

Effect of the Dow Jones Industrial Average on the Composite Stock Price Index

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Abstract

The direction of this research aims to examine effect of the Dow Jones Industrial Average on the Composite Stock Price Index. The type of research conducted is causal associative research. The population in this study is the entire monthly report data of the Dow Jones Industrial Average and the Composite Stock Price Index from January 2018 to December 2021. The number of samples from monthly time series data is 120 samples. The analytical method used in this research is multiple linear regression analysis method, through partial test. The results show that Dow Jones Industrial Average has a positive and significant effect on the Composite Stock Price Index.

Keywords

dow jones industrial average; composite stock price index; partial test



I. Introduction

The capital market has an important role for the economy of a country because the capital market performs two functions, namely first as a means for business funding or as a means for companies to obtain funds from the investor community. Funds obtained from the capital market can be used for business development, expansion, or additional working capital. Second, the capital market is a means for the public to invest in financial instruments such as stocks, bonds, mutual funds, and others. Thus, the public can place their funds according to the characteristics of the benefits and risks of each instrument.

The role of the capital market in a country's economy is as follows:

1. Investment Function

Money deposited in the bank will certainly experience depreciation. Currency values tend to decrease in the future due to inflation, changes in exchange rates, economic weakness, and others. If the money is invested in the capital market, investors can not only protect the value of their investment, the money invested in the capital market tends not to experience depreciation due to the economic activities carried out by the issuer.

2. Wealth Function

The capital market is a way to store wealth in the long and short term until the wealth can be used again. This method is better because the wealth does not depreciate like other assets. The older the value of assets such as cars, buildings, and ships, the greater the depreciation value will be. However, bonds, stock deposits and other securities instruments will not depreciate. Securities represent buying power in the future.

3. Liquidity Function

Wealth stored in securities can be liquidated through the capital market with very minimal risk compared to other assets. The process of liquidating securities can be done

quickly and cheaply. Although the value of liquidity is lower than money, money has a lower ability to store wealth than securities. This happens because the value of money is easily disturbed by inflation from time to time.

4. Loan Function

The capital market for a country's economy is a source of development financing from loans collected from the community. The government is encouraging the growth of the capital market to get easier and cheaper funds. This happens because loans from commercial banks generally have high interest rates. Meanwhile, companies that sell bonds on the money market can obtain funds at lower interest costs than bank interest.

The development of the capital market in Indonesia, especially on the Indonesia Stock Exchange, cannot be separated from the influence of macroeconomic conditions in Indonesia both internally and externally. Macroeconomic incidents, such as government policies, the impact of the global crisis have stimulated stock exchange trading activities, and have had an which is negative for stock exchange trading (Rumbiati, 2016). The capital market itself has a very important role for the private sector, government, and society. Through the capital market, the private sector can use it as an alternative to financing their business through the issuance of securities. Meanwhile, the capital market for the public is an alternative for storing funds in the form of investments in securities such as stocks, bonds, and mutual funds in the hope of getting a profit or a rate of return on income from investing in securities traded on the capital market. As for the government, the capital market is a means of driving the economy and economic development (Samsul, 2006).

One indicator that is often used to monitor the development of the capital market in Indonesia is the Composite Stock Price Index, which is a composite index of all types of stocks listed on the Indonesia Stock Exchange. This Composite Stock Price Index experiences movement or changes every day. This happens because of changes in market prices that occur every day and the presence of additional shares. Through this Composite Stock Price Index, an investor can see market conditions increasing or decreasing (bearish) (Mauliano, 2009).

The movement of the Composite Stock Price Index is influenced by several factors, namely factors originating from within the country and factors originating from abroad. Factors originating from within the country can come from fluctuations in currency exchange rates in a country against other countries, inflation and interest rates in that country, economic growth, social, political and security conditions of a country, and so on. While factors originating from abroad are stock exchanges that have a strong influence on stock exchanges in other countries, namely stock exchanges belonging to developed countries such as America, Japan, England and so on. In addition, stock exchanges located in the same area usually also influence each other due to the proximity of geographical factors between countries, such as the STI index in Singapore, KLSE in Malaysia, NIKKEI in South Korea, and Seng in Hong Kong. External factors also come from world oil prices, world gold prices, economic conditions and foreign security and so on. Therefore, all stock indices in each country always monitor movements that occur on stock exchanges in other countries. In addition, investor behavior also affects performance. from the Composite Stock Price Index (Yanuar, 2013).

The macroeconomic environment that can directly affect company performance and stock performance include interest rates, economic cycles, inflation, government policies related to certain companies, exchange rates, tax regulations, budget deficits, interest rates on foreign loans, international economic conditions, understanding of the

economy, money supply, private investment, balance of trade, and payments (Samsul, 2006).

The factor that influences the Composite Stock Price Index is the Dow Jones which is the oldest stock market index in the United States and is a representation of the performance of the most important industry in the United States (Witjaksono, 2010). With the increase in the Dow Jones Industrial Average, this means that the performance of the United States economy has also improved. As Indonesia's number one export destination, the United States' economic growth can encourage Indonesia's economic growth through export activities and capital inflows, both direct investment and through the capital market. Capital inflows through the capital market will certainly have a positive influence on the Composite Stock Price Index. This has the consequence that the movement of the Indonesian capital market will be influenced by the movement of the world capital market, either directly or indirectly.

The direction of this research aims to examine effect of the Dow Jones Industrial Average on the Composite Stock Price Index.

II. Research Method

The type of research conducted is causal associative research. Causal associative research is research that explains the relationship between two or more variables and a causal relationship, there are explanatory and dependent variables (Asyraini et al., 2022; Octiva, 2018; Pandiangan, 2015).

Population is a generalization area consisting of subjects or objects that have certain qualities and characteristics determined by the researcher to be studied and then draw conclusions (Octiva et al., 2018; Pandiangan, 2018). The population in this study is the entire monthly report data of the Dow Jones Industrial Average and the Composite Stock Price Index from January 2018 to December 2021. The sample is part of the number and characteristics possessed by the population. In order to accurately describe the variables studied, the researchers took all the population as samples (Octiva et al., 2021; Pandiangan et al., 2021; Pandia et al., 2018). The number of samples from monthly time series data is 120 samples.

Method of collecting data is a systematic approach to accurately collect information from various sources to provide insights and answers, such as testing a hypothesis or evaluating an outcome (Jibril et al., 2022; Pandiangan et al., 2018; Pandiangan, 2022). The method of collecting data is through literature study, namely looking for journals, previous research and books related to the problem being studied.

The analytical method used in this research is multiple linear regression analysis method, through partial test. Partial test is aimed at testing how the partial effect of the independent variable on the dependent variable (Pandiangan et al., 2022; Tobing et al., 2018).

III. Results and Discussion

3.1 The Dow Jones Industrial Average

The term "Dow Jones" is certainly no stranger to those who are in the stock world. The Dow Jones Industrial Average is one of the three main indicators of movement in the United States stock market, in addition to the Nasdaq and Standard & Poor's 500.

The Dow Jones stock index is a reference for those who pay attention to the stock market or investors. Not only those who are actively trading on Wall Street, but everyone

who is engaged in stock exchanges around the world. The Dow Jones index is the best known and oldest index today.

The Dow Jones index was first introduced by the editors of The Wall Street Journal daily. They are part of the Dow Jones & Co. Its creators are the founders of this company, namely Charles Dow and Edward Jones, a statistician. Because of this origin, the index was given the name Dow Jones.

The calculation of the stock index was first carried out on May 26, 1896. However, the results were not published in the Wall Street Journal, but the Customer's Afternoon Letter. There were only 12 companies included in the index calculation at that time. Decades later, namely 1928, the index was expanded and reached 30 issuers.

The twelve issuers included in the initial launch of the Dow Jones index are railroads, cotton, gas, sugar, tobacco and oil companies. One of them, General Electric, which was a member of the index from the beginning until 2016.

Early calculations focused on the majority of transportation companies which were growing stocks at that time. That is why, the term average stock price is known as the Transportation Average. In 1896, the transport and industrial indexes were divided to form the Dow Jones Industrial Average.

The fluctuating movement of the United States economy that leads to industry makes issuers change. It is no longer dominated by companies engaged in the commodity sector, but has moved towards consumer and technology companies.

In order to be on the Dow Jones index, a company must be very large. The company is also a market leader in the industry. Since its establishment until now, many companies enter and leave in the calculation of the index.

The Dow Jones index is calculated based on stock prices. Its value is not only based on the price of each share of the industry included in it, but the price which is then divided by a certain number.

Changes in stock prices due to the distribution of dividends or stock splits will affect the index value. This is why the Dow Jones stock index is always changing. This index calculation is known as the weighted price method.

If the Dow Jones index falls, this is caused by the decline in stock prices of several companies at once. The decline in the index will usually only occur when the price changes are very significant.

The index could also fall due to the general economic downturn. Usually this is triggered by falling oil prices, economic crises and natural disasters, and various other factors.

For the public, a very significant decline in the Dow Jones is something that is often viewed negatively. Inexperienced investors experience the psychological effect of panic. In the end, many of them also threw away their shares. In fact, in terms of trends, when the Dow Jones index drops, that's the right time to buy.

There are several benefits of the existence of the Dow Jones index, including simplicity and ease in calculating stock indexes in the capital market. In addition, because it has a very long history, the opportunity to analyze data over a long period of time is wide open.

On the other hand, there is also a weakness in this calculation, namely the lack of objectivity. Although the 30 largest companies are in the Dow Jones index, it is not impossible that there are also smaller companies that influence the stock market.

3.2 The Composite Stock Price Index

The Composite Stock Price Index is one of the stock market indexes used by the Indonesia Stock Exchange. The Composite Stock Price Index was first introduced on April 1, 1983 as an indicator of stock price movements on the Jakarta Stock Exchange. This index covers the price movements of all common and preferred shares listed on the Indonesia Stock Exchange. The base day for calculating the Composite Stock Price Index is August 10, 1982. On that date, the index was set at a base value of 100 and the listed shares at that time amounted to 13 shares.

The highest intraday position ever achieved by the Composite Stock Price Index was 6,996.93 points recorded on March 1, 2022. The highest closing position ever reached was 6,928.32 points on March 4, 2022.

3.3 Partial Test Results

Table 1. Partial Test Results

| Variable | B | Sig. |
|------------------------------|----------|-------------|
| Dow Jones Industrial Average | 0.109 | 0.014 |

Dependent Variable: Composite Stock Price Index

The results show that Dow Jones Industrial Average has a positive and significant effect on the Composite Stock Price Index. This is because it has a significance value of $0.014 < 0.05$. This indicates that the increase in the Dow Jones Industrial Average is able to affect the Composite Stock Price Index. The increase in the Dow Jones Industrial Average can be assumed that the performance of the United State economy will also improve. As Indonesia's number one export destination, the United States economic growth can encourage Indonesia's economic growth through export activities and capital inflows, both direct investment and through the capital market. Capital inflows through the capital market will certainly have a positive influence on the Composite Stock Price Index. This research is strengthened by the theory put forward by Yanuar (2013) factors originating from abroad (external) have a strong influence on the stock exchanges of developed countries such as America, Japan, England, and so on. Samsul (2006) states that the Indonesian capital market has been integrated with the world capital market. This will have the consequence that the movement of the Indonesian capital market will be influenced by the movement of the world capital market, either directly or indirectly. In investing itself, there is a risk of State Risk, namely companies operating abroad, then the economic and political stability of the country concerned will be indispensable in order to avoid risk that is too high. So that the Composite Stock Price Index can indirectly be influenced by the Dow Jones Industrial Average.

IV. Conclusion

The results show that Dow Jones Industrial Average has a positive and significant effect on the Composite Stock Price Index.

The advice given in the research is that investors can be aware of the movement of the Dow Jones Industrial Average which can affect the performance of the capital market in Indonesia to determine the ideal position, whether they should buy, sell, or hold.

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