-global>
- Bissoon, R., Seetanah, B., Babajee, R. B., Ramdhany, N. G., & Seetah, K. (2016). Monetary Policy Impact on Stock Return: Evidence from Growing Stock Markets. *Theoretical Economics Letters*, 6(5), 1186-1195.
- Brigham, E. F., & Houston, J. F. (2001). *Manajemen Keuangan* (Vol. 2). Jakarta:: Erlangga.
- Eldomiaty, T., Saeed, Y., Hammam, R., & AboulSoud, S. (2020). The associations between stock prices, inflation rates, interest rates are still persistent. Empirical evidence from stock duration model. *Journal of Economics, Finance and Administrative Science*, 25(49).
- Fama, E. F. (1981). Stock Returns, Real Activity, Inflation, and Money. *The American Economic Review*, 71(4), 545-565.
- Geetha, C., Mohidin, R., Chandran, V. V., & Chong, V. (2011). The Relationship Between Inflation And Stock Market: Evidence From Malaysia, United States And China. *International Journal of Economics and Management Sciences*, 1(2).
- Gursida, H. (2018). The Influence Of Inflation Rate, Interest Rate, And Money Supply On Share Price LQ45. *Sinergi : Jurnal Ilmiah Ilmu Manajemen*, 8(1).
- Hong, H., Bian, Z., & Lee, C.-C. (2021). COVID-19 and instability of stock market performance: evidence from the U.S. *Financial Innovation*, 7(1), 12. doi: 10.1186/s40854-021-00229-1
- Jefry, & Djazuli, A. (2020). The Effect of Inflation, Interest Rates and Exchange Rates on Stock Prices of Manufacturing Companies in Basic and Chemical Industrial Sectors on the Indonesia Stock Exchange (IDX). *International Journal of Business, Management & Economics Research*, 1(1).
- Junaedi, D., & Salistia, F. (2020). Dampak Pandemi Covid-19 terhadap Pasar Modal di Indonesia Studi Kasus Indeks Saham Komposit (IHSG). *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 2(2).
- Kaur, M. (2017). An Impact Of Inflation And Exchange Rate On Stock Returns: Evidence From India. *Scholarly Research Journal for Interdisciplinary Studies*, 4(37).
- Khalwaty, T. (2000). *Inflasi dan Solusinya*. Jakarta: Gramedia Pustaka Utama.
- Khan, K., Zhao, H., Zhang, H., Yang, H., Shah, M. H., & Jahanger, A. (2020). The Impact of COVID-19 Pandemic on Stock Markets: An Empirical Analysis of World Major Stock Indices. *The Journal of Asian Finance, Economics and Business*, 7(7).
- Krisna, A. A. G. A. (2013). Pengaruh Inflasi, Nilai Tukar Rupiah, Suku Bunga SBI Pada Indeks Harga Saham Gabungan Di BEI. *E-Jurnal Akuntansi*, 3(2), 421-435.

- Krisna, A. A. G. A., & Wirawati, N. G. P. (2013). Pengaruh Inflasi, Nilai Tukar Rupiah, Suku Bunga Sbi Pada Indeks Harga Saham Gabungan Di BEI. *E-Jurnal Akuntansi*, 3(2), 421-435.
- Panda, C. (2008). Do Interest Rates Matter for Stock Markets? *Economic and Political Weekly*, 43(17), 107-115.
- Puspitasari, I. (2019, 30/12/2019). Siap-siap January Effect, Ini Saham yang Bisa Diperhatikan, *Kompas*. Retrieved from <https://money.kompas.com/read/2019/12/30/071000226/siap-siap-january-effect-ini-saham-yang-bisa-diperhatikan?page=all>
- Rahmayani, D., & Oktavilia, S. (2020). Does the Covid-19 Pandemic Affect the Stock Market in Indonesia? *Jurnal Ilmu Sosial dan Ilmu Politik*, 24(1).
- Setiawan, S. A. (2020). Impact of Inflation on Stock Market Performance in Pakistan. *The Indonesian Journal of Development Planning*, IV(1).
- Spence, M. (1973). Job Market Signaling. *Quarterly Journal of Economics*, 87(3), 355-374.
- Suhadak, S., & Suciandy, A. D. (2021). Brief Technical Note: The Influence of Exchange Rates on Inflation, Interest Rates and the Composite Stock Price Index: Indonesia 2015 - 2018 *Australasian Accounting, Business and Finance Journal*, 14(1).
- Sukanto, S. W. (2016). Pengaruh Inflasi, Suku Bunga, Dan Nilai Tukar Rupiah Terhadap Indeks Harga Saham Gabungan (IHSG) Di Bursa Efek Indonesia. *Manajemen Bisnis*, 6(2).
- Thobarry, A. A. (2009). *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 )*. (Pasca Sarjana), Universitas Diponegoro, Semarang
- Thomas, V. F. (2020). Bagaimana Pandemi COVID-19 Mengganggu Pola Inflasi Indonesia 2020, *Tirto.id*. Retrieved from <https://tirto.id/fVqL>
- Umi, M., & Ayi, R. (2017). Analisis Pengaruh Nilai Tukar, Tingkat Suku Bunga Dan Inflasi Terhadap Indeks Harga Saham Studi Kasus Pada Perusahaan Properti yang Terdaftar di Bursa Efek Indonesia. *JRMSI - Jurnal Riset Manajemen Sains Indonesia*, 4(1).
- Zulfa, A., & Tan, J. (2009). Analisis Pengaruh Inflasi Dan Bunga Sbi Terhadap IHSG di BEI. *Journal Dinamika Ekonomi & Bisnis*, 6(2).