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# THE EFFECT OF SINGAPORE INTEREST RATES ON THE JOINT STOCK PRICE INDEX (JCI) IN THE BANKING SECTOR

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#### **ABSTRACT**

### **KEYWORDS**

Indonesia Stock
Exchange (IDX),
Composite Stock
Price Index (CSPI),
Banking, Interest
Rates, Singapore
(SIBOR)

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This research aims to examine the influence to determine the effect of Singapore interest rates on the Jakarta Composite Index (JCI) in the banking sector. This research is a quantitative research. The data were collected using documentation. In order to achieve the goal study, this study was conducted by using the type of proportional sampling method so that as many as 36 banking samples were obtained. The result showed that the Singapore interest rate (SIBOR) had a significant positive effect on the Composite Stock Price Index (CSPI) of the banking sector, this was indicated by the value of sig. on the SIBOR variable of 0.008 <0.05 and has a beta value of -26.527. And has a t-count value of -2.819 < from t-table which is 2.719.

### **INTRODUCTION**

The capital market advances the country's economy because of its infrastructure for capital formation and long-term funding aimed at maximizing public order when mobilizing funds to support state development funds (Stoian & Iorgulescu, 2019). Rather, the capital market is also a reference for assessing the state of a joint venture in a country(Sestu & Majocchi, 2020). The Composite Stock Price Index (JCI) is a picture of the general capital market activity. The development of the JCI proves that the capital market is still bullish, if it shrinks, it proves that the capital market is still bearish. Whereas, investors in the same class are required to know the form of stock price integrity in the capital market (Clark & Newell, 2013). An index that investors often observe when investing on the IDX is the composite stock price index (Desfiandi, Desfiandi, & Hapzi, 2017). This is because this index is a composite index of all stocks listed on the IDX.

Therefore, the development of the individual stock price index, investors can check the market situation if it is still excited or sluggish (Ecer, Ardabili, Band, & Mosavi, 2020). This week's comparison of the situation calls for a different plan from investors when it comes to funding (Notteboom, Pallis, & Rodrigue, 2021). JCI first time was shown on April 1, 1983 with the parameter of price mobility of all shares listed on the IDX, either ordinary shares or

preferred shares (Sumaji, 2016). Price Index is a nominal that is used to observe the transformation of nominal at the same or different duration and location (Eggertsson, Juelsrud, Summers, & Wold, 2019). Index is a framing measure that is mostly used to express differences in the results of the value of a single variable or the value of a variable. Jogiyanto (2017) interprets the JCI as a value-weighted index, an index that is calculated using weekly investments. There are many aspects that affect the performance of the composite stock index. This includes economic indices, global oil estimates, global economic situation, and national political stability. The global economic confrontation has had a profound impact on the Indonesian economy, especially the situation of Indonesia's contribution index which is being influenced by foreign investors.

Ethnic groupInterest is an economic aspect that affects a country's economy, and investors can use the interest rate as a benchmark when they want to invest. Interest rates have a negative relationship with the stock market, because an increase in interest rates generally results in a preference for owners of capital. Stock prices fall to save money in the bank instead of investing in the stock market. The Singapore Foreign Interest Rate (SIBOR) is the interest rate for assistance from Singaporean banks and financial institutions. Rising interest rates in Singapore have made investments in SGD dollars more attractive, and investments previously invested in developed countries such as Indonesia have returned to Singapore. Meanwhile, when Singapore's policy interest rate drops, investors can be dragged back to reinvest in developed markets, such as Indonesia.

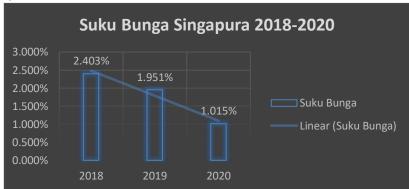


Figure 1. Average Singapore Interest Rate (Source: CEIC (Data processed, 2021)

Interest rates are very influential on the stock price index, which can be seen in the picture above in 2018 Singapore's interest rate has an average of only 2.403%, and in 2019 Singapore's interest rate decreased to 1.951%, and in 2020 Singapore's interest rate also decreased to 1.015%. Where this has an impact on the capital market, especially in Indonesia. When the interest rate declines, high-risk capital instruments such as stocks and bonds have the potential to receive product compensation that is more leverage than other investment tools (Abraham, Cortina Lorente, & Schmukler, 2020). The impact of the decline in Singapore interest rates (SIBOR) made the increase in the Composite Stock Price Index (JCI) of the banking sector, which can be seen from the picture above in 2019 the banking index had a value of 99. 51% and in 2020 where the SIBOR interest rate decreased, the banking index increased to 106.35%, and in 2020 it was at the level of 79.39%. This proves that a decrease in the SIBOR interest rate can increase the stock index in Indonesia, especially in the banking sector (Suhendra, Istikomah, & Anwar, 2022).

According to Leonita (2020) regarding influencing rupiah exchange rate inflation,

foreign interest (the fed), and inflation at the IHGS resulted in the fact that the fed influenced the IHGS. According to Nurwani (2016) regarding the analysis of the effects of inflation, the rupiah exchange rate, and the SBI interest rate on the IHGS movement on the IDX, the SBI interest rate has a negative effect on the JCI (Rosalyn, 2018). According to Kumalasari (2016) regarding influencing the usd/idr exchange rate, the level of SBI interest rate, the deviation and the total spread of finance (m2) on the IHGS on the IDX resulted in the SBI interest rate not having a significant influence on the JCI.

This research is a replication and development of Leonita's (2020) research on foreign interest rates (the fed), the rupiah exchange rate and inflation on the JCI. Previous research did not use the Fed's interest rate from the United States, while this research uses Singapore's interest rate (Urom, Guesmi, Abid, & Dagher, 2021). Another difference in this research is in the period of year used, where previous research used the period 2013-2017, but in this research it uses the year 2018-2020 (Romm et al., 2022). The expected result of this research is that there is an influence on Singapore's interest rates on the IHGS of the banking sector. Based on the explanation above, the researcher will conduct research on "The Effect of Singapore Interest Rates on the Composite Stock Price Index (CSPI) in the Banking Sector".

#### RESEARCH METHOD

The population in this research are banking companies listed on the IDX and the SIBOR interest rate (Qudratullah, 2021). Determination of the sample in this research using the type of porposive sampling method defined by Sugiyono (2016) is a technique for collecting data sources by considering. In this research, the criteria used to determine the sample are:

- 1. Banking companies listed on the IDX at the 2018-2020 level.
- 2. A banking company that trades the stock market in 2018-2020.
- 3. The SIBOR interest rate applied by the Singapore central bank in 2018-2020.

In this observation, the type of data used is quantitative data, although the source of data used in this research is secondary data from IHGS banking data for the 2018-2020 period, and SIBOR data is the procedural interest rate applied by the Singapore central bank in percent (%) period. 2018-2020. In this research, the data used are secondary data obtained through financial reportsrespective banking companies. The method used in data accumulation is the documentation method. Secondary data collected from the company's official website and (www.idx.co.id).

## **RESULTS AND DISCUSSION**

### 1. Descriptive Statistical Analysis Results

Descriptive analysis was carried out by calculating the average JCI. banking sector and the SIBOR interest rate. The table below shows the descriptive statistical analysis test as follows:

Table 1 Results of Descriptive Statistical Analysis

Variabel	Jumlah Sampel	Nilai Minimum	Nilai Maksimum	Mean	Standar Deviasi
SIBOR	36	0,81	4,39	1,87	0,78
IHSG	36	-103,83	113,29	83,80	47,73

Source: Secondary Data processed, 2021

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Table 1 shows that from 36 samples of Singapore interest rates (SIBOR) observed from January 2018 to December 2020, they have a mean SIBOR value of 1.87% which shows that interest rates in the last three years are only 1.87%. Singapore is very low.

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With a standard deviation of 0.78%, with a mean result greater than the standard deviation, the distribution of SIBOR data can be concluded as good(Francis, Aykut, & Tereanu, 2014). The lowest SIBOR of 0.81% occurred in October 2020, which means that Singapore's lowest interest rate occurred in 2020 so that it had an increasing effect on the Indonesian banking JCI, while the highest SIBOR was 4.

The JCI variable shows a mean value of 83.80% which shows that the banking JCI in the last three years has an average of 83.80%, so it can be said that due to the low average interest rates in Singapore, there has been a significant increase in the Indonesian banking JCI. The lowest JCI was -103.83% which occurred in February 2018 where it can be said that the banking JCI increased well due to the low foreign interest rate, namely SIBOR, while the highest JCI at 113.29% occurred in December 2019, where This is due to the decline in Singapore interest rates (SIBOR),

### 2. Classic assumption test

## 1. Normality test

In hypothesis research, normality test is needed to understand whether the distribution is normal or not.

Table 2 Kolmogrov Smirnov . Normality Test
One-Sample Kolmogorov-Smirnov Test

Unstandardiz ed Residual 36 Normal Parametersa,b Mean 0,0000000 Std. Deviation 20,24246647 Most Extreme Absolute 0,120 Differences Positive 0,086 Negative -0,120 0,089 Test Statistic 0,200c,d Asymp. Sig. (2-tailed)

Source: Secondary Data processed, 2021

From table 2 above, the results of Kolmogrov Smirnov's statistical test prove that the data in this study has a significance result of 0.200c, d> 0.05. This means that the data in this research are normally distributed.

### 3. Simple Linear Regression Analysis

The results of calculations with linear regression analysis formula using SPSS calculation tools, namely:

Table 3 Simple Linear Regression Analysis

#### Coefficientsa

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	133,483	19,063		7,002	0,000
	SIBOR	-26,527	9,410	-0,435	-2,819	0,008

Source: SPSS 26.0 output (processed data)

The results of the SPSS output in the linear regression table give the SIBOR beta value (X1) of -26.527. So with this the regression equation formula is as follows:

$$Y = 133,483 - 26,527X1$$

The conclusions from the parable above include:

- 1. The coefficient of 133,483 indicates that if there is no Singapore interest rate variable (SIBOR) then the composite stock price index (JCI) of the banking sector is 133.483 provided that the other 0 variables are held constant. And has a standard error of 19,063.
- 2. The SIBOR coefficient of -26.527 indicates that for every one increase in the SIBOR variable, the composite stock price index (JCI) of the banking sector can be a maximum of -26.527 units with other variables considered constant. And has a standard error of 9.410.

#### T - test

## 1. Singapore Interest Rate (SIBOR) Affects the Composite Stock Price Index (JCI) of the Banking Sector

Based on the results of the linear regression test where the Singapore interest rate (SIBOR) has a significant positive effect on the JCI in the banking sector, this is indicated by the sig value. on the SIBOR variable worth 0.008 <0.05 and has a beta result of -26.527. And has a tcount of -2.819 < from ttable which is worth 2.719. So it can be interpreted that the Singapore interest rate (SIBOR) has a negative effect on the banking JCI.

### **Discussion**

## 1. Singapore Interest Rate (SIBOR) Affects the Composite Stock Price Index (JCI) of the Banking Sector

Based on the results of the analysis presented in the table, it proves that the Singapore interest rate (SIBOR) affects the JCI in the banking sector significantly and negatively. Where we can see that the Singapore interest rate (SIBOR) from 2018 to 2020 has decreased, thus giving an increasing impact on the Indonesian banking JCI.

Based on the efficient market theory where information on foreign interest rates, especially on the Singapore interest rate (SIBOR) can be used as a consideration for investors' decision making by paying attention to interest rate movements. Theoretically, the SIBOR interest rate has a negative effect on the JCI, meaning that when SIBOR maximizes the interest rate, there will be a lot of money coming into Singapore, this means that investment in savings is higher than investment in stocks. In Indonesia, when SIBOR maximizes interest rates, SBI increases after that the bank or savings interest rates increase, the impact of which is that funds enter the banking sector, investing in savings will be more attractive.

Interest rates greatly affect the stock price index, which can be seen in the 2018 period Singapore's interest rate has an average of only 2.403%, and in 2019 Singapore's interest rate

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decreased to 1.951%, and in 2020 Singapore's interest rate decreased to 1.015%. Where this has an impact on the capital market, especially in Indonesia. When interest rates are getting lower, investment instruments have the maximum effect as stocks and bonds have the capacity to get maximum returns than other investment tools.

This will allow foreign investors to invest in Indonesia because the relationship between the Singaporean and Indonesian currencies is getting stronger. The impact of the decline in Singapore interest rates (SIBOR) made the increase in the Composite Stock Price Index (JCI) of the banking sector, which can be seen from the picture above in 2019 the banking index had a value of 99.51% and in 2020 where the SIBOR interest rate decreased, the banking index increased to 106.35%, and in 2020 it was at the level of 79.39%. This proves that a decrease in the SIBOR interest rate can increase the stock index in Indonesia, especially in the banking sector.

This research was assisted by the results of research conducted by Leonita (2020) where the interest rates of the United States (The Fed) significantly affected the JCI. And contrary to research conducted by Nurwani (2016) that the SBI interest rate negatively affects the JCI. Research conducted by Kumalasari (2016) resulted in the SBI interest rate having a negative effect on the Composite Stock Price Index (JCI). Based on the description above, the better Singapore foreign interest rates (SIBOR) can have a negative impact on the JCI of banking in Indonesia where this can be considered by investors to pay more attention to foreign interest rates in order to invest properly so as to generate a significant increase in profits.

### **CONCLUSION**

Based on the results of research and discussions conducted regarding "The Influence of Singapore Interest Rates on the Composite Stock Price Index (CSPI) in the Banking Sector (Empirical Study on Banking Companies Listed on the Indonesia Stock Exchange)", it can be described that it has a negative and insignificant effect interest rates in Singapore or Singapore Interbank Offered Rates (SIBOR) on the Jakarta Composite Index (JCI) in the banking sector. This is due to a decrease in the SIBOR interest rate from 2018-2020 which has an impact on the increase in the Indonesian banking stock price index, where the lower the SIBOR interest rate, the greater the Indonesian banking JCI.

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