



## The Effect of Solvability, Profitability, and Macroeconomics on Stock Price Growth on Automotive Sub Sector Companies Listed on IDX

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**Abstract:** The purpose of this study is to provide empirical evidence about the effect of solvability, profitability, and macroeconomics on the stock price growth for automotive sub-sector companies listed on the IDX for the 2019-2021 period. Solvability is proxied using the debt to equity ratio, profitability is proxied using earning per share. The macroeconomics is represented exchange rate growth and interest rates. The data analysis technique used in this study is multiple linear regression analysis. The population in this study are automotive sub-sector companies on the IDX for the 2019-2021 period, which consists of 12 companies. Determination of the sample using saturated sampling with a total of 36 samples. The results showed that partially debt to equity ratio and exchange rate growth had a positive and not significant effect on stock price growth, earning per share had a positive and significant effect on stock price growth, and interest rate had a negative effect and not significant effect on stock price growth.

**Keywords:** Debt to Equity Ratio, Earning Per Share, Exchange Rate Growth, Interest Rates, Stock Price Growth

### INTRODUCTION

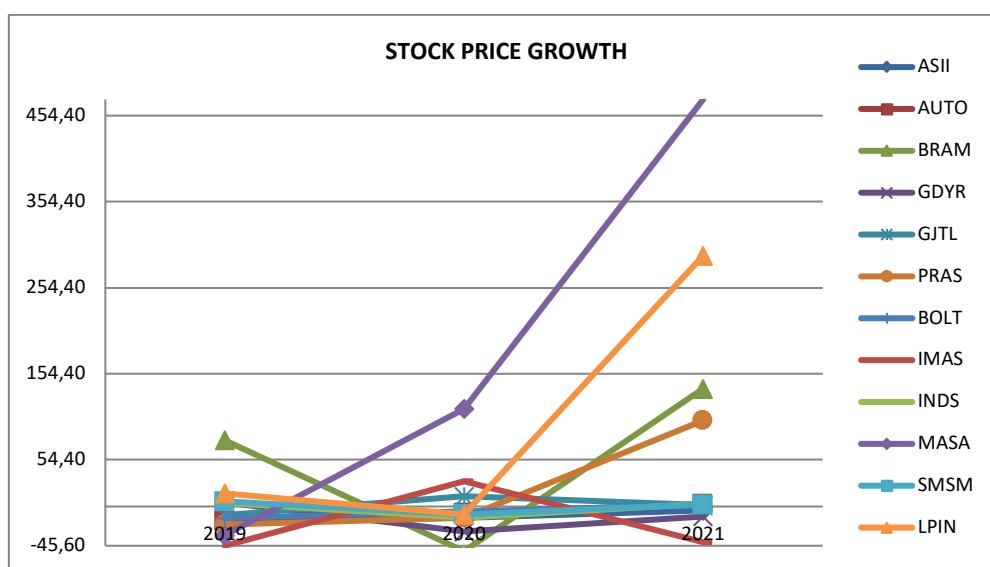
The existence of the automotive industry has made it one of the mainstay sectors of the manufacturing sub-sector which has contributed to the national economic recovery after Covid-19 which hit Indonesia. The development of this industry can be proven based on the accumulated investment value calculated in 2021 for both the four-wheeled and two-wheeled vehicle industries of IDR 10.05 trillion (Gaikindo, 2020). Moreover, there is also evidence of the increasing construction of production factories due to consumer demand.

The amount of capital needed by the automotive industry to meet production needs makes it urgent in the capital market to obtain funding for the sustainability of the company,

so that it can attract investors to invest in the company. This, one of them may be done by increasing the company's performance through the growth of stock prices.

Stock price is the price of a shares that occurs on the stock market at a certain time determined by market participants. The volatility of the shares is determined by the demand and supply of it in the capital market (Hartono, 2017: 143). Stock price growth shows the trend of increasing or decreasing that occurs in a company's stock price within a certain period of time. When the stock price growth shows an increasing trend, it can be interpreted that the stock price is also increasing. Rising stock prices will provide an opportunity for companies to get additional investment from investors. Investors will conclude that the company has good performance, and vice versa.

Trend fluctuations that occur in stock price growth can be influenced by the company's financial performance and macroeconomics. Financial performance can be measured by financial ratios. In this study solvability ratio and profitability ratio were chosen to explain how they influence the growth of stock prices. As for the macroeconomics, it's an external factors that can influence the growth of stock prices, and in this study is represented by exchange rate growth and interest rates.



Source: [idx.co.id](https://idx.co.id) (processed, 2022)

**Chart 1. Stock Price Growth of 12 Automotive Sub Sector Companies Listed on the IDX**

Debt to equity ratio is a ratio used to measure the percentage of liabilities in the company's capital structure (Sukamulja, 2017: 122). The higher value of DER indicates the amount of debt that dominates the company's funding. The productive way of using debt will increase income and profits as well as an increase in stock prices and stock price growth.

This is supported by the results of previous research by Dian Indah Sari (2021) which stated that DER had no significant negative effect on stock prices. However, when debt is used unproductively, it will depress income and profits and decrease stock prices and then stock price growth. This is supported by the results of previous research by Yona Yolanda Pohan, Hendro Sasongko, and Zul Azhar (2019) which stated that DER had no significant positive effect on stock prices.

Earning per share is a comparison between net profit after tax in the financial year to shares issued by the company (Hadi, 2015: 130). The higher value of EPS indicates the level of company's ability to increase investor prosperity. It has a large impact on the dividends that will be obtained by investors. Furthermore, the stock price will rise followed by stock price growth.

This is supported by the results of previous research by Yolanda Pohan, Hendro Sasongko, and Zul Azhar (2019) and Ayu Puspitaningtyas (2016) which stated that EPS had a significant positive effect on stock prices. However, the results of research by Pande Widya Rahmadewi and Nyoman Abundanti (2018) didn't support it by stating that EPS had a significant negative effect on stock prices.

The exchange rate is the value of a certain country's currency that is measured, compared or stated in the currency of another country (Adiningsih, 2017:60). Exchange rate growth is described as the appreciation or depreciation that occurs in an exchange rate. When the growth of exchange rate increases, one of the implications is that the cost of imports for production raw materials becomes cheap. Thus, the COGS will decrease which will make the selling price of goods in the domestic market cheaper.

The company's sales will increase followed by revenues and profits. The company's sales will increase followed by revenues and profits. This means that dividends received by investors are high, stock prices and stock price growth increase. This statement is supported by the results of research by Yolanda Pohan, Hendro Sasongko, and Zul Azhar (2019) which states that the exchange rate had no significant positive effect on stock prices.

But on the other hand, when the growth of exchange rate increases, the company's export sales of goods will weaken because the selling price is higher in foreign markets. This caused a decrease in revenue performance and company profits. Furthermore, reducing the amount of dividends obtained by investors, thus the stock prices will decrease followed by stock price growth. This statement is supported by the results of previous research by Ayu Puspitaningtyas (2016) which stated that exchange rates had no significant negative effect on stock prices.

Credit interest rates are the interest given to borrowers or the price that borrowers must pay to the bank (Kasmir, 2019:91). Viewed from the company's perspective, when credit interest rates rise, this will increase the company's cost of capital due to difficulties in obtaining funding at a low and reasonable cost. The company's productivity will decrease, pressing sales, reducing revenue and profits, thereby reducing the amount of dividends that will be distributed to investors. Thus there will be a decrease in the stock price and then in the stock price growth.

This is supported by the results of previous research by Veranica Anisya and Imam Hidayat (2019) which stated that interest rates had no significant negative effect on stock prices. However, the results of research by Siti Hayati Efi Friantin (2018) didn't support it by stating that interest rates had an insignificant positive effect on stock prices.

## **Literature Review**

### **Financial Management**

Financial management is a combination of knowledge that discusses, examines, and analyzes how a financial manager uses all company resources to raise funds, manage funds, and distribute funds so that these funds are able to generate profits and prosperity for shareholders and sustainability for company operations (Fahmi, 2018:2). The main objective of financial management is to maximize company value or maximize prosperity for shareholders (Hery, 2017:5).

### **Capital Market**

Capital market is a financial market for long-term fund transactions and is a real market. The capital market is a place where parties, especially companies, sell stocks and bonds with the aim that the proceeds from the sale will be used as additional funds or to strengthen the company's capital (Fahmi, 2018:55).

### **Financial Ratio Analysis**

Financial ratio analysis is an activity to compare the numbers in the financial statements. Comparisons can be made between one component and components in one financial report or between components that exist between financial statements. Then, the numbers being compared can be figures in one period or several periods (Kasmir, 2019:104). There are four groups of financial ratios namely; liquidity ratios, solvability ratios, activity ratios, and profitability ratios (Munawir, 2014: 238).

### **Stock Price Growth**

Stock price growth is a reflection of good company management by management to create and exploit business prospects, so as to gain profits and be able to fulfill their responsibilities to owners, employees, society and government (stakeholders) (Zubir, 2014:4). Stock price growth is described as an increase or decrease trend that occurs in a company's stock price within a certain period of. The increase in stock price growth indicates that the stock price of the period has increased compared to the previous period, and vice versa.

### **Debt to Equity Ratio**

Debt to equity ratio is a ratio that serves to find out the size of the comparison between the amount of funds provided by creditors and the amount of funds originating from company owners (Kuncoro, 2016:288). The factors that can affect the debt to equity ratio include; sales stability, capital structure, operating leverage, growth rate, taxes, control, management attitudes, attitudes of lenders and rating agencies, market conditions, internal company conditions, financial flexibility (Houston and Brigham, 2016:42).

### **Earning Per Share**

Earning per share describes the company's profitability which is reflected in each share on the market. The higher value of EPS, of course, makes shareholders happy because the big amount of profit are provided to shareholders and the possibility of increasing the amount of dividends received by shareholders will also increase (Fakhruddin and Darmadji, 2012: 154).

### **Exchange Rate Growth**

Exchange rate growth is a relative comparison of the price of a currency against other foreign currencies (Mahyus Ekananda, 2014:313). Exchange rate growth is described as the appreciation or depreciation that occurs in an exchange rate. The exchange rate of a currency that appreciates shows that the value of that currency has increased, and vice versa. The factors that affect exchange rate, namely; foreign currency supply and demand, balance of payment (BOP) position, inflation rate, interest rate, income level, government supervision, expectations and speculation.

### **Interest Rates**

Credit interest rates is the price of the credit. Credit interest rates are expressed as a percentage of principal per unit of time. Interest is the measure of price of the resources used by debtors that must be paid to creditors (Sunariyah, 2013: 80). The factors that affect interest rates, namely; funding requirements, competition, government policies, desired profit targets, timeframe, quality assurance, company reputation, and competitive products (Kasmir, 2019:115).

## **Relation Between Variables and Hypothesis Development**

### **Effect of Debt to Equity Ratio on Stock Prices Growth**

Debt to equity ratio can be understood as a ratio that assesses debt to equity by comparing all debt to all equity which further shows the company's ability to fulfill all debts and it can be seen that every rupiah of its own capital is used as collateral for debt (Kasmir, 2019: 157). The higher value of DER indicates the amount of debt that dominates the company's funding. This shows the magnitude of the company's dependence on creditors which will have an impact on the high interest expense that must be paid by the company. Interest expenses that must be paid will depress the company's performance where revenue will decrease followed by company profits.

In addition, if the debt owned by the company is used unproductively, for example, for operational activities or is stored as additional company cash, this kind of using debt certainly doesn't provide any return for the company, but instead increases the burden on the company. This burden will then depress the revenue and profits that the company will earn. Decreasing profits mean reducing investors' opportunities to obtain dividends which also will decrease stock prices and stock price growth. The statement above is supported by research results which state that DER has a negative and not significant effect on stock prices (Sari, 2021).

But on the other hand, when the debt owned by a company is high and used productively, for example, building a factory for business expansion, this kind of way will increase the company's productivity in producing products. Companies can boost sales which will then increase revenue and increase profits to be obtained by the company.

Increased profit means increasing the portion of dividends that will be received by investors. This causes the stock price to rise and the stock price growth to increase. The statement above is supported by the results of research which states that DER has a positive no significant effect on stock prices (Pohan, Sasongko and Azhar, 2019). Based on the explanation above, the hypothesis that is constructed namely:

H<sub>1</sub> : Debt to equity ratio has a significant effect on stock price growth.

### **Effect of Earning Per Share on Stock Prices Growth**

Earning per share can be meant as the net profit distributed to shareholders divided by the number of company shares, earnings per share ratio or also called book value ratio is a ratio to measure the success of management in achieving profits for shareholders. (Kasmir, 2019:198).

The higher value of EPS indicates the level of company's ability to increase investor prosperity because the company is able to yield large profits. This then has a major impact on the dividends that will be obtained by investors. Furthermore, the stock price will rise followed by the increasing of stock price growth. The statement above is supported by research results which state that EPS has a positive and significant effect on stock prices (Pohan, Sasongko and Azhar, 2019), (Puspitaningtyas, 2016). Based on the explanation above, the hypothesis that is constructed namely:

H<sub>2</sub> : Earning per share has a positive and significant effect on stock price growth.

### **Effect of Exchange Rate Growth on Stock Prices Growth**

Exchange rate is a relative comparison of the price of a currency against other foreign currencies (Mahyus Ekananda, 2014: 313). Meanwhile, exchange rate growth is described as the appreciation or depreciation that occurs in an exchange rate. When the growth of exchange rate increases, it can be interpreted that the Rupiah exchange rate strengthens against the US Dollar so that one of the implications is that the cost of importing raw materials for production becomes cheap.



With the cheap cost of production raw materials, the implication of the appreciation of the Rupiah, the COGS will decrease. This is due to the cost of production raw materials included in the components that cause and affect the volatility of COGS of a company's products. Low cost of goods sold will further reduce the selling price of an item.

This will have an impact on sales in the domestic market. The selling price of cheap goods will increase domestic demand which in turn will boost production quantity. Furthermore, the company's sales will increase followed by an increase in revenue and profit. Thus, the dividends received by investors are high then the stock price will also increase. As the result, the stock price growth also increased. The statement above is supported by research results which state that exchange rate has a positive and not significant effect on stock prices (Pohan, Sasongko and Azhar, 2019).

But on the other hand, an appreciating Rupiah exchange rate against the US Dollar will have an impact on weakening a company's export sales of goods. The weakening of export sales was caused by the price of goods being exported which became more expensive abroad as a result of which they didn't sell well in the market. Companies in the automotive sub-sector that don't only rely on domestic sales but also export will of course be affected by the appreciation of the Rupiah.

Decreasing in export sales volume caused the company's revenue performance and profit to diminish. Low profits will reduce the amount of dividends earned by investors. Thus the stock price will decrease followed by stock price growth. The statement above is supported by the results of research which states that exchange rate has a negative and not significant effect on stock prices (Puspitaningtyas, 2016). Based on the explanation above, the hypothesis that is constructed namely:

H<sub>3</sub> : Exchange rate growth has a significant effect on stock price growth.

### **Effect of Interest Rates on Stock Prices Growth**

Credit interest rates can be described as the amount of money that is obligated to the party that borrows it with a calculation based on a percentage and is carried out based on a specified period of time (Fahmi, 2018: 114). When credit interest rates rise, this will have an impact on the large cost of capital that companies must taken out due to the difficulty in obtaining funding at low and reasonable cost. Therefore, the company's productivity will decrease.

A decrease in productivity will suppress sales, reduce revenue and profits, thereby reducing the amount of dividends that will be distributed to investors. This has an impact on the decrease in stock prices and also in stock price growth. The statement above is supported by research results which state that interest rates has a negative and not significant effect on stock prices (Anisya, 2019). Based on the explanation above, the hypothesis that is constructed namely:

H<sub>4</sub> : Interest rates has a negatif and significant effect on stock price growth.

### **Effect of Debt to Equity Ratio, Earning Per Share, Exchange Rate Growth, and Interest Rates on Stock Prices Growth**

Based on the explanation of the relation between each of the variables above and the support of previous researchs, the hypothesis that is constructed namely:

H<sub>5</sub> : Debt to equity ratio, earning per share, exchange rate growth, and interest rates on stock prices growth has a significant effect on stock price growth.

## **METHOD**

### **Operational Definition and Variable Measurement Stock Price Growth (Y)**

Stock price is the price that occurs on the stock market at a certain time determined by market participants (Sari, 2021). The growth of stock prices shows the trend of increasing or decreasing that occurs in a company's stock price within a certain period of time. The calculation of stock price growth in this study uses the year-end closing price (December) from 2019-2021.

$$\frac{HS_t - HS_{t-1}}{HS_{t-1}} \times 100\%$$

Note:

$HS_{t-1}$  = Stock price at previous period (t-1)

$HS_t$  = Stock price at current period (t)

### Debt to Equity Ratio ( $X_1$ )

Debt to equity ratio is the ratio used to assess debt with equity (Ramadhan and Nursito, 2021).

$$\frac{\text{Total Liabilities}}{\text{Total Equity}} \times 100\%$$

### Earning Per Share ( $X_2$ )

Earning per share is a profit indicator that is often considered by investors which is the basic number needed to find out how much profit per share the company earns (Puspitaningtyas, 2016).

$$\frac{\text{Net Profit}}{\text{Number of Common Shares Outstanding}}$$

### Exchange Rate Growth ( $X_3$ )

Exchange rate is defined as the amount of domestic currency needed, namely the number of rupiahs needed to obtain one unit of foreign currency (Pohan, Sasongko and Azhar, 2019). Exchange rate growth is described as the appreciation or depreciation that occurs in an exchange rate. The calculation of exchange rate growth in this study refers to the benchmark Rupiah against the US Dollar where the buying and selling rates are taken from the 31 of December exchange rate each year from 2019-2021.

$$\frac{KursBelit_{t-1} - KursJual_t}{KursBelit_{t-1}} \times 100\%$$

Note:

Buying rate $_{t-1}$  = Buying rate at previous period (t-1)

Selling rate $_t$  = Selling rate at current period (t)

### Interest Rates ( $X_4$ )

Interest rate is the cost of the credit or the price paid for the borrowed funds (Friatin, 2018). The indicator for measuring interest rates in this study is the monthly interest rate set by Bank Indonesia (BI Rate) at the end of the year (December) from 2019-2021.

### Population and Research Sample

The population in this study are automotive sub-sector companies listed on IDX for the 2019-2021 period, totaling twelve companies. The sampling technique used is saturated sampling, because the population size is relatively small and the research wants to make generalizations with very small errors. Thus the samples in this study are automotive sub-sector companies listed on IDX for the 2019-2021 period, totaling twelve companies.

### Data Types and Sources

The type of data used in this study is quantitative data. Source of data used in this research is secondary data. The secondary data used in this study are the annual financial reports of automotive sub-sector companies on IDX for 2019-2021 and published information for exchange rates and interest rates on the Bank Indonesia official website.

### **Data Analysis Technique**

The data analysis method used is descriptive statistical analysis, classical assumption test (normality test, multicollinearity test, heteroscedasticity test and autocorrelation test), multiple linear regression analysis, correlation coefficient test, coefficient of determination test ( $R^2$ ) and hypothesis testing (simultaneous test (test F) and partial test (t test)).

## **RESULTS AND DISCUSSION**

### **Classical Assumption Test**

#### **1. Normality Test**

The results of the data analysis showed that the Asymp. Sig. (2-tailed) is 0,200 where the significance value is greater than 0,05, so it can be concluded that the data is normally distributed.

#### **2. Multicollinearity Test**

The results of the data analysis showed that the tolerance value was  $> 0.10$  and the VIF value was  $< 10$ . Thus, it was concluded that the regression model in this study did not have multicollinearity and the regression model was feasible to use.

#### **3. Heteroscedasticity Test**

Based on the results of the heteroscedasticity test using the scatter plot method, it can be seen that the points on the scatter plot spread randomly above and below the number 0 on the y axis and do not form a specific pattern. Thus, it is concluded that there is no heteroscedasticity problem in the regression model.

#### **4. Autocorrelation Test**

Based on the results of the autocorrelation test with the Durbin Watson method, a value of 2,135 was obtained. While the du and dL values obtained from the Durbin Watson statistical table with  $n = 30$ ;  $k = 4$ ;  $du = 1,739$ ;  $dL = 1,143$ . Then the value of  $4-du = 2.261$  and  $4-dL = 2,857$ . Because the DW value lies between du and  $4-du$  ( $1,739 < 2,135 < 2,261$ ). This means that the model is free from positive or negative autocorrelation so that the regression model passes the autocorrelation test and is feasible to use.

### **Multiple Linear Regression Analysis**

Multiple linear regression analysis is a regression that has one dependent variable and two or more independent variables, used to measure the effect of these variables. In this study, multiple linear regression analysis was used to prove the effect of debt to equity ratio, earnings per share, exchange rate growth, and interest rates on stock price growth in automotive sub-sector companies listed on IDX for the 2019-2021 period. From the results of data analysis, the multiple linear regression equation is obtained as follows:

$$Y = 6,006 - 0,520 X_1 + 0,890 X_2 + 0,221 X_3 - 0,371 X_4 + e$$



## Hypothesis Test

### 1. Partial Test (t test)

The t test aims to show how far the influence is partially between the independent variables and the dependent variable (Ghozali, 2018: 99). The criteria for testing the t test is if  $t_{\text{count}} > t_{\text{table}}$  or the significance value is less than 0.05 then  $H_0$  is rejected and  $H_1$  is accepted. This shows that there is a significant relationship and influence between the independent and dependent variables. The results of the t test can be seen in table 1 below:

**Table 1. Partial Test Results**

Coefficients <sup>a</sup>					
Model		Unstandardized Coefficients	Standardized Coefficients	t	Sig.
		B	Std. Error		
1	(Constant)	6.006	1.092	15.854	0.004
	DER	0.520	0.175	0.484	0.256
	EPS	0.890	0.237	0.531	0.018
	Pert NT	0.221	0.019	0.167	0.198
	SB	-0.371	0.042	-2.729	0.402

Sumber: Secondary data, processed with SPSS version 26 (2023)

Based on the results of the t test in table 1, the effect of the independent variables on the dependent variable can be interpreted as follows:

1. The results of the debt to equity ratio obtained a  $t_{\text{count}}$  value of  $-2,855$ , and a  $t_{\text{table}}$  value of  $2,060$ . Thus  $t_{\text{count}} 2,855 > t_{\text{table}} 2,060$ . Meanwhile, the significance value is  $0,256$  which is greater than  $0,05$ . So it is concluded that the debt to equity ratio has positive and not significant effect on stock price growth.
2. The results of the earning per share obtained a  $t_{\text{count}}$  value of  $2.245$ , and a  $t_{\text{table}}$  value of  $2,060$ . Thus  $t_{\text{count}} 2,245 > t_{\text{table}} 2,060$ . Meanwhile, the significance value is  $0,018$  which is smaller than  $0,05$ . So it can be concluded that earning per share has a positive and significant effect on stock price growth.
3. The results of the exchange rate growth obtained a  $t_{\text{count}}$  value of  $2,784$ , and a  $t_{\text{table}}$  value of  $2,060$ . Thus  $t_{\text{count}} 2,784 > t_{\text{table}} 2,060$ . Meanwhile, the significance value is  $0,198$  which is greater than  $0,05$ . So it can be concluded that the growth of the exchange rate has positive and not significant effect on stock price growth.
4. The results of the interest rate obtained a  $t_{\text{count}}$  value of  $-2,729$ , and a  $t_{\text{table}}$  value of  $2,060$ . Thus  $t_{\text{count}} -2,729 < t_{\text{table}} -2,060$ . Meanwhile, the significance value is  $0,402$  which is greater than  $0,05$ . So it was concluded that interest rates has negative and not significant effect on stock price growth.

### 2. Simultaneous Test (Test F)

The F test aims to show whether all the independent variables included in the model have a joint effect on the dependent variable (Ghozali, 2018:98). This test is carried out by comparing the  $F_{\text{count}}$  value with the  $F_{\text{table}}$  value. If the value of  $F_{\text{count}} > F_{\text{table}}$  with a significance value of  $< 0,05$ , it can be concluded that the regression model is feasible to use as a regression model in research. The results of the F test can be seen in table 2 below:

**Table 2. Simultaneous Test Results**

ANOVA <sup>a</sup>					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	8.239	4	2.060	4.089	.019 <sup>b</sup>
Residual	16.282	25	0.848		

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Total	24.521	29
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*Sumber : Secondary data, processed with SPSS version 26 (2023)*

Based on the results of the t test in table 2, the  $F_{\text{count}}$  value is 4,089. This value is greater than the  $F_{\text{table}}$  value, namely 2,74 or  $4,089 > 2,74$ . Meanwhile, the significance value is 0,019, where the significance value is less than 0,05. Thus it can be concluded that the debt to equity ratio, earning per share, exchange rate growth, and interest rates have a significant effect on stock price growth or  $H_0$  is rejected and  $H_a$  is accepted.

### 3. Correlation Coefficient Test

Testing the correlation coefficient is to find out a direction and whether or not the strength of the linear relationship between the independent variables studied on the dependent variable (Kuncoro, 2016:240). The R value was obtained at 0,577. This value indicates that there is a moderate relationship between the independent variables and the dependent variable.

### 4. Test the Coefficient of Determination ( $R^2$ )

The magnitude of the coefficient of determination shows how much the independent variable contributes to the dependent variable, while the rest is influenced by other factors outside the regression model (Ghozali, 2018:97). The Adjusted R Square value is 0,394. This value indicates that the large percentage of variation in the independent variable explaining the variation in the dependent variable is 0,394 or 39,4% and the remaining 60,6% is explained by other variables not included in this study.

## Discussion of Hypotheses

### Effect of Debt to Equity Ratio on Stock Prices Growth in Automotive Sub-Sector Companies Listed on IDX

The regression coefficient value for the debt to equity ratio variable is known to have a positive value of 0,520. The results of the partial test obtained  $t_{\text{count}} 2,855 > t_{\text{table}} 2,060$  with a significance value of  $0,256 > 0,05$ . Thus it can be concluded that the debt to equity ratio has negatif and not significant effect on stock price growth in automotive sub-sector companies listed on the IDX. This is contrary to the first hypothesis, so it can be concluded that the first hypothesis is rejected.

A high value of DER means that the composition of debt owned by a company is high and when the debt is used productively, for example, building a factory for business expansion, of course will increase the company's productivity in producing products. Companies can boost sales which will then increase revenue and increase profits to be obtained by the company. Increased profits will then increase the amount of dividends that will be received by investors. This causes the stock price to rise and the stock price growth to increase.

This result is in line with previous research which concluded that the debt to equity ratio has a positive and not significant effect on stock prices (Pohan, Sasongko and Azhar, 2019). However, it is contrary to previous research which stated that the debt to equity ratio has a negative and not significant effect on stock prices (Sari, 2021).

### Effect of Earning Per Share on Stock Prices Growth in Automotive Sub-Sector Companies Listed on IDX

The regression coefficient value for the earning per share variable is known to have a positive value of 0,890. The results of the partial test obtained a  $t_{\text{count}}$  of  $2,245 > t_{\text{table}}$  of 2,060 with a significance value of  $0,018 < 0,05$ . Thus it can be concluded that earning per share has

a positive and significant effect on stock price growth in automotive sub-sector companies listed on the IDX, thus **the second hypothesis is accepted.**

The higher value of EPS indicates the level of the company's ability to increase investor prosperity because the company is able to yield large profits. This has a major impact on the dividends that will be obtained by investors. Furthermore, the stock price will rise followed by stock price growth.

This result is also consistent with the bird in the hand theory expressed by Modigliani and Miller (1961), which stated that investors prefer accepted dividend payment at this time rather than capital gains to be received in the future, because dividends are more certain. The tendency for investor behavior of this kind is supported and motivated by the nature of information in the Indonesian Capital Market which is spread out in semi-strong form (semi-strong information).

With such nature, the existing information cannot fully reflect or predict the stock price that will occur. This will give doubts for investors to decide whether to buy or sell the shares they own in order to obtain the expected return. If it turns out that the results of the decision to sell or buy shares made by investors on the basis of semi-strong information do not obtain the expected return, of course the investor will suffer a loss.

But on the other hand, if the decision chosen brings the expected return, of course the investor will benefit. Therefore, on the basis of these considerations, the majority of investors in Indonesia tend to prefer the distribution of dividends whose amount and time are certain to be obtained compared to capital gains which cannot be predicted with profit or loss in the future.

These results are in line with previous research which concluded that earning per share has a positive and significant effect on stock prices (Pohan, Sasongko and Azhar, 2019), (Puspitaningtyas, 2016). However, this is in contrast to previous research which states that earning per share has a negative and not significant effect on stock prices (Rahmadewi and Abundanti, 2018).

### **Effect of Exchange Rate Growth on Stock Prices Growth in Automotive Sub-Sector Companies Listed on IDX**

The regression coefficient value for the exchange rate growth variable is known to have a positive value of 0,221. The results of the partial test obtained  $t_{\text{count}} 2,784 > t_{\text{table}} 2,060$  with a significance value of  $0,198 > 0,05$ . Thus it can be concluded that the growth of the exchange rate has positive and not significant effect on stock price growth in automotive sub-sector companies listed on the IDX. This is contrary to the third hypothesis, so it can be concluded that **the third hypothesis is rejected.**

The growth of exchange rate increases or in other words the Rupiah exchange rate strengthens against the US Dollar so that one of the implications is that the cost of imports for production raw materials will decrease. The majority of the production pattern of automotive companies in Indonesia is by importing several raw materials or main materials needed from foreign exporters to be assembled and produced domestically. With the cheap cost of produ

ction raw materials, the implication of the appreciation of the Rupiah, the COGS will decrease. This is due to the cost of production raw materials included in the components that cause and affect the volatility of COGS of a company's products. Low cost of goods sold will further reduce the selling price of an item. This will have an impact on sales in the domestic market.

The selling price of cheap goods will increase domestic demand which in turn will boost production quantity. Furthermore, the company's sales will increase followed by an increase in revenue and profits. Thus, the dividends received by investors are high then the stock price will also increase. As a result, the stock price growth also increased.

This result is in line with previous research which concluded that the exchange rate has a positive and not significant effect on stock prices (Pohan, Sasongko and Azhar, 2019). However, it is contrary to previous research which stated that exchange rate has a negative and not significant effect on stock prices (Puspitaningtyas, 2016).

### **Effect of Interest Rates on Stock Prices Growth in Automotive Sub-Sector Companies Listed on IDX**

The regression coefficient value for the interest rate variable is known to have a negative value of  $-0,371$ . The results of the partial test obtained  $t_{\text{count}} -2,729 < t_{\text{table}} 2,060$  with a significance value of  $0,402 > 0,05$ . Thus it can be concluded that interest rates has negative and not significant effect on stock price growth in automotive sub-sector companies listed on the IDX. This contradicts the fourth hypothesis, so it can be concluded that **the fourth hypothesis is rejected**.

Rising credit interest rates will have an impact on the large cost of capital that companies must taken out due to difficulties in obtaining funding at low and reasonable costs. Therefore, the company's productivity will decrease. A decrease in productivity will suppress sales, reduce income and profits, thereby reducing the amount of dividends that will be distributed to investors. This has an impact on decreasing stock prices and also stock price growth.

This result is in line with previous research which concluded that interest rates has a negative and not significant effect on stock prices (Anisya, 2019). However, this is contrary to previous research which stated that interest rates has a positive and not significant effect on stock prices (Friantin, 2018).

### **Effect of Debt to Equity Ratio, Earning Per Share, Exchange Rate Growth, and Interest Rates on Stock Prices Growth in Automotive Sub-Sector Companies Listed on IDX**

Based on the results of the coefficient of determination ( $R^2$ ) which aims to see the magnitude of the influence of the relationship between the four independent variables, namely debt to equity ratio, earning per share, exchange rate growth, and interest rates simultaneously on the dependent variable, namely share price growth, the Adjusted R Square value is obtained of  $0,394$  or  $39,4\%$ . These results indicate that the stock price growth variable can be explained by independent variables, namely debt to equity ratio, earning per share, exchange rate growth, and interest rates of  $39,4\%$  while the remaining  $60,6\%$  can be explained by other variables that are not examined in this study.

Furthermore, the results of simultaneous testing obtained a value of  $F_{\text{table}} 4,089 > F_{\text{count}} 2,74$  with a significance value of  $0,019 < 0,05$ . Thus it can be concluded that the debt to equity ratio, earning per share, exchange rate growth, and interest rates have a significant effect on stock price growth, thus **the fifth hypothesis is accepted**.

## **CONCLUSION**

1. Debt to equity ratio had positive and not significant effect on stock price growth in automotive sub-sector companies listed on IDX.
2. Earning per share had a positive and significant effect on stock price growth in automotive sub-sector companies listed on IDX.
3. Exchange rate growth had a positive and not significant effect on stock price growth in automotive sub-sector companies listed on IDX.
4. Interest rates had negative and not significant effect on stock price growth in automotive sub-sector companies listed on IDX.

5. Debt to equity ratio, earning per share, exchange rate growth, and interest rates simultaneously had a significant effect on stock price growth in automotive sub-sector companies listed on IDX.

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