

Global and Regional Stock Market: Case Study Asia, Amerika, Europe, and Indonesia

¹Lisa Kustina, ²Adrianna S Rakhmat,
³Kurniawati

¹ Faculty of Management, Pelita Bangsa University, Cikarang

² Faculty of Management, Pelita Bangsa University, Cikarang

³ Faculty of Management, Pelita Bangsa University, Cikarang

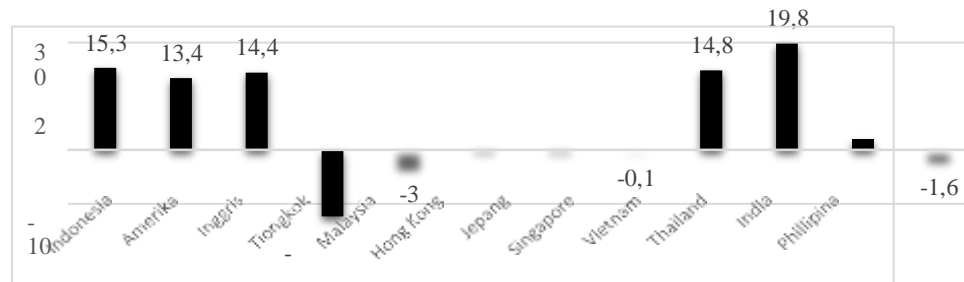
*Corresponding author: Lisakustina188@gmail.com

Abstract. *The purpose of this study was to determine how much influence the stock indices in Asia, Europe, and America have on the movement of the Jakarta Composite index in Indonesia, both partially and simultaneously. The stock price index chosen in the Asian region is the Nikkei 225 index and the Hang Seng index, in the European area the Financial Times Stock Exchange 100 index and the Deutscher Aktienindex 30 index, while for the American region the Nasdaq Composite Index and the Dow Jones Industrial Average index. The analytical method used in this research is descriptive analysis with a quantitative approach. The sample used in this study is the closing price from January 2016 - December 2018. The method of multiple linear regression analysis with e-views software. The results of this study indicate that the Nikkei 225 index, Hang Seng, Nasdaq Composite Index, and Dow Jones Industrial Average affect the Jakarta Composite Index (JCI) while the FTSE 100, DAX 30 index does not affect the JCI.*

Keywords: *Jakarta Composite Index, NIKKEI 225, Hang Seng, FTSE100, DAX30, Nasdaq Composite Index, Dow Jones Industrial Average (DJIA)*

1. INTRODUCTION

Stock exchanges in developed countries generally have an intense influence on the movement of stock exchanges in other countries, for example the American Stock Exchange, the Japan Stock Exchange, the UK Stock Exchange and others (Novianto, 2010). Composite Stock Price Index (IHSG) is an explanation of economic activity in Indonesia. Hence, the fluctuation of world stock price index will possibly affect the price movements of the Composite Stock Price Index (IHSG). IHSG conditions in early 2008 continued to decline until the end of 2009. Before the decline occurred in 2007 in the United States, there was a financial crisis causing a collapse in prices from the Dow Jones stock index, as well as stock indexes in Japan, the Nikkei 225, the Shanghai Composite Index in China, and the FTSE 100 index in London (Oktarina, 2015).



Source : Bloomberg

The Composite Stock Price Index (IHSG) in 2016 continued to increase compared to 2015 by giving a return of 19.99%. The strengthening of the IHSG was based on a positive sentiment regarding the success of the Tax Amnesty program. In 2016, IHSG gave a great performance by growing by 15.3% and achieving the second highest position among the global Stock Exchange indexes and in the ASEAN region after Thailand which grew by 19.8%. In 2017, IHSG gave a return of 15.32%, strengthened with a level of 6,355.65 compared to the closing price in 2016. This increase was based on an increase in domestic ownership by 54% of the total capitalization value. However, in 2018 the closing price of the IHSG fell to -2.53%. This decline occurred due to an increase in the FFR (Federal Funds Rate) which rose 4 times and an increase of 100 basis points (BPS). In addition, the condition of global financial markets increased because the trade war between the United States and China as well as the economic crisis that struck the countries of Argentina and Turkey which caused negative sentiment towards developing countries. In addition to IHSG, global indices also declined such as the Nikkei 225 index, FTSE 100, DAX 30 etc.

2. LITERATURE REVIEW

The IHSG was publicly introduced on April 1, 1983 with its basic calculation date on August 10, 1982 and the initial value of the IHSG was 100. The calculation method used in the IHSG uses the weighted average market capitalization method. Nikkei 225 is a stock index that is on the Tokyo Stock Exchange. The Nikkei Index was first published on May 16, 1949, at which time the average price was ¥ 176.21 then divided by 22 shares of companies included in the Nikkei shareholders. Hang Seng Index Company Limited (Hang Seng index) is a stock index owned by Hang Seng Bank. The Hang Seng Index was published in 1984 and is an index that describes the most famous index in Hong Kong which covers the Hong Kong market and mainland China.

The Financial Times Stock Exchange 100 is an index that is traded on the London Stock Exchange. This index tracks the performance of 100 public companies that have high capital traded on the London Stock Exchange (LSE). Deutscher Aktienindex 30 is a stock index traded on the Frankfurt Stock Exchange published by the Deutsche Borse Group in Germany. Nasdaq is an abbreviation of the National Association of Securities Dealers Automated Quotations which is a stock exchange run by the National Association of Securities Dealers. In the Nasdaq index, companies commonly from the field of technology such as Apple, Facebook, Microsoft etc. Dow Jones is one of the stock indexes that uses 30 Blue Chip shares as a value of the weighted average. The Dow Jones Index has been a very influential stock on other stocks that were followed globally since October 1, 1928

- H1:** *NIKKEI 225* index has a significant positive effect on the IHSG
H2: *Hang Seng Index* has a significant positive effect on the IHSG
H3: *FTSE Index (Financial Times Stock Exchange) 100* has a significant positive effect on the IHSG
H4: *DAX Index (Deutscher Aktienindex) 30* has a significant positive effect on the IHSG
H5: *Nasdaq Composite Index* has a significant positive effect on the IHSG
H6: *Dow Jones Industrial Average* has a significant positive effect on the IHSG
H7: Asian Stock Indices (*Nikkei 225* and *Hang Seng*), European Stock Indices (*FTSE 100* and *DAX 30*) and American Stock Indices (*Nasdaq Composite Index* and *Dow Jones Industrial Average*) simultaneously influence on IHSG.

3. METHODS

Stock price indexes selected in the Asian region are the Nikkei 225 index and the Hang Seng index, while the *Financial Times Stock Exchange 100* index and the *Deutscher Aktienindex 30* index in Europe and the *Nasdaq Composite Index* and the *Dow Jones Industrial Average* index in the U.S. The analytical method used in this study is descriptive analysis and uses secondary data taken from the stock exchange web of each country. The data was tested using evIEWS software.

4. RESULT AND DISCUSSION

Multiple linear regression analysis was used to test the effect of variable X1, the Asian stock price index (*Nikkei 225* and *Hang Seng*), variable X2, European stock price index (*FTSE100* and *DAX30*) and variable X3, the American stock price index (*Nasdaq composite* and *DJIA*) against Y, the Composite Stock Price Index (IHSG).

Table 1. Regression Analysis

Variabel	Coefficient	Prob.
C	1594,408	0,0121
Nikkei 225	-0,093272	0,0207
Hang Seng	0,073029	0,0007
FTSE 100	0,145926	0,3775
DAX 30	0,007457	0,9224
Nasdaq	-0,307003	0,0498
DJIA	0,222901	0,0003
R-Squared	0,931246	
Adjusted R-squared	0,916513	
F-Statistic	63,20854	
Prob. (F-Statistic)	0.000000	

Figure 5.5 above shows multiple linear regression test results using the Least Square method in EvIEWS 10 software. Firstly, it can be seen from the results of Prob (F-statistics) of 0.000000 which means that all variable indexes of Asian, European and American stock prices affect simultaneously the dependent variable IHSG. Secondly, it can be seen from the Probability value and it can be said that it affects significantly if the Probability result value <0.05. As it showed from the picture that the variables that have a Probability value <0.05 are the Nikkei225 index, Hang Seng and DJIA. Therefore, the Nikkei 225, Hang Seng and DJIA

indexes influence the IHSG. The other three variables, FTSE 100, DAX 30 and Nasdaq have a Probability value > 0.05 . As a result, the three variables are declared to have no effect on the IHSG.

Aditya et al (2017) and Kusumawati & Asandimitra (2017) stated that the Nikkei 225 index had a significant and positive effect on the Composite Stock Price Index (IHSG). The results of the study are also the same as Wicaksono and Yasa (2017) which stated that the Hang Seng index has an effect on the rise of IHSG in Jakarta Stock Exchange. Tamara & Djazuli (2012), Topowijono (2015) and Sihombing (2013) stated that the DAX 30 stock index has no significant effect on the Composite Stock Price Index (IHSG) similar to the results of this study. Moreover, this study also gives the same results as Bery and Worokinasih (2018), which stated that the Nasdaq Composite Index significantly influences the price of the Composite Stock Price Index (IHSG). Gom (2013) stated that the Dow Jones Industrial Averages (DJIA) stock index has a positive and significant effect on the Composite Stock Price Index (IHSG) in accordance with the results of this study.

CONCLUSION

The results of this study indicate that the Asian, European and American stock price indexes simultaneously influence the IHSG, while the Probability value of each stock index using the same method, *Least Squares*, shows that the *Nikkei 225 index*, *Hang Seng*, *Nasdaq Composite Index* and *Dow Jones Industrial Average* affects the IHSG, while the FTSE 100 Index and DAX 30 has no effect on the IHSG.

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