JCI Correlation with JII and LQ45 on The Indonesia Stock Exchange

Heri Sasono
STIE Dharma Bumiputera, Jakarta

ABSTRACT: Investors who invest want to earn profits from the funds invested in the capital market. This study will see whether Economic Growth, SBI, Dollar Exchange, LQ-45 and JII affect the JCI. The method of analysis is multiple regression (Multiple Regression Analysis) and the research data is processed using the SPSS (Statistical Package for Social Science) program and the research period is from 2010 to 2021. The conclusion is that Economic Growth, SBI, Dollar Exchange and JII have no significant effect on the JCI, while LQ-45 has a significant effect on the JCI. Simultaneously Economic Growth, SBI, Dollar Exchange, LQ-45 and JII have a significant effect on the JCI for the period 2010 to 2021.

KEYWORDS: Economic Growth, Dollar Exchange Rate, LQ45, JII and JCI, SBI (BI7DRR).

PRELIMINARY

One of the indicators used to monitor the development of the capital market in Indonesia is the Composite Stock Price Index (IHSG), where the JCI is a composite index of all types of stocks listed on the Indonesia Stock Exchange (IDX).

Through this Composite Stock Price Index, an investor can see market conditions increasing (bullish) or decreasing (bearish) (Maulino, 2009). JCI movement is influenced by several factors, factors originating from within the country (internal) and factors from abroad (external). Factors from within the country (internal), such as; from fluctuations in the exchange rate of a country's currency with other countries, interest rates, economic growth, social, political and security conditions of a country, and so on.

Meanwhile, factors from abroad (external), the stock market which has a strong influence on the stock exchanges of other countries, such as; stock exchanges from other countries such as; Asian countries (regional) and countries in Australia, Europe and America (international).

Investment in the capital market is something that every country must pay attention to, given its strategic role in strengthening a country's economic resilience. If the state expects investment to last a long time, the government must maintain economic growth (Samsul, 2015: 2). The investment growth of a country will be influenced by the country's economic growth. The better the level of the economy of a country, the better the level of prosperity of its population which is marked by an increase in the level of income of its people. With the increase in people's income levels, more and more excess public funds will be deposited in banks or invested in the Indonesian capital market (IDX).

In accordance with the Stock Price Index Handbook, the Indonesia Stock Exchange (Indonesian Stock Exchange, 2019), currently has 16 types of stock indexes, namely: (1) Composite Stock Price Index (JCI), (2) Sectoral Index, (3) LQ45 Index, (4) Indonesian Sharia Stock Index, (5) Jakarta Islamic Index (JII), (6) Compass Index 100, (7) BUSINESS-27 Index, (8) PEFINDO25 Index, (9) SRI-KEHATI Index, (10) Main Board Index, (11) Development Board Index, (12) Individual Stock Price Index (IHSI), (13) InfoBank15, (14) IDX30, (15) SMItra18 Index, (16) MNC36.

Several macroeconomic factors that can affect stock investment activity and the movement of the JCI on the Indonesia Stock Exchange are inflation, money supply, dollar exchange rate and gross domestic product and economic growth. Economic conditions and macroeconomic variables are factors that have an effect and cause stock prices and returns to change from time to time (Zulaikha, 2013).

The Dollar Exchange Rate is another macroeconomic variable that can affect the JCI movement. If the Dollar Exchange Rate weakens against the rupiah, investors tend to invest their capital in dollars in the hope that when the rupiah appreciates against the dollar, then investors will sell it again in rupiah in the future.

The interest rate is one of the attractions for investors to invest in the form of deposits or SBI, so that investments in shares will be competitive (Sartika, 2017). SBI is one of the mechanisms used by Bank Indonesia to control the stability of the
rupiah and interest rates. By selling SBIs, Bank Indonesia can absorb excess base money in circulation and regulate interest rates nationally (Andriyani & Armereo, 2016).

### TABLES OF JCI, JII AND LQ45

#### PERIOD 2010 TO 2021

<table>
<thead>
<tr>
<th>PERIODE</th>
<th>IHSG</th>
<th>LQ 45</th>
<th>JII</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>3.70351</td>
<td>661.38</td>
<td>532.90</td>
</tr>
<tr>
<td>2011</td>
<td>3.82199</td>
<td>673.51</td>
<td>537.03</td>
</tr>
<tr>
<td>2012</td>
<td>4.31667</td>
<td>735.04</td>
<td>372.29</td>
</tr>
<tr>
<td>2013</td>
<td>4.27418</td>
<td>711.14</td>
<td>585.11</td>
</tr>
<tr>
<td>2014</td>
<td>5.22695</td>
<td>898.58</td>
<td>691.04</td>
</tr>
<tr>
<td>2015</td>
<td>4.52265</td>
<td>788.11</td>
<td>593.25</td>
</tr>
<tr>
<td>2016</td>
<td>5.29671</td>
<td>884.62</td>
<td>694.13</td>
</tr>
<tr>
<td>2017</td>
<td>6.35565</td>
<td>1.07939</td>
<td>759.07</td>
</tr>
<tr>
<td>2018</td>
<td>6.19450</td>
<td>982.73</td>
<td>685.22</td>
</tr>
<tr>
<td>2019</td>
<td>6.29954</td>
<td>1.01447</td>
<td>698.09</td>
</tr>
<tr>
<td>2020</td>
<td>5.97907</td>
<td>934.89</td>
<td>630.42</td>
</tr>
<tr>
<td>2021</td>
<td>6.58148</td>
<td>931.41</td>
<td>562.02</td>
</tr>
</tbody>
</table>

Sources: Indonesia Stock Exchange

The table above shows that the JCI, LQ45 and JII experienced fluctuating changes from 2010 to 2021 and the highest JCI index was in 2021, the highest LQ45 index was in 2017 and the highest JII index was in 2017, while the lowest JCI index was in 2010, LQ45 index and JII index, the lowest in 2010.

Research conducted by I Putu Marta Edi Kusuma and Ida Badgus Badjara (2016), the results of the partial study show that inflation and the amount of money in circulation have no and significant effect on the JCI, while the dollar exchange rate and GDP have a positive and significant effect on the JCI on the Indonesia Stock Exchange.

According to Tommy Suwandy (2014) fluctuations in the LQ45 index against the dollar exchange rate in a negative direction indicate the higher the exchange rate, the lower the return on the LQ 45 index.

The results of research by Kewal (2012), conducted research on the effect of inflation, interest rates, exchange rates, and GDP growth on the composite stock price index. The results of the study found that only the dollar exchange rate had a significant effect on the JCI, while the inflation rate, SBI interest rate and GDP growth had no effect on the JCI.

The results of previous studies showed that several macro variables had a significant effect on the JCI. This time, the researcher is eager to see from the 16 types of indices available on the Indonesia Stock Exchange, such as the LQ-45 and JII indexes, whether the two stock indices have a significant influence on the JCI.

Based on several previous studies and the statements above, the researcher is interested in analyzing the factors that affect the JCI in Indonesia for the period 2010 to 2021, such as; economic growth variables, foreign exchange rates (US Dollars), interest rates (BI rate) and types of stock indices such as LQ45 and JII.

### THEORITICAL REVIEW

#### Capital market

According to Tandelilin (2010:26) the capital market is a meeting between parties who have excess funds and those who need funds by trading securities. The place where there is a physical sale and purchase of securities is called the Stock Exchange. Indonesia has one stock exchange, namely the Indonesia Stock Exchange (IDX). Since 2007 the Jakarta Stock Exchange (JSX) and Surabaya Stock Exchange (BES) have merged and changed their names to the Indonesia Stock Exchange (IDX). According to Law
Composite Stock Price Index (JCI)

The Composite Stock Price Index (JCI), according to Jogiyanto (2010) is an indicator that can show stock price movements that function as market indicators, which means that the movement of indexes describes conditions at a time whether the market is active or weak. The factors that affect the JCI are marketable securities in rupiah issued by Bank Indonesia as an acknowledgment of short-term debt with a discount system (Basit, 2020).

JCI acts like an indicator in the capital market, which means that index fluctuations reflect the market situation at a certain time. By knowing the stock index, you will be able to understand stock market price fluctuations at that time, be able to analyze market conditions, whether they are experiencing a bearish, bullish or sideways trend (Maulinda, 2018). A positive market or active transactions are indicated by an increasing stock price index. Stable condition is indicated by a fixed stock price index. The sluggish state is indicated by the declining stock price index (Tesa, 2012).

JCI reflects a value that serves as a measurement of the performance of a joint stock on the stock exchange. The purpose of the combination itself is the performance of the shares included in the calculation of more than one, even all the shares listed on the stock exchange (Kefi & Sutopo, 2020). The Indonesia Stock Exchange has the authority to issue and/or exclude one or more listed companies from the JCI calculation. The basis for consideration is, among other things, if the number of shares of the listed company owned by the public (free float) is relatively small while the market capitalization is large enough, so that changes in the share price of the listed company have the potential to affect the fairness of the JCI movement (Ningsih & Waspada, 2018).

LQ45 Index

The LQ45 index consists of 45 issuers with high liquidity, which were selected through several selection criteria. In addition to the assessment of liquidity, the selection of these issuers also considers market capitalization. Since its launch in February 1997, the main measure of transaction liquidity has been the transaction value in the regular market. In accordance with market developments and to further refine the criteria for liquidity, since the January 2005 review, the number of trading days and the frequency of transactions are included as a measure of liquidity, thus the criteria for an issuer to be included in the calculation of the LQ45 index.

Jakarta Islamic Index (JII)

The Jakarta Islamic index is one of the stock indexes that adheres to the sharia basis in it, both in terms of mechanism and profit sharing. Looking at the stock index by calculating the average stock price index for types of sharia-based stocks (OK Stocks, 2019).

In Indonesia, the development of sharia instruments in the capital market has occurred since 1997. Beginning with the birth of sharia mutual funds initiated by mutual funds. Furthermore, PT. Jakarta Stock Exchange (JSX) together with PT. Mutual Fund Investment Management (DIM) launched the Jakarta Islamic index (JII) which includes 30 types of shares from issuers whose business activities comply with the provisions of sharia law (IDX, 2010). The determination of the criteria for the JII component is prepared from the approval of the Sharia Supervisory Board in accordance with the 2004 MUI fatwa which regulates sharia shares that enter or are under the auspices of the JII in accordance with sharia principles.

Economic growth

Economic growth is a process where there is an increase in real gross national product or real national income. So that the economy is said to be growing or developing, if there is real output growth (Prasetono, 2010). An economy is said to be experiencing growth if current economic activity is higher than the previous year (Adisetiawan, 2009). This economic growth is characterized by an increase in the physical quantity of goods or services produced which results in an increase in people's income.

The increase in Gross Domistic Product has a positive effect on consumer purchasing power, so that it can increase the demand for the company's products which then increase the income of the company. When the country's economy grows, investors will be willing to invest large amounts of capital in the hope of getting a large return. So increasing GDP is a good signal (positive) for investment and vice versa.
Rupiah exchange rate

Exchange rates or more popularly known as currency rates are records (quotations) of market prices of foreign currencies in domestic currency prices or reciprocally, namely the price of domestic currency in terms of foreign currency. An exchange rate that represents the level of exchange rates from one currency to another and is used in various transactions, including international trade and international investment transactions, or short-term money flows between countries, which cross geographical or legal boundaries.

The Rupiah exchange rate is an exchange between two different currencies, so there is a comparison of the value or price between the two currencies. This comparison of values is often referred to as the exchange rate (Nopirin, 1988: 163). Currency rates show the price of a currency, when it is exchanged for another currency.

Currency rates show the price of a currency when it is exchanged for another currency. Determination of the exchange rate of a country's currency with the currency of another country is determined as well as goods, namely by the demand and supply of the currency concerned. This law applies to the rupiah exchange rate, if the demand for rupiah is more than the supply, the rupiah exchange rate will appreciate, and vice versa.

BI Rate (BI-7 Day Reverse Repo Rate/BI7DRR)

The BI 7-Day (Reverse) Repo Rate instrument is used as the new policy interest rate because it can quickly affect the money market, banking and real sector. The BI 7-Day (Reverse) Repo Rate instrument as a new reference has a stronger relationship to money market interest rates, is transactional or traded in the market, and encourages financial market deepening, particularly the use of repo instruments. Bank Indonesia has strengthened the monetary operating framework by implementing a new benchmark interest rate or policy rate, namely the BI-7 Day Reverse Repo Rate (BI7DRR), which has been effective since August 19, 2016, replacing the BI Rate (BI.go.id).

According to (Kasmir, 2015), bank interest can be interpreted as remuneration provided by banks based on conventional principles to customers who buy or sell their products.

Interest rate according to (Boediono, 2014) is the determination of prices derived from investment funds (loanable funds). The interest rate is one indicator in determining whether someone will invest or save.

RESEARCH METHOD

Population and Sample

According to Arikunto (2010) that the population is the entire object to be studied. The population in this study are Interest Rates (SBI), Foreign Exchange Rates (US Dollar Exchange), Economic Growth, JII and LQ45 and JCI. The sample is a part or representative of the population that is the object of research. The samples in this study are Interest Rates (SBI), Foreign Exchange Rates (US Dollar Exchange), Economic Growth, JII and LQ45 and JCI in Indonesia for the period 2010 to 2021.

Method of collecting data

(1). Secondary Data. This study uses secondary data in the form of time series data with an annual scale taken from data sources including Bank Indonesia (BI), the Financial Services Authority (OJK), the Central Statistics Agency (BPS) and the Indonesia Stock Exchange (IDX) and Other websites that can be used as a source of reference.

(2). Literature. Data collection in this research is also complemented by reading and studying and analyzing literature sourced from books, articles and journals related to this research.

(3). Data source. Data collection by means of online library research. This research uses books, journals, or articles, and sources from the internet, including:

1. Indonesia Stock Exchange, (https://www.idx.co.id),
2. Yahoo Finance (https://finance.yahoo.com),
3. Capital Financial Services Authority, (https://www.ojk.go.id),
4. Bank Indonesia, (https://www.bi.go.id),
Data analysis technique

The data analysis method in this research is multiple regression analysis (Multiple Regression Analysis) and the research data is processed using the SPSS (Statistical Package for Social Science) program. Multiple regression analysis intends to predict how the condition of the dependent variable is when it is associated with two or more independent variables.

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e \]

Where:
- \( Y \): JCI
- \( b_1 - b_5 \): Regression Coefficients
- \( X_1 \): Economic Growth
- \( X_2 \): US Dollar Rate
- \( X_3 \): Interest Rate (BI7DRR)
- \( X_4 \): LQ45
- \( X_5 \): JII
- \( e \): Error Term

RESULTS AND DISCUSSION

Multiple Linear Regression Equation, to determine whether or not there is an influence between the independent variables (independent) on the dependent variable (dependent).

Partial Test (t Test)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>35401.139</td>
</tr>
<tr>
<td></td>
<td>Economic_Growth</td>
<td>30.839</td>
</tr>
<tr>
<td></td>
<td>SBI (BI7DRR)</td>
<td>-185.970</td>
</tr>
<tr>
<td></td>
<td>Dollar Rate</td>
<td>179.094</td>
</tr>
<tr>
<td></td>
<td>LQ-45</td>
<td>4.660</td>
</tr>
<tr>
<td></td>
<td>JII</td>
<td>-713</td>
</tr>
</tbody>
</table>

a. Dependent Variable: IHSG

Multiple Linear Regression Results

\[ Y = 30,839 + 30,839 \text{ Economic}_\text{Growth} - 185,970 \text{ SBI} + 179.094 \text{ Dollar Rate} - 4.660 \text{ LQ-45} - 0.713 \text{ JII} \]

Partial Test Results (t Test)

Partial test, showing how far the influence of one independent variable individually in explaining the dependent variable.

Partial test results (t test) as follows:

a) Economic Growth with a t count of 0.648 < t table of 2.364, and a significance value of 0.541 > 0.050, it can be concluded that Economic Growth has no significant effect on the Composite Stock Price Index (JCI).

b) SBI has a t count of -1.979 < t table of 2.364 and a significance value of 0.095 > 0.050, it can be concluded that the Dollar Exchange does not have a significant effect on the Composite Stock Price Index (JCI).
c) The Dollar Exchange rate has a t count of 2.324 < t table of 2.364 and a significance value of 0.059 > 0.050, it can be concluded that the Dollar Exchange rate has no significant effect on the Composite Stock Price Index (JCI).

d) LQ-45 has a t count of 2.913 > t table of 2.364 and a significance value of 0.027 < 0.050, it can be concluded that the Dollar Exchange rate has a significant effect on the Composite Stock Price Index (JCI).

e) JII has a t count of -0.517 < t table of 2.364 and a significance value of 0.624 > 0.050, it can be concluded that the Dollar Exchange rate has no significant effect on the Composite Stock Price Index (JCI).

Simultaneous Test

Based on the F (Anova) test, the following regression equation is generated:

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>1.193E+11</td>
<td>2.387E+10</td>
<td>39.989</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>5</td>
<td>2.387E+10</td>
<td>596825388.0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Total</td>
<td>11</td>
<td>1.229E+11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: IHSG

Simultaneous test results show that the effect of Economic Growth, SBI, Dollar Exchange, LQ-45 and JII have a significant effect on the JCI (Sig. 0.000 < 0.005) and F Count 39.989 > F table 4.120).

Correlation Test

**Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.985</td>
<td>0.971</td>
<td>0.947</td>
<td>244300999</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Economic_Growth, SBI, Dollar Rate, JII

b. Dependent Variable: IHSG

The correlation between Economic Growth, SBI, Dollar Exchange Rate, LQ-45 and JII for the period 2010 to 2021 of 0.985 or 98.5% and Adjusted R Square of 0.947 or 94.7% can be said to have a very strong influence.

**CONCLUSION**

The conclusion of this study is that Economic Growth, SBI, Dollar Exchange and JII have no significant effect on the JCI, while LQ-45 has a significant effect on the JCI. Simultaneously Economic Growth, SBI, Dollar Exchange, LQ-45 and JII have a significant effect on the JCI for the period 2010 to 2021.

Investors in the capital market can analyze the movement of LQ-45, because it has a significant effect on the JCI, this is due to the volume capitalization and transaction value of LQ-45, which are relatively large, when compared to 15 other stock indices on the Indonesia Stock Exchange.

**REFERENCES**


19. DSN-MUI Fatwa Regarding Efforts to Develop Sharia Capital Market. Fatwa No. 40/DSN-MUI/X/2003. concerning the capital market and general guidelines for the application of sharia principles in the capital market.
45. Zulaikha, Sharifah Bint Syed Jaafar. 2013. Relationship between stock market and macroeconomics variables. 5 A Learning Centre.

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