
THE INFLUENCE OF EXCHANGE RATE, INFLATION RATE, DEBT TO EQUITY RATIO, EARNINGS PER SHARE, AND RETURN ON ASSETS ON STOCK RETURN OF FOOD AND BEVERAGE COMPANIES LISTED ON INDONESIA STOCK EXCHANGE (IDX)

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Abstract

This study aims to determine the effect of exchange rate, inflation rate, debt to equity ratio, earning per share, and return on assets on stock returns of food and beverages companies listed on the Indonesian stock exchange. This research is a causal research which aims to prove the causality relationship between variables. The number of samples in this study were 11 companies from a population of 25 companies. This study uses secondary data obtained from annual reports of companies in the Food and Beverage sector from 2014 to 2018, stock returns of Food and Beverage companies based on stock closing prices from the Indonesia Stock Exchange (IDX) Annual Report 2014 to 2019, Consumer Price Index from Central Bureau of Statistics for 2014-2018, and JISDOR USD-IDR Reference Rate from Bank Indonesia during 2014-2018. The data analysis technique used in this study is multiple linear regression using SPSS. The results of this study indicate that the exchange rate and inflation rate do not have a significant effect on stock returns. Meanwhile, debt to equity ratio and earnings per share have a significant effect on stock returns, while the return on assets do not have a significant effect on stock returns.

Keywords: *Exchange Rate, Inflation Rate, Debt to Equity Ratio, Earnings per Share, Return on Assets, Stock Return.*

INTRODUCTION

The food and beverage sub-sector is a mainstay sub-sector that provides a major contribution to the manufacturing sector and also the GDP, because the manufacturing sector itself provides the largest contribution compared to other sectors, namely in the range of 19-21% (Central Statistics Agency (BPS), 2019). This because there are various sub-sectors in the manufacturing industry that contributes to the sector, but only food and beverage industry has the most contribution to the sector. According to Central Statistics Agency (2019), food and beverages sub-sector has the highest contribution to the manufacturing sector and has always increased. Furthermore, the food and beverage industry's stock has a resilient

performance and fast growth (IDX, 2019). Thus, based on its large share of contribution for Manufacturing Sector along with the resilient performance and a very fast growth in terms of stock performance especially on what can be seen from its own market capitalization and share volume, the Food and Beverage industry is an industry that are attractive for investors who wanted to invest in stocks of this industry.

Stocks or shares are proof of owning a part of the company where the owners are also referred to as shareholders (Bodie *et al*, 2014: 41). In investing in stocks, Suciwati (2017) explains that investors will choose to invest in stocks with high returns. Return is a result of holding an investment for several periods. Investors receive a stock return

from dividends or the difference of value between the current and the initial investment based on the stock price. Getting a high stock return is not easy because many factors influence it. Hence, investors need information that reflects growth and development inside and outside the company, which is expected to affect the stock return rate.

According to Weston and Copeland (2010: 34), there are several factors that influence stock returns on an investment, namely the company's internal and external factors. Internal factors are factors that are within the company and are directly related to the company's performance itself. This includes the company's internal ability to pay off all existing debts by using all its assets, the company's ability to earn a profit in relation to sales, total assets, and own capital, and the company's ability to meet its short-term obligations as they fall due. Meanwhile, external factors are factors that are outside the company and are directly or indirectly related to the increase or decrease in company performance. external factors including government policies, inflation rate, interest rate, and exchange rate.

Analyzing and predicting factors that can affect stock returns is an important thing. Bodie *et al* (2014: 548) stated that the success of managing company performance can determine share prices in the stock market and also affect dividends that can be paid to shareholders. When analyzing the prospects of enterprises, it is usually meaningful to start with the broad economic environment and examine the overall economy and even the international economy. From there, people considered the impact of the external environment on the industry in which the company operates and finally check the company's internal conditions (Bodie *et al*, 2008:370).

The internal and external factors can be analyzed through security analysis by using fundamental analysis approach. Fundamental analysis involves an analysis using prospects and risk evaluation of the

firm supplemented by a detailed economic analysis, evaluation of the quality of the firm's management, the firm's standing within its industry, and the prospects for the industry as a whole (Bodie *et al.*, 2008: 237). Fundamental analysis for this study is focused on analyzing company's financial performance with financial ratio analysis, in order to get good understanding of possible impact of company's financial performance on stock prices. Fundamental analysis in this study is also focused on macroeconomic factors, since the recurring pattern of expansion and contraction in the economy may affect stock prices because if the economy performs poorly, most companies and stock markets will also perform poorly. Conversely, if the economy is prosperous, most companies will perform well, and the stock market will reflect this economic strength (Jones, 2013:355).

There are several previous research related to the effect of financial performance and macroeconomic factors on stock return, on which there's a research gap because each research has different results. Based on previously related research, Financial ratio such as Debt to Equity Ratio (DER), Return on Assets (ROA), and Earnings per Share (EPS) are selected for this research to measure their effect on stock return because these variables are most commonly used in fundamental analysis and are also most commonly used to measure their effect on stock return. In addition, this research also uses Exchange Rate and Inflation Rate to measure the effect of macroeconomic factors on stock return.

The analysis of Exchange Rate, Inflation Rate, Debt to Equity (DER), Earnings per Share (EPS), and Return on Assets (ROA) is vital, especially concerning their effect on stock return. When the debt to equity ratio (DER) increases, it shows that companies rely on a larger proportion of debt than equity to fund their assets. When the debt to-equity ratio increases, it indicates that a company is increasing its financial leverage (Garrison *et al.* 2017: 736).

Atidhira and Yustina (2017) stated that investors tend to avoid company with high debt or high DER since high Debt to Equity Ratio (DER) ratio reflects the company's relatively high risk in its solvency since the increase in the number of debt in absolute terms will reduce the level of solvency of the company. So it can be concluded that companies with a high Debt to Equity Ratio are considered less attractive to investors, resulting in a decline in stock prices. Decreasing stock prices will affect stock return. The Return on Assets (ROA) ratio is often used to evaluate a company's return on total assets (Garrison *et al.* 2017: 739). If the value of ROA increases, it means that the better the company uses its assets to make a profit (Luo 2019). This will attract investors to buy shares and will cause an increase in share prices. The increase in stock prices will increase returns. Lastly, Erzad and Erzad (2017) state that earnings per share (EPS) is one way to measure success in achieving profits per share for shareholders based on net income contribution to the number of shares offered. So it can be said that investors will be more interested in stocks with high earnings per share than stocks with low earnings per share. An increase in EPS will be a positive input for investors to invest their capital so that the demand for shares will increase, and resulting to an increasing stock prices and increasing stock return.

As for inflation rate and exchange rate, if the inflation rate increases, cost of production will become more expensive and as a result, the company's profit can decrease. It may reduce investors' interest in investing due to the adverse performance, so it affects stock prices and also reduces the company's stock return (Tripathi and Kumar, 2014). Then, according to Madura (2010: 93), exchange rates can affect companies because they can affect the amount of cash inflows received from exports and the amount of cash outflows needed to pay for imports. Currency depreciation due to an increase in the exchange rate can lead to higher import

prices paid by the domestic (Kang and Dagli, 2018). Higher import prices will increase the cost of importing raw materials, which will increase production costs and reduce the company's profitability. In addition, according to Sari (2019), if the exchange rate continues to fluctuate in such a wide way, it will cause investors to be more interested in investing in the currency market rather than in the capital market because the level of profits obtained is relatively higher than those obtained in the capital market. An increase in cost and decreasing level of investor confidence will impact decreasing investor interest in investing to affect stock prices and stock return.

Based on the background description, there are phenomena, theories, and also research gaps because of different results from various previously conducted research. Therefore, it is necessary to conduct another research on the influence of Exchange Rate, Inflation Rate, Debt to Equity Ratio, Earnings per Share, and Return on Assets on Stock Return of food and beverage companies listed on the Indonesia Stock Exchange.

LITERATURE REVIEW

Investment

According to Bodie *et al.* (2008: 2), investment is placing or investing assets, both in the form of assets and funds, in something expected to provide income or increase value in the future. Financial investment is an investment in security that is expected to increase its value in the future. Bodie *et al.* (2014: 24) also states that investment can be done by buying securities from investment companies. Investment companies provide financial services by selling their shares to the public and using the funds raised to invest in their portfolios. Investing through an investment company offers benefits to investors. Jogiyanto (2010:7-11) classifies financial investment activities into two types, namely direct and indirect investments.

Stocks and Stock Return

Stocks or shares are proof of owning a company in which the owners are also referred to as shareholders (Bodie *et al.* 2014: 41). Each share gives one owner the right to vote in all matters relating to corporate governance that are used in the annual general meeting of shareholders and to be able to get a share of the company's financial profits. According to Brigham and Houston (2019: 34), the types of stocks include common and preferred stocks. Sharpe (1998: 3) states that the stock return or rate of return is the return on investment that comes from the difference between the current investment amount and the initial amount invested, divided by the amount initially invested. In addition, return also means the return from holding an investment for several periods in the form of cash payments received due to investment ownership, plus changes in market prices, divided by the initial price (Horne and Wachowitz 2008: 98).

Stock return can be divided into two, namely realized returns and expected returns. Realized return is the actual return received over several periods (Brigham and Houston 2019: 284). Expected return is the return whose rate of return is expected to be realized from the investment obtained based on the weighted average of the probability distribution of possible outcomes (Brigham and Houston 2019: 276). There are two forms of return that investors receive from stock investing activities, namely dividends and Capital Gain. Dividends are the net profits provided by the issuing company to shareholders (Kapoor *et al.* 2007; 273). Capital gain is the profit obtained by investors in the capital market, which comes from the difference between the current share price and the stock price of the previous period when invested (Horne and Wachowitz 2008: 26).

According to Weston and Copeland (2010: 34), stock prices are influenced by several main factors, namely Internal factors and External Factors. Internal factors are factors within the company and are directly related to the company's performance itself. External factors are factors outside the company and are directly or indirectly related to the increase or decrease in company performance. External factors can be referred to as macroeconomic conditions, including Government policies, inflation rate, interest rate, and exchange rate. This study uses stock return calculation based on the capital gain (loss), because the company's stock price has been known every quarter or year on the Indonesian stock exchange. In addition, not all companies pay dividends periodically.

Fundamental Analysis

According to Sharpe (1998:12), Securities analysis involves analyzing several individual securities or a group of securities in a broad category of financial assets, through two securities analysis techniques, namely fundamental analysis and technical analysis. Fundamental analysis is used specifically for this research.

According to Bodie *et al.* (2008: 237), Fundamental analysis uses the company's earnings and dividend prospects, expectations of future interest rates, and the company's risk assessment to determine the appropriate stock price. According to Jones (2013:348), the analysis includes economic analysis, industry analysis, and company analysis. Economic analysis is carried out because there is a tendency for a strong relationship between the macro environment and a capital market's performance. Economic analysis includes macroeconomic factors such as inflation, gross domestic product, interest rates, private investment, currency exchange rates, and trade and payments balance. Jones (2013:355) stated that the stock market is an important part of the entire economy. Obviously, there is a strong relationship between the two. Therefore, this leading relationship must be

considered when using economic conditions to assess the market. After conducting economic analysis, investors need to carry out an industrial analysis. In industry analysis, investors compare the performance of various industries in order to find out which type of industry provides the most favorable prospects or vice versa. The results of the industry analysis can be used as consideration for conducting company analysis. Company analysis involves analyzing basic financial variables in order to estimate the company's intrinsic value. These variables include sales, profits, depreciation, tax rates, sources of financing, asset utilization and other factors.

Inflation Rate

Inflation is the tendency of prices to increase generally and continuously (Case et al, 2012: 412). Deflation is the opposite of inflation, and deflation occurs when the overall price level drops. According to the initial cause, Samuelson and Nordhaus (2009: 617) argue that inflation can be classified as Expected Inflation, Demand-Pull Inflation, and Cost-Push Inflation

Tripathi and Kumar (2014) suggest that in a state of inflation, the price of goods rises relatively fast and is quite high and the costs of production will become more expensive, which is also followed by interest rates and as a result, profit decrease quite drastically, thereby reducing stocks prices and returns. In order to calculate inflation rate, the measurements can be done by using several Price Index, namely Consumer Price Index, GDP Price index, and Producer Price Index. Uwubanmwen (2015) research shows that inflation has a significant negative impact on stock return. Meanwhile, Ndlovu (2018) research shows that Inflation has a significant positive relationship.

Exchange Rate

According to Samuelson and Nordhaus (2009: 548), what is meant by currency exchange rates or what is often referred to as exchange rates is the price of a foreign currency unit in domestic currency, or it can also be said that the price of domestic currency against foreign currencies. Meanwhile, based on Salvatore (2013: 428), it can be concluded that the exchange rate or currency exchange rate is the price of one currency against another. Madura (2010: 93) says that the exchange rate measures the value of one currency in units of another currency where when economic conditions change, the exchange rate can change substantially.

Madura (2010: 93) says that the exchange rate can affect the company because it can affect the amount of cash inflows received from exports and the amount of cash outflows required to pay for imports, in which the depreciation of the currency causes a lower export price to be paid by the parties. Foreigners and higher import prices are paid by domestic (Kang and Dagli, 2018).

According to Suciwati (2017), the determination of the rupiah exchange rate against foreign currencies is important for capital market players in Indonesia. Sari (2019) explains that the exchange rate can reduce investor confidence level because the foreign currency exchange rate will affect the costs and benefits of "playing" in trading goods, services, and securities. In the measurement of exchange rates, a decrease in the value of a currency is often referred to as depreciation. In contrast, an increase in the value of a currency is often referred to as appreciation. Gay (2016) and Kaur (2017) research results show that there is no significant relationship between exchange rates on stock return. Meanwhile, Afriyani (2018) research shows that exchange rates positively and significantly effect stock return.

Financial Ratio Analysis

Ratio analysis is commonly used by analysts who examine corporate financial reports (Sharpe 1998: 762). Ratios can be used in several ways. Some analysts apply absolute standards, arguing that substandard ratios indicate potential weaknesses that need further analysis. Other analysts compare firms' ratio to those of "average" firms in the same industry to detect differences that may need further consideration. Others analyze company ratios over time, perhaps compared to industry trends, hope that this past data will help predict future changes.

Return on Assets

Martin *et al.* (2017: 141) state that Return On Assets is a ratio that shows the return on the total assets used in the company. Luo (2019) says that the greater the value of ROA, the better its assets to profit. With the increase in the ROA value, the profitability of the company increases. This makes investors interested in buying company shares and impacts the increasing share price, followed by a high return on stock return. Narayanarao (2019) and Dwi (2019) research shows that ROA has a significant negative effect on Stock return.

Earnings per Share

Martin *et al.* (2017: 83) state that EPS is a ratio that measures the success of management in achieving profits for shareholders through the contribution of net income to the number of shares offered. Garrison *et al.* (2017: 740) say that this ratio also shows its ability to achieve net income for shareholders based on the number of shares outstanding.

Erzad and Erzad (2017) state that earnings per share (EPS) is one way to measure success in achieving profits for its shareholders. So it can be said that investors will be more interested in stocks with high earnings per share than stocks with low earnings per share. This will result in an increase in share prices with an increased

rate of return on shares. Mussalam (2018) research shows that Earnings Per Share has a positive relationship with stock return and Return on assets has an insignificant relationship with stock return.

Debt to Equity Ratio

According to Horne (2008: 140), DER is a ratio that shows the extent to which a company is financed by debt or obligations it has. DER is measured by the amount of debt used against the equity owned by the company. By measuring this ratio, it can be seen information related to how many parts of each equity is used as collateral for the entire company's debt. Garrison *et al.* (2017: 736) also explain the debt to equity ratio (DER) is a type of ratio that shows the relative proportion of debt and equity at one point in time on a company's balance sheet. When the debt-to-equity ratio (DER) increases, it shows that companies rely on a larger proportion of debt than equity to fund their assets. When the debt to-equity ratio increases, it indicates that a company is increasing its financial leverage (Garrison *et al.* 2017: 736).

Atidhira and Yustina (2017) state that investors tend to avoid company with high debt or company who has high DER, since high Debt to Equity Ratio (DER) ratio reflects the company's relatively high risk in solvency since increase in the number of debt in absolute terms will reduce the level of solvency of the company. Investors will be more interested if a company has a DER value, which is a small proportion of its debt than equity when funding its assets. Sari and Hutagaol (2009) research shows that there is a positive relationship between debt to equity ratio on stock returns. Sayedy and Ghazali (2017) research results also shows that DER has a significant effect on stock return. Meanwhile, Reza *et al.* (2019) research shows that the DER Rate has no significant effect on Stock return.

Hypothesis

1) Currency exchange rate or what is often referred to as the exchange rate is the price of a unit of foreign currency in domestic currency. Exchange rate fluctuations can affect companies because they can increase production costs as a result of the rising costs of imported raw materials when the exchange rate increases. It will result in a decrease of profitability, which then impact the decrease of investor interest in investing in company stocks and will later affect stock prices and returns. Afriyani (2018) and Ndlovu (2018) concluded that Exchange Rate has a significant effect on stock return.

H1: Exchange rate has a significant influence on stock return

2) Inflation is the tendency of prices to increase generally and continuously (Case *et al.*, 2012: 412). If the rate of inflation increases, costs will become more expensive because inflation caused a rise in the price of input products. It will reduce the company's profitability, thereby reducing investors' interest in investing in company stocks and ultimately affecting stock return. In Uwubanmwun's research (2015), it can be concluded that the relationship between the Inflation Rate and Stock Return is in a Significantly Negative relationship. Meanwhile, in another study, Ndlovu (2018) and Kaur's (2017) concluded that the inflation rate has a significant positive result on stock return.

H2: Inflation rate has a significant influence on stock return

3) Debt to Equity Ratio (DER) is a ratio that shows the extent to which a company is financed by debt or obligations it has. DER is a ratio that is often associated with stock return because DER shows the company's ability to meet its obligations, which is shown in how much part of its capital is used to pay the debt. Investors tend to avoid company with high debt or company that has high DER. It is because the high Debt to Equity Ratio (DER) ratio reflects the company's relatively high risk in

solvency since the increase in the number of debt in absolute terms will reduce the level of solvency of the company. If investors avoid investing, it will result in declining company share prices. Moreover, it will affect stock return. Based on research results by Sayedy and Ghazali (2017) with Sari and Hutagaol (2009) research, DER has a significant effect on stock return.

H3: Debt to Equity Ratio (DER) has a significant influence on stock return

4) Earnings per Share (EPS) is a ratio that measures the profits for shareholders per share through the contribution of net income to the number of shares outstanding. High EPS value and increase in EPS will attract investors to invest in these shares since it indicates that more profits are generated per share. Later, the share price increase, and with the increase in stock prices, the return increases. In Mussalam's (2018) study, EPS has a significant effect on stock return. Research by Dwi (2019) also stated that EPS also has a significant effect on stock return simultaneously with other variables in his research.

H4: Earnings Per Share (EPS) has a significant influence on stock return

5) Return On Assets (ROA) is a ratio that shows the return on the total assets used in the company. When a company has a high value of Return on Assets as well as it increases constantly, it means the management of the company's assets is efficient and the greater the profit is generated by the assets. It will attract investors to buy shares and later cause an increase in stock prices. An increase in stock prices will allow investors to get increased returns. Narayanarao (2019) said that ROA has a significant effect on stock return. Meanwhile, Dwi (2019) stated that ROA has a significant effect on stock return simultaneously with other variables in his research.

H5: Return on Assets (ROA) has a significant influence on stock return

RESEARCH METHOD

This is a causal research. Causal research aims to explain the influence between one variable and another (Sekaran and Bougie, 2016; 44). The type of data used in this study can be called Cross-Section Data. It can be called a Cross-Section data because this research data comes from several companies and each measurements is based on different units. According to Basuki and Prawoto (2017: 275), Cross section data is observational data from several observation units in one point in time. The data in this study were obtained by documentation which is by tracing historical data, such as notifications, correspondence, reports to shareholders, administrative, public records, and web page text (Saunders et al., 2016: 319).

In this study, the population used is companies listed in the food and beverages sector on the Indonesia Stock Exchange, consisting of 25 food and beverages companies (IDX Annual Statistics, 2018). Companies from population that met all criteria as sample are 11 companies out of the 25 companies. Sampling technique in this study employed census sampling method with few criteria such as follows: 1) Companies are listed in the food and beverages sector on the Indonesia Stock Exchange during the research period. 2) The company does not experience a loss during the research period.

The data analysis method used for this study is the inferential statistical methods, which is . statistics through the process of making conclusions based on smaller sample data into more general conclusions for a population (Waller, 2008: 187). Inferential statistics in this study used the "Multiple Linear Regression" method with the help of software in the form of SPSS (Statistical Package for Social Science). This study uses the regression equation as follows: $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$

The data processing steps for this research starts with the secondary data that had been collected was processed using descriptive statistics, and later processed through the Classical Assumption Test consisting of a Normality Test, Multicollinearity Test, Autocorrelation Test, and Heteroscedasticity Test. Furthermore, Multiple Linear Regression Analysis, F-Test, Determination Coefficient Test, and Hypothesis Test (T-Test) is conducted.

Next is operational definitions and variable measurement. Based on Sekaran and Bougie (2016: 195), operational definitions and variable measurement are the formations of abstract concepts to make them measurable in a real way through operationalization. The Operational Definition on this reseach is divided into two kinds of variables; Independent and Dependent Variables.

Independent variables are variables that cause changes in the dependent variable (Saunders *et al.*, 2016: 444). The independent variables used are Inflation Rate, Exchange Rate, Debt to Equity Ratio (DER), and Earning per Share (EPS), and Return on Assets (ROA).

According to Samuelson and Nordhaus (2009: 548), currency exchange rates, or often referred to as exchange rates, is the price of one unit of foreign currency in domestic currency, or the price of domestic currency against foreign currencies. The exchange rate measurement is calculated using the following formula:

$$\text{Exchange Rate} = \frac{S - S_{t-1}}{S_{t-1}}$$

(Madura, 2010: 95)

Based on the formula from Madura (2010:95), exchange rate is calculated from the current period spot rate minus the spot rate from previous period, and divided by previous period spot rate. For the measurement of the exchange rate, this study used the average annual value of the Jakarta Interbank Spot Dollar Rate (JISDOR) Reference Rate, which comes

from Bank Indonesia (BI). JISDOR is the USD-IDR spot price compiled based on the interbank exchange rate of USD/IDR against Rupiah on the Indonesian foreign exchange market, through the Monitoring System for Foreign Exchange Transactions against Rupiah (SISMONTAVAR) at Bank Indonesia in real time. JISDOR Reference Rate is used because it provides a representative reference market price for spot transactions of USD/IDR on the Indonesian foreign exchange market.

Inflation is the tendency of prices to increase generally and continuously (Case *et al.*, 2012: 412). In order to calculate the inflation rate, the measurements can be done as follows:

$$\text{Inflation Rate} = \frac{\text{Current CPI} - \text{Previous CPI}}{\text{Previous CPI}} \times 100$$

(Samuelson and Nordhaus, 2009:402)

Based on the formula from Samuelson and Nordhaus (2009:402), inflation rate is calculated from the current period Consumer Price Index (CPI) minus the CPI from the previous period, and divided by previous period CPI. For the measurement of the inflation rate, this study used the average annual CPI value based on the monthly calculation CPI value from Central Statistics Agency (BPS). BPS uses CPI as a component in calculating the inflation rate, and CPI is widely used to measure inflation. In addition, changes in the CPI over time reflect the rate of increase (inflation) or the rate of decline (deflation) of goods and services.

According to Horne (2008: 140), DER is a ratio that shows the extent to which a company is financed by debt or obligations it has. The formula for calculating the debt-to-equity ratio is as follows:

$$\text{Debt to Equity Ratio (DER)} = \frac{\text{Total Liabilities}}{\text{Stockholders Equity}}$$

(Garrison *et al.*, 2017: 736)

Based on the formula from Garrison *et al.* (2017: 736), Debt To Equity Ratio can be measured by assessing the total liabilities

of the companies divided by the company's total stockholders' equity to see how much the company's debt compared to its equity.

Garrison *et al.* (2017: 740) states that EPS is a ratio that measures the success of management in achieving profits for shareholders through the contribution of net income to the number of shares outstanding. Earning per share can be formulated as follows:

$$\text{Earnings per Share (EPS)} = \frac{\text{Net Income}}{\text{Common Shares Outstanding}}$$

(Martin *et al.*, 2017:83)

Based on the formula from Martin *et al.* (2017:83), Earnings per Share can be measured by assessing the net income of the company divided by the company's outstanding shares to see how much profit is generated per share.

Martin *et al.* (2017: 141) say that Return On Assets is a ratio that shows the return on the total assets used in the company. Return on asset can be calculated with the following formula:

$$\text{Return on Assets (ROA)} = \frac{\text{Net Income}}{\text{Total Assets}}$$

(Brigham and Houston, 2019: 119)

Based on the formula from Brigham and Houston (2019: 119), Return on Assets can be measured by assessing the net income of the company divided by the company's total assets. The results show the ratio between the company's net income and total assets.

Finally it's the dependent variable. The dependent variable is a variable that can change in response to changes in other variables (Saunders *et al.*, 2016: 444). This study used Stock Return as the dependent variable. Sharpe (1998: 3) states that return is the return on investment from the difference between the current investment amount and the initial amount invested, divided by the amount initially invested.

Calculating and measuring stock return can be done with the following formula (Brigham and Houston, 2019:324):

$$\text{Stock Return} = \frac{P_t - P_{t-1}}{P_{t-1}}$$

(Brigham and Houston, 2019:324)

Based on the formula from Brigham and Houston (2019:324), Stock Return can be measured by counting current stock price minus the initial stock price, and divided by the initial stock price. Data of stock return from the year 2015 to 2019 is used since this study used stock annual closing price for the year 2014 until 2019, which is obtained from Indonesia Stock Exchange (IDX) Annual Report.

RESULTS AND DISCUSSIONS

Table 1.
Descriptive Statistic Analysis Results

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Exchange Rate	5 5	-0.06	.135	.06520	.059724
Inflation Rate	5 5	-11.78	6.36	1.0240	6.55901
Debt to Equity Ratio	5 5	.164	3.029	.90236	.540647
Earnings per Share	5 5	9.24	17969.57	570.2649	2402.43114
Return on Assets	5 5	.009	.527	.12355	.107787
Stock Return	5 5	-0.987	2.571	.05858	.480021

Source: Processed Data, 2020.

According to Table 1., Exchange Rate (X1) general average between 2014 until 2018 is 0.06520. Exchange Rate has a minimum rate of -0.006 which is happened on the year 2016. The maximum rate of the exchange rate is obtained from the descriptive statistic test table at 0.135 on the year 2014. The standard deviation value of this variable is 0.059, meaning the spread of the data set relative to the mean is 0.059. As for the Inflation Rate, Inflation Rate (X2) has an average rate of 1.024 between 2014

until 2018. The minimum rate of Inflation Rate is -11 which means a deflation on year 2014. The maximum rate of the inflation rate is obtained from the descriptive statistic test table at 6.36 on year 2015. The standard deviation for the Inflation Rate was 6.559, meaning the spread of the data set relative to the mean is 6.559.

Meanwhile, Debt to Equity Ratio (X3) has a general average value of 0.90236 between 2014 until 2018. PT Multi Bintang Indonesia Tbk (MLBI) has the highest value of Debt to Equity Ratio of 3.029, on the other hand, PT Ultra Jaya Milk Industry Tbk (ULTJ) has the lowest value of 0.164. The standard deviation for the variable was 0.540647, meaning the spread of the data set relative to the mean is 0.540647. Next, Earnings per Share (X4) has a general average value of 570.2627 between 2014 until 2018. PT Delta Djakarta Tbk (DLTA) has the highest value of 17969.57, while PT Sekar Bumi Tbk (SKBM) has the lowest value of 9.24. The standard deviation for the variable was 2402.43114, meaning the spread of the data set relative to the mean is 2402.43114. Lastly, Return on Assets (X5) value is 0.12355 between 2014 until 2018. PT Multi Bintang Indonesia Tbk (MLBI) has the highest value of 0.527, while PT Sekar Bumi Tbk (SKBM) has the lowest value of 0.009. The standard deviation for the variable was 0.107787, meaning the spread of the data set relative to the mean is 0.107787.

Lastly, Stock Return (Y) as the dependent variable has an average value of 0.05858 between 2015 until 2019. The minimum value of Stock Return is -0.987 by PT Delta Djakarta Tbk (DLTA). The maximum value of Stock Return is 2.571 by PT Sekar Laut (SKLT). The standard deviation of the Stock Return is 0.480021, meaning the spread of the data set relative to the mean is 0.480021.

Next, The Classical Assumption test are conducted. The test were Normality Test, Multicollinearity Test, Autocorrelation Test, and Heterocodascity Test using SPSS.

First step is conducting Normality Test using Kolmogorov-Smirnov Test. Based on research result, the sig value for all variables is above 0.05. From those results, it can be concluded that the assumption of normality is fulfilled.

Second step is conducting Multicollinearity Test. From the test results, the Tolerance and VIF for indicates there is no multicollinearity between the independent variables. Thus, the assumption test for multicollinearity can be fulfilled.

Third step is conducting Autocorrelation Test using Durbin-Watson test. The test results shows that the Durbin Watson test value is 2.136, which is located between 1.724 and 2.276, so it can be concluded that the assumption of autocorrelation has been fulfilled.

Lastly, Heteroscedasticity Test are conducted through Gejser Test. From this test, it is found that all variables sig. are $> \alpha$ ($\alpha = 0.05$). It can be concluded that the remainder has a homogeneous variety (constant), or in other words, there are no heteroscedasticity symptoms.

Next is to conduct the determination coefficient test. The determination coefficient test is used to determine the contribution of Exchange Rate (X1), Inflation Rate (X2), Debt to Equity Ratio (X3), Earnings per Share (X4), and Return on Assets (X5) to Stock Return (Y). Using SPSS, the results obtained is 59.6% of the variable stock return will be influenced by the Exchange Rate (X1), Inflation Rate (X2), Debt to Equity Ratio (X3), Earnings per Share (X4), and Return on Assets (X5). The remaining 40.4% means that stock return will be influenced by other variables, which are not discussed in this study.

Next is to conduct The F test. Using SPSS, the results obtained for F value is 16.917. Because of F count $>$ F table, namely

16.917 $>$ 2.404 or the value of Sig. F (0.000) $<$ $\alpha = 0.05$, then the regression analysis model is significant. It means that H0 is rejected, and H1 is accepted. So, it can be concluded that the regression model obtained is good, and the dependent variable can be well predicted by the independent variables. Finally, the Hyphothesis testing is conducted using T-Test through T value from Multiple Linear Regression Results. The results are as follows:

Table 2.
Multiple Linear Regression Results

Independent Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Information
	B	Std. Error	Beta			
(Constant)	.285	.123		2.319	.025	-
X1(Exchange Rate)	-.570	.795	-.071	-0.717	.477	Not Significant
X2(Inflation Rate)	-.007	.007	-.090	-0.887	.380	Not Significant
X3 (Debt to Equity Ratio)	-.262	.082	-.295	-3.178	.003	Significant
X4 (Earnings per Share)	.000135	.000019	.675	7.212	.000	Significant
X5 (Return on Assets)	-.185	.418	-.041	-0.442	.660	Not Significant

Source: Processed Data, 2020

Based on Table 2. above, the regression equation was obtained as follows:
Y = 0.285 – 0.570 Exchange Rate – 0.007 Inflation Rate - 0.262 DER+ 0.000135 EPS – 0.185 ROA + e

Based on Table 2., it can be interpreted that the regression coefficient b1 is -0.570 with a significance of 0.477 and t count $<$ t table, namely 0.717 $<$ 2.010 . It can be concluded that the Exchange Rate (X1) has no significant effect on the reduction of 0.570 units on Stock Return. The regression coefficient b2 is -0.007 with a significance of 0.380 and t count $<$ t table, namely 0.887 $<$ 2.010. It can be concluded that the Inflation Rate (X2) has no significant effect on the reduction of 0.007 units on Stock Return.

Also based on Table 2., the regression coefficient b_3 is -0.262 with a significance of 0.003 and $t_{count} > t_{table}$, namely $3.178 > 2.010$. It can be concluded that if Debt to Equity Ratio (X3) has increased, then the Stock Return will decrease significantly by 0.262 units. The regression coefficient b_4 is 0.000135 with a significance of 0.000 and $t_{count} > t_{table}$, namely $7.212 > 2.010$. It can be concluded that if Earnings per Share (X4) has increased, the Stock Return will increase significantly by 0.000135 units.

The regression coefficient b_5 is -0.185 with a significance of 0.660 and $t_{count} < t_{table}$, namely $0.442 < 2.010$. It can be concluded that the Return on Assets (X5) has no significant effect on the reduction of 0.185 units on Stock Return.

The Influence of Exchange Rate on Stock Return

The results of this study state that the exchange rate does not have a significant influence on stock return. It may be due to the relatively low fluctuation of the exchange rate throughout the years. In addition, the profitability of food and beverage companies may be supported by the export of the industry. It means the increase in production costs that may arise from the increase in the cost of importing raw materials as a result of exchange rate fluctuations can be covered by profits gained from exports. The results of this study are in accordance with the research of Gay (2016), which states that there is no significant effect between exchange rates and stock return. The results of this study are not in accordance with the research by Afriyani (2018), which concludes that exchange rates had a significant effect on stock return.

The Influence of Inflation Rate on Stock Return

The results of this study state that the Inflation Rate does not have a significant influence on stock return. It is because the annual inflation rate in Indonesia is low at the average inflation rate $< 10\%$. In addition,

foods and beverages sector is a sector that produces products every day and people buy products from food and beverage companies all the time. Thus, company profits are maintained because people will continue to buy products from food and beverage companies. Because of those conditions, the influence of the Inflation Rate on a company's production cost and profitability is insignificant, so investors are not taking the Inflation Rate into account when making an investment decision. Thus, it could be concluded that the influence of inflation rate towards stock return is not significant. The results of this study are in line with the research results of Dwi (2019), which in his research states that inflation has no significant effect on stock return. The results of this study are also not in line with research conducted by Uwubamwun (2015), which concluded that the relationship between the inflation rate and stock return was in a significantly negative relationship.

The Influence of Debt to Equity Ratio to Stock Return

The results of the study show that Debt to Equity Ratio (DER) has a significant negative influence on stock return, which means when Debt to Equity Ratio increases, the Stock Return decreases. It is because Debt to Equity Ratio (DER) value of food and beverage companies is high due to the relatively increasing proportions of debt used by the companies compared to total equity. An increased or high DER value can also indicate a high risk in solvency since the increase in the number of debt will reduce the level of solvency of the companies. Those conditions caused the stock prices to decrease since the company is deemed less attractive for investors, and investors are avoiding it. Decrease in stock prices resulted in a decrease in stock return. The results of this study are in accordance with the research of Sayedy and Ghazali (2017), which states that the Debt to Equity Ratio (DER) has a significant effect on Stock return. However, it is not in line with the research of Narayanarao (2019) which

states that DER did not have a significant effect on stock return.

The Influence of Earnings per Share Ratio to Stock Return

In this study, it was found that Earnings per Share (EPS) has a positive and significant influence on Stock return, which means an increase in Earnings per Share also increases the Stock return. It is because an increase in Earnings per Share value indicates that there are increase in profits per one share, and more net income for the company is generated compared to the total number of shares outstanding. An increase in earnings per share (EPS) in the long term is also a significant consideration for investors because profit per share becomes more sustainable. It makes investors interested in buying company shares, and it influences the increasing stock price followed by a high return on stock return. The results of this study are in line with research and Musallam (2018), which states that Earnings per Share (EPS) has a positive and significant effect on Stock return. The results of this study are not in line with the research conducted by Narayanarao (2019) on which concluded that EPS had no effect on stock return.

The Influence of Return on Assets Ratio to Stock Return

In this study, it was found that the Return on Assets (ROA) Ratio does not have a significant influence on stock return, which means the Return on Assets does not cause an increase or decrease in stock return. It is because the increase of ROA is relatively small and not continuous. It is because net income and total assets are fluctuating throughout the period. It is also possible that investors also considering other ratios such as Return on Equity (ROE) and Return on Investment (ROI). So, ROA alone could not be the only profitability ratio used by investors in determining stock return. Therefore, Return on Assets does not influence the stock price and stock return since investors do not take the company's Return on Assets into account when they

want to invest in the company's shares. The results of this study are in line with research conducted by Afriyani (2018), which states that Return on Assets (ROA) has no significant effect on stock return. The results of this study are not in line with research conducted by Narayanarao (2019), which states that ROA had a significant effect on stock return.

CONCLUSION AND RECOMMENDATON

This research was conducted to determine if Exchange Rate, Inflation Rate, Debt to Equity Ratio, Earning per Share, and Return on Assets have an influence on stock returns. Based on the analysis results conducted in this research, it can be concluded that changes in exchange rates, Inflation rates, and Return on Assets (ROA) do not cause changes to stock returns. Meanwhile based on the research results, changes in Debt to Equity (DER) and Earnings per Share (EPS) cause changes in stock returns.

Investors are suggested to focus on the company's Earning per Share because the Earning per Share influences stock return, since it shows the company's ability to generate profits. In addition, it is expected that the company can maintain and increase Earning per Share through generating more profits because investors will be more interested in stocks that have high Earning Per Share. Potential investors are suggested to start their fundamental analysis by focusing first on assessing company internals, especially related to firms profitability, market value, and solvability to measure the possibility it will affect the stock returns. Then, potential investors could start assesing the effect of external factors to the company.

The financial department of the company, along with the company's financial consultants, should make a consideration to face the risks posed by the exchange rate and inflation rate fluctuations. For companies, it is suggested to increase the value of Return On Assets (ROA) by maximizing their assets. There are several ways that can be done, including leasing the assets owned by the company. In addition, it can also be done for the sale of assets that have expired, the results can be used to procure new assets so as to reduce maintenance costs and increase the company's operating income.

Given that the independent variables in this study are essential in influencing stock return, it is expected that the results of this study can be used as a reference for further researchers to develop similar studies. It should considering other variables outside the variables that have been included in this study.

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