Asian Index Movement and Indonesian JCI Fluctuation

Heri Sasono¹, Sri Yuliati²
¹STIE Dharma Bumiputera, Jakarta
²Politeknik Pratama Mulia, Surakarta

ABSTRACT: Investors in the capital market certainly expect profits from the funds invested by buying several shares on the Indonesia Stock Exchange (IDX). This study wants to see whether the JCI is influenced by stock indexes in Asian countries, as well as macro variables in Indonesia. The analysis uses Partial Test, Simultaneous Test, Correlation and Regression of the independent variable on the dependent variable using SPSS Software, with the research period between 2010 and 2021. The conclusion is that Inflation, Economic Growth, Singapore Index, Malaysia Index, Thailand Index, Philippines Index and South Korea Index partially have no significant effect on the JCI, but simultaneously (simultaneously) have a significant effect on the JCI.

KEYWORDS: Inflation, Economic Growth, STI, KLCI, SET, PSEI and KOSPI.

PRELIMINARY

Economic development is one of the most frequently seen indicators to assess the condition of a country, whether it is good or bad. Globalization in the financial industry in the era of the ASEAN Economic Community (AEC) in 2020, the Indonesian government through Bank Indonesia and the Financial Services Authority and other parties will always coordinate to form regulations. The goal is that Indonesia is ready to face global challenges with international relations within the scope of ASIA. The impact of this liberalization is the existence of related and mutually supportive relationships through the world capital markets and ASIA states.

Investment through the capital market as a form of indirect investment is carried out in any market around the world, including the Indonesia Stock Exchange (Mansur, 2009 in Razaq, Suhandak, & Topowijono, 2015). The Composite Stock Price Index (CSPI) is one of the factors that reflects the performance of the capital market, so it can be said to have increased (bullish) or decreased (bearish).

A country's stock index is a reflection of current economic conditions. The decline in the value of a country's stock index indicates that the country's economic condition is deteriorating. Vice versa, with an increase in a country's stock index, it can be indicated that the country's economic condition is improving (Danardono 2016).

The linkages between exchanges which are represented by the relationship between stock price indices can occur because investors make the movement of stock price indexes on other exchanges as one of the information in the investment decision-making process (Tamara 2013).

Research conducted by Achsani (2000), on how the stock market responds to shocks from other exchanges, if a shock occurs in other countries, the regional exchanges will respond. In some countries such as; Malaysia, Singapore, Thailand, the Philippines and South Korea which will immediately respond, either directly or indirectly, to the Indonesia Stock Exchange (IHSG).

Stock prices in the capital market are not always stagnant, there are times of resistance and sometimes support, depending on the strength of demand and supply of exchange participants. In the capital market, fluctuations in the price of a stock will make the stock market attractive to some investors. On the other hand, stock price increases and decreases will occur, due to fundamental, psychological, and external factors.

Several macroeconomic factors that affect stock investment activities on the IDX, such as; inflation, economic growth, foreign exchange rates, SBI, unemployment rate. Some of these variables will affect the investment climate on the stock exchange which will have a psychological impact on investors about the company's prospects in the future.

The entry into force of the Asean Economic Community (MEA) will have an impact on the economies of Southeast Asian countries. This will affect many aspects related to the economic policies of the countries concerned. The relationship between Indonesia and Asia-Pacific countries, especially with Malaysia, the Philippines, Thailand, South Korea and Singapore in the field of export and import commodities, will make the Indonesian economy will be affected by the economies of these countries, either directly or indirectly. Indonesia's economy is seen on the Indonesia Stock Exchange (JCI).
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Table of Asian Country Composite Index 2010 to 2021

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>JCI</th>
<th>SET</th>
<th>PSCI</th>
<th>KOSPI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INDONESIA</td>
<td>THAILAND</td>
<td>PHILIPINA</td>
<td>KORSEL</td>
</tr>
<tr>
<td>2010</td>
<td>3.247,10</td>
<td>8,25</td>
<td>3,91</td>
<td>1.115,71</td>
</tr>
<tr>
<td>2011</td>
<td>3.537,29</td>
<td>8,38</td>
<td>4,50</td>
<td>1.017,92</td>
</tr>
<tr>
<td>2012</td>
<td>4.126,99</td>
<td>11,79</td>
<td>6,04</td>
<td>1.123,13</td>
</tr>
<tr>
<td>2013</td>
<td>4.219,02</td>
<td>11,45</td>
<td>6,36</td>
<td>1.145,20</td>
</tr>
<tr>
<td>2014</td>
<td>5.228,04</td>
<td>13,77</td>
<td>8,24</td>
<td>1.149,99</td>
</tr>
<tr>
<td>2015</td>
<td>4.796,80</td>
<td>12,00</td>
<td>8,11</td>
<td>1.217,47</td>
</tr>
<tr>
<td>2016</td>
<td>5.753,61</td>
<td>15,00</td>
<td>8,20</td>
<td>1.257,81</td>
</tr>
<tr>
<td>2017</td>
<td>7.052,39</td>
<td>17,42</td>
<td>10,31</td>
<td>1.548,43</td>
</tr>
<tr>
<td>2018</td>
<td>7,023,50</td>
<td>15,77</td>
<td>9,36</td>
<td>1.295,11</td>
</tr>
<tr>
<td>2019</td>
<td>7,265,02</td>
<td>16,70</td>
<td>9,77</td>
<td>1.427,14</td>
</tr>
<tr>
<td>2020</td>
<td>6,968,94</td>
<td>16,20</td>
<td>9,04</td>
<td>1.865,15</td>
</tr>
<tr>
<td>2021</td>
<td>8,252,41</td>
<td>19,39</td>
<td>9,74</td>
<td>2.134,34</td>
</tr>
</tbody>
</table>

Sources: Indonesia Stock Exchange and Financial Services Authority

The Indonesian Composite Stock Price Index (JCI) fluctuated from 2010 to 2021, sometimes bullish or bearish, as well as indices for Asian countries such as: Philippines, Thailand and South Korea. Looking at the movement of the JCI and several countries in ASIA, this study will see whether there is a significant relationship between the JCI and the ASIA country index as well as several macro variables in Indonesia with data from 2010 to 2021.

THEORITICAL REVIEW

Capital Market

According to the Capital Market Law No. 8 of 1995, the definition of capital market is explained more specifically as activities related to the Public Offering and Trading of Securities, public companies related to the issued Securities, as well as institutions and professions related to Securities.

Understanding the capital market based on presidential decree no. 52 of 1976 concerning the capital market states that the capital market is a Stock Exchange as referred to in Law no. 15 of 1952. According to the law, an exchange is a building or room designated as an office and a place for securities trading activities, while securities categorized as securities are stocks, bonds and other evidence commonly known as securities.

The capital market in general is a meeting place for sellers and buyers to conduct transactions in order to obtain capital (Kasmir, 2008:207). Basically, the capital market is similar to other markets. For every successful buyer, there must always be a successful seller. If there are more parties who want to buy than those who want to sell, the price will be higher.

Share

Shares according to Zubir (2011:4) are documents as evidence of ownership of a company, if the company earns a profit, then each shareholder is entitled to a share of the distributed profits or dividends in accordance with the proportion of ownership.

1. Common Stock
2. Priority Stock

Stock Risk

Zubir (2011:23) Expected stock returns are used to anticipate stock returns estimates in the future. Meanwhile, the actual return (realized return) is obtained after a period has passed and investors resell their shares. The actual return can be greater or less than the expected return. Risk is the difference between the expected return and the realized return. The essence of the investment process is to take into account the possibility of deviating realized returns from expected returns.

Inflation

Inflation is a symptom of rising prices that cover almost all types of goods and services from time to time continuously, thus causing the purchasing power of the rupiah to be different from the rupiah in other years (Boediono, 1986:155). In the Accounting Principle Board no.4, inflation is a decrease in purchasing power caused by an increase in the general price level of a number of goods and services. With the decline in people's purchasing power, the company's profits will decrease, resulting in a decrease in the company's share price in the capital market. Inflation will encourage people to reduce investment and will save more of their investment funds in banks to get higher yields (interest), when compared to other investment benefits. This condition will reduce investment in the capital market, resulting in the JCI tending to be bearish (decrease).
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Economic Growth
Economic Growth according to the Central Statistics Agency (BPS), is the development of the production of goods and services in an economic area in a certain year against the value of the previous year which is calculated based on GDP/GRDP at constant prices. Economic growth according to Jhingan, 2007: 57), is a continuous change in the economic conditions of a country towards a better state. Economic growth is a long-term increase in the ability of a country (region) to provide more and more economic goods to its population, this ability grows with technological progress, and the necessary institutional and ideological adjustments.

Composite Stock Price Index (JCI)
JCI is the main index used by the IDX. JCI was first introduced on April 1, 1983 as an indicator of the price movements of common and preferred shares listed on the IDX. The base date for calculating the JCI was on August 10, 1982 with a total of 13 listed shares at that time (Hadad et al., 2010).

Kuala Lumpur Composite Index (KLCI)
KLCI is the main index used by the established Bursa Malaysia since 1973. On 6 July 2009, Bursa Malaysia integrated the FTSE and KLCI indices using the international index calculation methodology to increase transparency. Currently, KLCI is known as the FTSE Stock Exchange Malaysia KLCI (Bursa Malaysia, 2021).

Straits Times Index (STI)
STI is the most globally recognized Singapore stock exchange index. STI records the stock movements of the 30 largest companies with the highest liquidity on the Singapore Exchange Ltd. This index is also the main index of the FTSE ST Index Series, an index created by Singapore Press Holdings (Straitstimes, 2021).

Stock Exchange of Thailand (SET)
SET is the main index used by the Thai stock exchange which has been established since 1962. This index combines all companies listed on the Stock Exchange of Thailand and has been operating since 1975 (SET, 2021).

Philippine Stock Exchange Index (PSEI)
PSEI is the main index of the Philippine capital market which consists of 30 companies with the largest market capitalization and highest liquidity. PSEI itself is one of the oldest stock exchanges in Asia because it has been operating since the establishment of the Manila Stock Exchange in 1927 and is a combination of the Manila and Makati Stock Exchange (PSEI, 2021).

South Korea Stock Exchange KOSPI
KOSPI is the main index in South Korea which consists of the 200 most liquid major stocks traded by the Korean stock exchange. For seven consecutive years, since opening in May 1996, KOSPI's transaction volume has far exceeded the volume of other futures and derivatives products in the world (KOSPI, 2021).

RESEARCH METHODS
Types of Research
This type of research is explanatory research whose purpose is to test the hypothesis between research variables. So that it can be seen the influence between the dependent variable (dependent variable) and the independent variable (independent variable). The approach in this study is a quantitative approach with data series (time series).

Data Sources and Types
The time series index data in this study were sourced from the websites of Yahoo Finance, Bloomberg, and the Indonesian Stock Exchange Capital Market Reference Center. Based on the source, this research data can also be categorized as secondary data.

Population and Sample
The population of this study includes the stock price index of several ASIA countries and the sample of this study includes the stock price index of the period 2010-2021 from five ASIA countries, namely; Indonesia, Singapore, Malaysia, Thailand, Philippines and South Korea.

Table of Variable Operational Definition

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation</td>
<td>Inflation is an increase in costs variable per unit and price goods continuously in a certain period which expressed in percent</td>
<td>Inflation = [(CPI – CPI n-1) / CPI-1] x 100</td>
</tr>
<tr>
<td>Economic Growth</td>
<td>Economic growth is a measure that describes the development of a regional economy in a certain year.</td>
<td>PEt = real GDP(t) – real GDP (t-1)/real GDP (t-1) x 100%</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Country</th>
<th>Indicator of stock price movements</th>
<th>Closing price at the end of the year</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCI</td>
<td>Indicator of stock price movements on the IDX</td>
<td>Closing price IDX at the end of the year</td>
</tr>
<tr>
<td>KLCI</td>
<td>Indicator of stock price movements on the KLCI</td>
<td>Closing price KLCI at the end of the year</td>
</tr>
<tr>
<td>STI</td>
<td>Indicator of stock price movements on the STI</td>
<td>Closing price STI at the end of the year</td>
</tr>
<tr>
<td>SET</td>
<td>Indicator of stock price movements on the SET</td>
<td>Closing price SET at the end of the year</td>
</tr>
<tr>
<td>PSEI</td>
<td>Indicator of stock price movements on the PSEI</td>
<td>Closing price PSEI at the end of the year</td>
</tr>
<tr>
<td>KOSPI</td>
<td>Indicator of stock price movements on the KOSPI</td>
<td>Closing price KOSPI at the end of the year</td>
</tr>
</tbody>
</table>

Sources: Several Sources

RESULTS AND DISCUSSION

Multiple Linear Regression Analysis

This study states multiple linear regression analysis 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>(Constant)</td>
<td>-1329.792</td>
<td>-</td>
</tr>
<tr>
<td>Inflation</td>
<td>-109.826</td>
<td>-.151</td>
</tr>
<tr>
<td>Economic Growth</td>
<td>26.506</td>
<td>0.036</td>
</tr>
<tr>
<td>STI</td>
<td>3188.427</td>
<td>0.107</td>
</tr>
<tr>
<td>KLCI</td>
<td>-277.860</td>
<td>-.016</td>
</tr>
<tr>
<td>SET</td>
<td>175.497</td>
<td>0.372</td>
</tr>
<tr>
<td>PSEI</td>
<td>263.697</td>
<td>0.336</td>
</tr>
<tr>
<td>KOSPI</td>
<td>1.077</td>
<td>0.218</td>
</tr>
</tbody>
</table>

a. Dependent Variable: JCI

Multiple Linear Regression Test Results

\[ Y = -1329.792 - 109.826 \text{Inflation} + 26.506 \text{Economic Growth} + 3188.427 \text{STI} - 277.860 \text{KLCI} + 175.497 \text{SET} + 263.697 \text{PSEI} + 1.077 \text{KOSPI} \]

Based on the Partial Test table (t test), it can be concluded as follows:

a. The resulting constant value \((\alpha)\) of -1,329,792 indicates if the values of the variables Inflation, Economic Growth, STI, KLCI, SET, PSEI and KOSPI are fixed (unchanged), then the JCI is 1,329,792 units of scale.
b. If inflation increases by 1 unit scale, the Composite Stock Price Index (IHSG) in the Indonesian capital market will decrease by 109,500 units on a scale and vice versa.
c. If Economic Growth increases by 1 unit scale, the Composite Stock Price Index (IHSG) in the Indonesian capital market will increase by 126,506 units and vice versa.
d. If the Singapore Index (STI) increases by 1 unit scale, then the Composite Stock Price Index (IHSG) in the Indonesian capital market increases by 3,188,427 units and vice versa.
e. If the Malaysia Index (KLSE) has increased by 1 unit scale, then the Composite Stock Price Index (IHSG) in the Indonesian capital market has decreased by 277,860 on a unit scale and vice versa.
f. If the Thailand Index (SET) increases by 1 unit scale, then the Composite Stock Price Index (IHSG) in the Indonesian capital market increases by 263,077 unit scale and vice versa.
g. If the Philippine Stock Price Index (PSEI) increases by 1 unit scale, the Composite Stock Price Index (IHSG) in the Indonesian capital market will increase by 277,860 on a unit scale and vice versa.
h. If the South Korean Index (KOSPI) increases by 1 unit scale, then the Composite Stock Price Index (IHSG) in the Indonesian capital market increases by 1,697 units on a scale and vice versa.

Partial Test (t Test)

According to Ghozali (2013: 61), the test basically shows how far the influence of one independent variable individually in explaining the dependent variable. The results of the partial test (t test) are as follows:
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a) Inflation has a t count of -0.994 < t table of 4.950, a significance value of 0.377 > 0.050, which means H1 is rejected, it can be concluded that inflation has no significant effect on the Composite Stock Price Index (JCI).

b) Economic Growth has a t count of -0.251 < t table of 4.950, a significance value of 0.815 > 0.050, which means H2 is rejected, it can be concluded that Economic Growth has no significant effect on the Composite Stock Price Index (JCI).

c) Singapore Index (STI) has a t count of 0.890 < t table of 4.950, a significance value of 0.424 > 0.050, which means H3 is rejected, it can be concluded that the Singapore Index (STI) has no significant effect on the Composite Stock Price Index (CSPI).

d) Malaysia Index (KLCI) has a t count of 0.063 < t table of 4.950, a significance value of 0.953 > 0.050, which means H4 is rejected, it can be concluded that the Malaysia Index (KLCI) has no significant effect on the Composite Stock Price Index (CSPI).

e) Thailand Index (SET) has a t count of 0.723 < t table of 4.950, a significance value of 0.510 > 0.050, which means H5 is rejected, it can be concluded that the Thailand Index (SET) has no significant effect on the Composite Stock Price Index (CSPI).

f) Philippine Index (PSEI) has a t count of 0.845 < t table of 4.950, a significance value of 0.446 > 0.050, which means H6 is rejected, it can be concluded that the Philippine Index (PSEI) has no significant effect on the Composite Stock Price Index (JCI).

g) South Korean Index (KOSPI) has a t count of 0.867 < t table of 4.950, a significance value of 0.435 > 0.050, which means H7 is rejected, it can be concluded that the South Korean Index (KOSPI) has no significant effect on the Composite Stock Price Index (JCI).

Correlation Test

Inflation, Economic Growth, STI, KLCI, SET, PSEI and KOSPI on the JCI to the JCI have a significant effect (Sig. 0.000 < 0.005) and F Count 24.386 > F table 3.837.

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>.987a</td>
<td>.974</td>
<td>.929</td>
<td>442.41196</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Inflation, Economic Growth, STI, KLCI, SET, PSEI, KOSPI.
b. Dependent Variable: JCI

The results of the correlation between Inflation, Economic Growth, Singapore Index, Malaysia Index, Thailand Index, Philippines Index and South Korea Index to the JCI for the 2010 to 2021 period of 0.987 or 98.7% and Adjusted R Square of 0.929 or 92.9% have an influence very strong.

Simultaneous Test

Based on data processing in the F (Anova) test, the following regression equation can be 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>Regression</td>
<td>29703173.35</td>
<td>7</td>
<td>4243310.478</td>
<td>21.680</td>
<td>.005a</td>
</tr>
<tr>
<td>Residual</td>
<td>782913.383</td>
<td>4</td>
<td>195728.346</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30486086.73</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: IHSG
b. Predictors: (Constant), Inflation, Economic Growth, STI, KLCI, SET, PSEI, KOSPI.

The results of the Anova test, are simultaneous tests showing f count of 21.680 > t table of 2.570, a significance value of 0.005 < 0.050, the effect of Inflation, Economic Growth, Singapore Index, Malaysia Index, Thailand Index, Philippines Index and South Korea Index, simultaneously having an effect Significant to the Composite Stock Price Index (IHSG) in Indonesia for the period 2010 to 2021.
CONCLUSION

The conclusion of the study is that Inflation, Economic Growth, Singapore Index, Malaysia Index, Thailand Index, Philippines Index and South Korea Index partially have no significant effect on the JCI, but simultaneously (simultaneously) have a significant effect on the JCI.

Investors, before placing their investment funds in the Indonesian capital market (IDX), do not need to pay attention to and analyze the stock indexes of Asian countries, because partially they have no significant effect, but also need to be considered as material for further consideration and study, because they simultaneously have a significant effect against the JCI.

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