

THE INFLUENCE OF INFLATION, INTEREST RATES AND EXCHANGE RATES ON STOCK PRICES (STUDY ON: PT SENTUL CITY TBK. IN PROPERTY AND REAL ESTATE SECTOR COMPANIES LISTED ON THE IDX)

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Abstract

Globalization has a fairly broad impact on investment and funding, both short term and long term funding. Investment and funding can make it easier for companies to get additional sources of capital for the company's operational activities. Stocks are the instrument that many investors choose because stocks are able to provide an attractive profit rate and by issuing shares is one of the company's choices when deciding to fund the company. Prospective investors need to pay attention to stock price developments or share profit rates as well as macroeconomic factors that affect stock prices in order to reduce the risk of loss in investment activities in the capital market. From the examination it can be seen that exchange rates, inflation, and interest each have their own influence on the prices of shares listed on the Indonesia Stock Exchange. The object of this study is the price of company shares in the property and *real estate sector* which are listed on the Indonesian Stock Exchange. The results of the simultaneous test analysis show that there is a significant influence of inflation, the BI rate and the US dollar exchange rate simultaneously on the stock prices of property and *real estate companies* on the Indonesia Stock Exchange. There is no significant effect partially on the inflation variable on company stock prices in the property and *real estate sector* on the Indonesia Stock Exchange. There is a partial significant effect of the BI rate on stock prices of property and *real estate companies* on the Indonesia Stock Exchange. There is a significant effect partially on the exchange rate on stock prices of property and *real estate sector companies* on the Indonesia Stock Exchange.

Keywords : *Inflation; Interest Rate; Exchange rate; Stock price.*

1.INTRODUCTION

The era of globalization has pushed the world to enter the rapid development of technology and information, as well as in the economic sector. Globalization also has a fairly broad impact on investment and funding, both short-term funding and long-term funding. Investment is not only limited to the domestic environment but in the scope between countries and can influence each other. The purpose of investment and funding activities is to improve the economic welfare of a country. Investment and funding can make it easier for companies to obtain additional sources of capital for the company's operational activities. Increasing sources of capital obtained by the company will create stability in the business cycle that the company wants to achieve. Syamsuddin (2004: 410) states that "investment (capital expenditure) are expenditures made by companies with the hope that these expenditures will provide benefits or results (benefits) in a period of more than a year". It can be said that investment is a way for each company to get its source of capital. Companies need to get sources of capital in order to survive in the business cycle. The source of capital comes from outside the company and from within the company. Internal capital sources, namely sources of capital generated by themselves from within the company, such as depreciation and retained earnings. It is different with external capital sources, namely sources of capital obtained from third parties outside the company such as banks, capital markets and suppliers.

According to Sunariyah (2003: 147), the Composite Stock Price Index is a series of historical information regarding the movement of the joint stock price, up to a certain date and reflects a value that serves as a measurement of the performance of a joint stock on the stock exchange. The

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information shown by the Composite Stock Price Index at any time is a description of the market situation that occurs in general or to indicate whether stock prices have increased or decreased in that particular country. Increases or decreases that occur in the Jakarta Composite Index can also be reflected in the movements of economic and political phenomena that occur. Tandelilin (2001: 211) states that there are several variables that influence stock price fluctuations which are reflected in the Jakarta Composite Index, namely inflation, interest rates, and the rupiah exchange rate. These macroeconomic factors will give a positive or negative reaction to the stock price index in the capital market. The movement of the Jakarta Composite Index is shown in Figure 1 as follows:



Figure 1 shows that the Composite Stock Price Index tends to move up. As time goes by, the Composite Stock Price Index tends to increase until the end of the 2017 period. Share Price is the price set for a company for other parties who wish to have share ownership rights. The value of stock prices always changes all the time. The value of the share price is influenced by the supply and demand that occurs between sellers and buyers of shares. The increase and decrease in stock prices in the capital market is directly proportional to the performance of a company. Information about a company's stock price can be found on a stock exchange. Stock prices determine the wealth of shareholders so that information becomes important for investors in the capital market. Stock price information is divided into weak information, semi-strong information and strong information. Stock prices can be determined using fundamental analysis and technical analysis (www.id.m.wikipedia.org).

The phenomenon of rising and falling stock prices in the property and *real estate sector* has resulted in investors tending to make judgments after analyzing stock prices which will later be used as a reference in making investment decisions on stocks. In addition to price fluctuations, another phenomenon that arises is the inconsistency of the results of one study with the results of other studies, including the results of research conducted by Kustanto (2011) explaining that inflation, interest rates, the rupiah exchange rate have a significant influence on stock prices. The stock performance of the property and construction sector up to December 2014 grew brilliantly, growing 73.11% or the highest on the Indonesia Stock Exchange (IDX). Agribusiness stocks on an annual basis (yoy) are still minus 3.92%, the mining sector has strengthened 2.85%, consumer goods sector shares have strengthened positively 8.19%, and infrastructure sector stocks plus 8.64%. Property, finance, trade and service sector shares became the three stocks with the highest increases, namely 32.5%, 18.05%, 12.98%.

Changes in inflation that occur are one of the factors for investors in making decisions to buy a stock. High inflation raises public perceptions that prices have increased. In investing, investors

tend to avoid big risks when there is high inflation, where the economic situation in a country is unstable, because investors will be careful in investing. Sentul City is the first and largest planned city in Indonesia with guaranteed quality living destinations through combination with nature, stylish facilities, premium living, and easy access to the central urban area. Investment is something that is guaranteed for investors because of experienced management and high transparency. With a commitment to achieving city infrastructure that promotes beauty and innovation for the people and families who live, play and work in Sentul City.

Meanwhile, PT Sentul City TBK or BKSL is a company engaged in property *real estate development*, a business that includes indoor and outdoor planning and development such as housing, offices, to shopping centers. This area is managed by PT Sukaputra Graha Cemerlang (SGC), upon direct appointment by PT Sentul City TBK (BKSL) as the founder and owner of the Sentul City area. The management carried out by SGC covers all aspects of environmental maintenance which include maintenance of the entire infrastructure network starting from roads, canals, public street lighting, retaining walls, clean water pipelines, dirty water pipelines, security, road cleanliness, garden maintenance, to transportation. household waste. Illustration of the Sentul area, Jakarta – The Sentul City area is a modern area located between South Jakarta and Bogor with a total area of 3,100 hectares. The Sentul area is an area known for its green housing, lodging and circuits. Reporting from the company's official website, this area is managed by PT Sukaputra Graha Cemerlang (SGC), upon direct appointment by PT Sentul City TBK (BKSL) as the founder and owner of the Sentul City area.

Meanwhile, PT Sentul City TBK or BKSL is a company engaged in property *real estate development*, a business that includes indoor and outdoor planning and development such as housing, offices, to shopping centers. Founded on April 16 1993, on the basis of a company called PT Sentragriya Kharisma at that time, the company kept changing names before finally becoming PT Sentul City in 2006 which is used today. BKSL was an *Initial Public Offering (IPO)* to the public in 1997 and was listed on the Jakarta Stock Exchange (BEJ) and Surabaya Stock Exchange (BES). From there, it is known that the name Stella Isabella Djohan is the majority shareholder in BKSL through PT Sakti Generasi Perdana (SGP), which is a subsidiary of BKSL itself. With the current BKSL shares held by SGP with a total of 52.68%, then the shareholders are held by Stella Isabella Djohan herself as much as 16.76%, the remaining 30.56% are held by the public. Until now, Sentul City continues to innovate to become a world-level green city and to be a pioneer in providing high-quality living by integrating nature, modern facilities and easy transportation access. In accordance with the explanation above, the researcher aims to conduct research entitled "The Influence of Inflation, Interest, Exchange Rates on Stock Prices (Studies on: Property and Real Estate Sector Companies Listed on the IDX).

2.THEORETICAL BASIS

2.1 Stock price

Shares are securities issued by a company as proof that a person or organization already owns shares in that company. The purpose of issuing shares in the form of a certificate of ownership is to obtain capital from the public through securities intermediaries, the Indonesia Stock Exchange (IDX) and stockbrokers. So, the share price is the price set by a company or issuer for a share ownership certificate in their company. Stock prices are things that affect the JCI or Composite Stock Price Index. The stock price index is an indicator that shows the movement of stock prices in a period. The JCI will measure the performance of all stocks listed on the IDX (Indonesian Stock Exchange) at a certain time. The stock price index is a picture of the overall rise and fall of shares listed on the Indonesian Stock Exchange. Usually, the JCI will be discussed when explaining the end of the year to the beginning of the year. Meanwhile, the share price fraction is a system that serves as a guide for negotiating the sale and purchase of shares according to the price and the maximum change in price. Meanwhile, stock volatility is a statistical measure that shows the spread of feedback from securities or market indexes .

2.2 Inflation

Inflation is an increase in the price of goods and services in general and continuously within a certain period of time. An increase in the price of just one or two goods cannot be called inflation unless the increase is widespread or results in an increase in the price of other goods. The opposite of inflation is called deflation. Definition of Inflation Meanwhile, Bank Indonesia defines inflation, which is a general and continuous increase in prices. An increase in just one or two goods cannot be called inflation unless the increase extends (or causes price increases) to other goods. The opposite of inflation is called deflation (www.bi.go.id).

2.3 Exchange rate

Exchange Rates By in Education Corner on 15 June 2016. Exchange rates or exchange rates are exchange rates between two countries that are agreed upon by residents of the two countries to trade with each other. There are two types of exchange rates used, namely the Nominal Exchange Rate and the Real Exchange Rate. The nominal exchange rate is the value that a person uses when exchanging one country's currency for another country's currency. For example, if the exchange rate between the US dollar and the Indonesian Rupiah is IDR 14.500, then 1 dollar is worth Rp. 14,500. When we want 20 dollars, we have to pay Rp. 290,000 ($\$20 \times \text{Rp. } 14,500$). The real exchange rate is the exchange rate that a person uses when exchanging goods and services from one country for goods and services from another country. For example, when buying a bag with the price in America is 400 dollars while in Indonesia it is Rp. 2,000,000. To compare the prices of the two, you have to convert them into common currency, if 1 dollar is IDR 10,000 then the price of a bag in America is IDR 4,000,000. So in comparing the price of bags in America and Indonesia, it can be concluded that the price of bags in Indonesia is $\frac{1}{2}$ the price of bags in America. When the exchange rate changes so that 1 dollar can buy more foreign currency it is called Appreciation, some call it "strengthening". Conversely, when the exchange rate changes so that 1 dollar can only buy less currency, it is called depreciation, some call it "weakening". Rates (REER) The rate illustrates that export values are more expensive and import values are cheaper, this increase indicates reduced trade competitiveness, and vice versa. The data source used is the currency/exchange rate of a particular country (CURI) compared to the Indonesian exchange rate (IDRt). In addition, the calculation of the Indonesian consumer price index (Pid) is compared with a certain country's consumer price index (Pi). The weight calculation (w) used in the calculation is based on the proportion of each country's export and import value to Indonesia's export and import value.

2.4 Interest rate

The interest rate is the price of using investment funds (loanable funds). The interest rate is one indicator in determining whether someone will invest or save (Boediono, 1994: 76). If in an economy there are members of the public who receive income beyond what they need for their consumption needs, then the excess income will be allocated or used for save. Offers for loanable funds are formed or obtained from the total amount of public savings in a certain period. On the other hand, during the same period, members of the public needed funds to operate or expand their business. Another definition of interest rates is the price of using money for a certain period of time. The meaning of the interest rate as "price" is expressed as the price to be paid if there is an "exchange" between one rupiah now and one rupiah in the future. According to the Marshall Principle: "interest, as the price to be paid for the use of capital in all markets, tends towards equilibrium, so that all capital in that market according to the interest rate equals the supply that appears at that level". The interest rate is set on point.

3. RESEARCH METHODS

3.1 Method

Based on the research objective, namely to determine the effect of inflation, interest rates, and the rupiah exchange rate on the Jakarta Composite Index, the type of research that will be used is explanatory research with a quantitative approach. Explanatory research aims to explain the relationship between two or more symptoms or variables, either direction or relationship (Silalahi, 2009:30). According to (Sugiyono, 2015: 8) the quantitative research method can be interpreted as a research method based on the philosophy of positivism, used to examine certain populations or samples, collecting data using research instruments, statistical data analysis, with the aim of testing established hypotheses. This type of research allows researchers to determine the effect of the relationship between two variables, namely the independent variables consisting of inflation, interest rates, and the rupiah exchange rate on the dependent variable, namely the Stock Price Index on the Indonesia Stock Exchange. The results of this study will determine the effect of inflation, interest rates, and the rupiah exchange rate on the Composite Stock Price Index. This research is expected to be in accordance with the objectives and formulation of the problems in the research that have been described and explained previously.

3.2 Data processing analysis

The research data is secondary data in the form of data on CPI inflation, BI rate, exchange rate of the US dollar against the rupiah obtained from the Bank Indonesia website as well as data on property and real estate sector stock prices obtained from the Indonesia Stock Exchange website.

3.3 Sources of research informants

In determining the sample, *purposive sampling was used*, Sugiyono (2010). Sample selection was based on the suitability of the sample characteristics with certain selection criteria. The characteristics and criteria set are as follows:

1. The Company in the Property and Real Estate sector was still listed on the Indonesia Stock Exchange from January 2013 to December 2014.
2. Data on company stock prices in the Property and Real Estate sector are available on the Indonesia Stock Exchange from January 2013 to December 2014.
3. Availability of financial statements of companies in the Property and Real Estate sector on the Indonesia Stock Exchange from 2013 to December 2014.

4. RESULTS AND DISCUSSION

The results of research conducted using the F-statistic test show that inflation, the BI rate and the US Dollar Exchange Rate jointly affect the stock prices of companies in the property and real estate sectors significantly. While the magnitude of the coefficient of determination (R^2) is 0.765. This indicates that inflation, the BI rate and the US dollar exchange rate can influence the share price variable of Property and Real Estate Sector Companies by 76.5%. while the remaining 23.5% is explained by other factors. This means that there are other factors besides inflation, the BI interest rate and the US dollar exchange rate. Other macroeconomic factors that may affect stock prices include Gross Domestic Product, Budget deficit, Private investment, trade balance and payments. There are also company fundamental factors that can be seen from Return On Investment (ROI), and Earning Per Share (EPS). as well as other factors that have an influence on stock prices. While the results of the partial t-statistic test calculation show that inflation does not have a significant effect on stock prices. does not strengthen the theory expressed by Tandililin (2010), an increase in inflation is relatively a negative signal for investors in the capital market. This means, if inflation rises, it will reduce stock prices and vice versa if inflation decreases, it will increase stock prices. Inflation that occurred in the period under study was still not too high, so that

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investors continued to invest and buy shares of companies in the property and real estate sector. So that even though inflation has increased, the stock prices of companies in the property and real estate sector continue to provide high value so that *the returns* obtained are also attractive to investors.

Based on the results of the partial t-statistic test calculations, it was found that the BI rate has a significant effect on stock prices. The effect of the BI rate on stock prices is $12.8 > 2.776$, which means that the BI rate has a negative effect on stock prices. This is in line with previous research conducted by Raharjo (2011) where there is a significant influence between interest rates and stock prices. With the theory of the effect of interest rates on stock prices as put forward by Tandelilin (2010), high interest rates are a negative signal on stock prices. Where if interest rates increase then stock prices will fall and vice versa if interest rates fall then stock prices will increase. The BI interest rate is a benchmark for investors to estimate whether later bank interest rates, such as deposit rates or lending rates, will increase or decrease. Based on the results of the t-statistic test, it shows that the US dollar exchange rate has an effect on stock prices with a t-statistic value of 17.31 greater than the t-table at a 5% significance level of 2.667.

According to the theory expressed by Tandelilin (2010), the exchange rate is a positive signal, meaning that if the exchange rate appreciates, the stock price will increase and vice versa if the exchange rate depreciates, the stock price will decrease. Strengthening and weakening of a country's exchange rate indicates the state of the country's economy. If the value of the currency is strengthening, it indicates that the country's economic condition is good, where many investors who invest in the country also invest in the capital market. In the results of the study, negative results were obtained between the US dollar exchange rate in the form of rupiah and stock prices, meaning that a decreasing US dollar value would increase stock prices in this case meaning that the rupiah value strengthened and caused stock prices to increase meaning that there was a positive effect otherwise the US dollar value an increase will make the stock price fall, in this case it means that the rupiah exchange rate weakens and makes the stock price decrease, where the effect that occurs is in accordance with the existing theory.

The condition of the strengthening rupiah is a consideration for investors in buying shares, if the value of the rupiah weakens investors tend to sell shares or not buy shares because they avoid the risks involved, and for investors or people who have money in dollars, they will sell dollars because the dollar price which is strengthening so that the share price has decreased. The weakening of the rupiah exchange rate against the US dollar also had an impact on increasing the cost of importing raw materials and equipment needed by companies, resulting in increased production costs, or in other words, the weakening of the rupiah exchange rate against the US dollar had a negative impact on the national economy which ultimately reduced stock performance in the stock market and share prices declined.

5. CONCLUSION

From this research, it can be concluded that:

1. There is a significant influence of inflation, the BI rate and the US dollar exchange rate simultaneously on the stock prices of property and real estate companies on the Indonesia Stock Exchange for the period January 2013 - December 2014, where:
2. There is no significant effect partially on the inflation variable on company stock prices in the property and real estate sector on the Indonesia Stock Exchange for the period January 2013 - December 2014.
3. There is a partial significant effect of the BI rate on stock prices of property and real estate sector companies on the Indonesia Stock Exchange for the period January 2013 - December 2014. From the test results it was found that partially, the BI rate interest rate variable showed an opposite or negative causality with stock price. This means that if the

- BI interest rate increases, the stock prices of property and real estate companies will decrease, and vice versa.
4. There is a significant effect partially on the exchange rate on the stock prices of companies in the property and real estate sector on the Indonesia Stock Exchange for the period January 2013 - December 2014. From the test results, it was found that partially, the US dollar exchange rate variable against the rupiah showed an opposite or negative causality.

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