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# The Effect of Profitability on Share Prices Through Capital Structure as an Intervening Variable in Indonesia's Automotive Sectors Listed Companies

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### ABSTRACT

The purpose of this study is to determine whether there is an influence between profitability (Return On Equity) on stock prices through the capital structure (debt to equity ratio) as an intervening variable on automotive sector companies listed on the Indonesian stock exchange (BEI) 2013 - 2017 period. It uses an associative approach. Data collection techniques in this study using documentation techniques. Data analysis techniques in this research are using path analysis, classic assumption test, hypothesis test, and the coefficient of determination with a significance level of 5%. The results of this study indicate that Profitability (Return On Equity) has no significant and negative effect on the Capital Structure (Debt To Equity Ratio) of -1,624, Profitability (Return On Equity) has a significant and positive effect on the Stock price of 3,525, Capital Structure (Debt To Equity Ratio) does not have a significant and negative effect on the Share Price of -0,531, and Profitability (Return On Equity) directly affects the Stock Price of 0,535.

Keywords: Profitability, Capital Structure, Stock Price

# **1. INTRODUCTION**

Increasing profits by companies can be achieved in various ways. One of them is by investing in the capital market. Capital is needed for the sustainability of a business, this is also an obstacle that is often faced by companies. The capital market is one of the effective means of accelerating the accumulation of funds for development financing through a mechanism for collecting funds from the public and channeling these funds to productive sectors. With the development of the capital market, investment alternatives for investors are no longer limited to real assets and deposits in the banking system but can invest their funds in the capital market, either in the form of stocks, bonds, or other securities (financial assets). Investors hope that by buying shares, *capital gains*) when the shares are resold. But at the same time, they also have to be prepared to face risks if the opposite happens. There are various choices of activities for someone who wants to invest the wealth he has.

In investing, the stock price shows the amount that is entitled to each investor or investment manager. If the share price has decreased, this means that it is an opportunity that can be used to buy up shares. The stock price can be used as an indicator of whether the investor wants to invest in a company the small price of a share in a constant number of shares, the more investors will be generated.

In the world of stock investing, the stock price is the main thing that investors pay attention to in the world of equity, the stock price becomes a reference point for investors to buy or sell their shares. The stock price is an important indicator because it becomes the benchmark for investors to invest their shares.

Companies whose share price has decreased indicates that the company's performance is not good, and will have an impact on investors who own these shares because it will determine *capital gain/loss* (profit/loss from the sale of shares) they will get the ups and downs of stock prices due to the need for money, panic company fundamentals, and market manipulation.

Investors use various ways to obtain the expected return, as well as by taking advantage of the advice given by capital market analysts such as investment managers and others. In fundamental analysis, several financial ratios can reflect the financial condition and performance of a company.

The high and low price of a company's stock is influenced by many factors. The factors that affect stock prices, one of which is the company's internal factors. As for the company's internal factors, investors usually use financial ratios as part of analyzing companies by comparing the financial ratios of one company with other similar companies. The most dominant financial ratios that are used as a reference to see the condition of a company's performance, one of which is the profitability ratio. The profitability ratio is useful for showing the success of the company in generating profits and as a ratio used to measure management effectiveness as seen from the profit generated against sales and investment [**6**].

According to [13]., the profitability ratio is a ratio to assess a company's ability to seek profit. This ratio also provides the level of management effectiveness of a company. This is indicated by the profit generated from sales and investment income. The profitability ratio in this study is Return on Equity (ROE). This ratio is used to predict stock prices. Because the increase in ROE will usually be followed by an increase in the company's stock price because ROE can describe the extent to which the assets owned by the company can generate profits [20].

According to Harahap's theory **[8]**, *Return On Equity* (ROE) is a ratio that shows what percentage of net income is obtained when measured from the capital. This ratio is used to find out how much return the company provides for every rupiah of capital from the shareholder.

In addition to the profitability ratio that affects stock prices, the capital structure also affects stock prices, because the capital structure can invest in company shares by maximizing company value and the cost of capital so as not to experience changes that usually lead to changes in the capital structure **[17]**.

According to [14], the capital structure is a reflecting permanent expenditure balance between long-term debt with capital. However, [3] says that a company must understand the main components of capital structure by maximizing its share price so that its capital structure is optimal. Because too much debt can hamper the development of the company, even shareholders will selectively assess how to keep investing.

## Formulation of the problem

The main problems in this research are: 1) What *Return On Equity*affect the Debt To Equity Ratio in automotive sector companies listed on the Indonesia Stock Exchange in 2013-2017?; 2) Does Return On Equity affect stock prices in automotive sector companies listed on the Indonesia Stock Exchange in 2013-2017?; 3) Does the Debt To Equity Ratio affect stock prices in automotive sector companies listed on the Indonesia Stock Exchange in 2013-2017?; 3) Does the Debt To Equity Ratio affect stock prices in automotive sector companies listed on the Indonesia Stock Exchange in 2013-2017?; 3) Does the Debt To Equity Ratio affect stock prices in automotive sector companies listed on the Indonesia Stock Exchange in 2013-2017?; 3) Does Return on the Indonesia Stock Exchange in 2013-2017?; 3) Does Return on the Indonesia Stock Exchange in 2013-2017?; 3) Does Return on the Indonesia Stock Exchange in 2013-2017?; 3) Does Return on the Indonesia Stock Exchange in 2013-2017?; 3) Does Return on the Indonesia Stock Exchange in 2013-2017?; 3) Does Return on the Indonesia Stock Exchange in 2013-2017?; 3) Does Return on the Indonesia Stock Exchange in 2013-2017?; 3) Does Return on Stock Exchange in 2013-2017?; 3) Does Return on the Indonesia Stock Exchange in 2013-2017?; 3) Does Return on Stock Exchange in 2013-2017?; 3) Does

Equity affect stock prices through the Debt To Equity Ratio as an intervening variable in automotive sector companies listed on the Indonesia Stock Exchange in 2013-2017?

## 2. LITERATURE REVIEW

### Stock price

The stock price is the price formed on the stock exchange. In general, the stock price is obtained to calculate the value of its shares. The further the difference is, this reflects too little information flowing to the stock exchange. So, the stock price tends to be influenced by psychological pressure from buyers or sellers to prevent this, the company should at all times provide sufficient information to the stock exchange as long as this information affects the market price of its shares.

According to [6] shares (stock) is proof of a statement of ownership of capital/funds in a company that is ready to be sold, followed by rights and obligations explained to each holder. According to Brealey [4], "the share price is the value of a company which summarizes the collective assessment of investors about how well a company is, both current performance and prospects".

## **Profitability**

According to [15], that profitability is the ability of the company earns a profit in its influence by sales, total assets, as well as its capital. So that profitability can describe the company's fundamental performance in terms of the level of efficiency and effectiveness of the company's operations in generating profits [9]. Profitability can be used as an analytical tool for investors/shareholders, where the company's profitability can be seen by the profits received in the form of dividends. Thus, it can be concluded that profitability is the company's ability to generate profits by utilizing all company resources and measuring management effectiveness through the calculation of profit generated from sales and investment.

Therefore, the company must always be in a profitable state. However, if the opposite is true, the company will find it difficult to attract outside capital. Where creditors and owners of capital expect maximum profits. Meanwhile, company management will try to increase profits. The goal is that the profits obtained can be the basis for future extensions of the company.

## Return on Equity (ROE)

ROE or capital profitability is a ratio to measure the profit that the company gets from the equity it has, where this ratio measures net profit after tax with its capital. The higher this ratio, the better the efficiency level of the company's capital. The ROE formula is as follows:

$$ROE = \frac{Earning After Taxes (EAT)}{Equity}$$



## **Capital Structure**

According to [15] states that "the capital structure is a balance between users of loan capital consisting of permanent short-term debt, long-term debt with own capital from preferred shares and common stock". [17] argues that: capital structure (capital structure) relates to a company's long-term spending as measured by the ratio of long-term debt to its capital.

Based on the definitions above, it can be concluded that the capital structure is a balance between users of loan capital in the form of permanent short-term debt, long-term debt with their capital consisting of preferred shares and common shares.



# **Hypothesis**

The hypothesis formulation of this research is:

- H1 = There is an effect of ROE on DER in automotive sector companies in 2013-2017
- H2 = There is an effect of ROE on stock prices in automotive sector companies in 2013-2017
- H3=There is an effect of DER on stock prices in automotive sector companies in 2013-2017
- H4 = There is influence roe on stock prices through der in automotive sector companies 2013-2017

# **3. RESEARCH METHODS**

The research approach used in this research is to use an associative approach. An associative approach is an approach using two or more variables to determine the effect or influence between one variable and another. The population in this study were as many as 7 automotive sector companies listed on the Indonesian stock exchange. The data used in this study were collected by documenting the financial statements of companies in the automotive sector sourced from the Indonesia stock exchange (BEI).

## 4. RESULTS AND DISCUSSION

## Path Analysis



Figure 2. Path Analysis

If profitability has increased by 100%, there will be a decrease in capital structure by -27.2%. If profitability has increased by 100%, there will be an increase in share prices by 53.4%. Meanwhile, if the capital structure has increased by 100%, there will be a decline in share prices by -8.1%.

#### **Classic Assumption Test**

#### Normality test

The normality test aims to test whether in regression the independent variable or both of them has a normal distribution or does not have a normal distribution. The Kolmogorov-Smirnov test is used for statistical tests whether the data is normally distributed or is not normally distributed. The Kolmogorov-Smirnov test with the following conditions: if the Kolmogorov-Smirnov significance value is greater than the predetermined significance value, it is normally distributed.

 Table 1. Normality Test

	Unstandardized Residual
	35
Mean	, 0000000
Std. Deviation	2891,35544283
Absolute	, 135
Positive	, 135
Negative	-, 097
	, 135
	, 105
	Mean Std. Deviation Absolute Positive Negative

a. Test distribution is Normal.

From the table above, it can be seen that the Kolmogorov-Smirnov value of the Profitability, Capital Structure and Share Price variables has been normally distributed because each of the variables has a probability of more than 0.05 (5%). Variable values that meet the standards set can be on the line Asymp sig. (2-tailed). From this table, there is the Asymp sig value. (2-tailed) = 0.105 (10.5%). From this value, it can be concluded that



the Asymp sig (2-tailed) value is greater than 0.05, which means the variable has been normally distributed.

#### Multicollinearity Test

Table 2. Multicollinearity Test

		Unstandardized Coefficients		Standardized Coefficients	т	Sig.	Collinearity Statistics	
	Model	в	Std. Error	Beta			Toleranc e	VIP
	(Constant)	1869,363	1176,498		1,589	, 122		
	ROE	258,876	73,445	, 535	3,525	,001	, 926	1,080
	DER	-325,447	613,387	-, 081	-, 531	, 599	, 926	1,080
a. Dependent Variable: SHARE PRICE								

Based on the table above, the VIF value shows that the value of the independent variable and the intervening variable, namely ROE and DER, shows that there is no multicollinearity due to the VIF value (not exceeding 10).

#### Heteroscedasticity Test



Figure 3. Heteroscedasticity Test

From the results of the scatterplot, it can be seen that there are unclear patterns, such as spreading dots above and below the number 0 on the Y axis, thus identifying heteroscedasticity does not occur. It can be concluded that there is no heteroscedasticity in the regression model so that the regression model is feasible to use to see the stock prices of automotive companies listed on the Indonesian stock exchange based on the independent variable profitability (ROE) and the intervening variable Capital Structure (DER).

# Autocorrelation Test

#### Table 3. Autocorrelation Test

Model	Summary	b
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			Adjusted R Std. an Error of the				
Model	R	R Square	Square	Estimate	Durbin-Watson		
1	, 563a	, 317	, 274	2980,341	1,251		
a. Predictors: (Constant), DER, ROE							

a. Heurois. (Constant), DER, ROE

b. Dependent Variable: SHARE PRICE

From the results of the linearity test output above, a significance value of > 0.05 or [sig. (0.224)> 0.05] was obtained, which means that there is a significant linear relationship between the independent variables using the dependent variable.

## Effect of Profitability on Capital Structure

Based on the results of the research above regarding the effect of profitability (ROE) on Capital Structure (DER) in automotive companies which states that t count <t-table is -1.624 < 2.036. with a significance value of 0.114>0.05 where t count is in the receiving area of Ho so that Ho is accepted and Ha is rejected. This states that profitability (ROE) does not have a partially significant effect on the Capital Structure (DER) of automotive companies listed on the Indonesian stock exchange for the period 2013-2017.

Return On Equity (ROE) is because net income has decreased and equity has also decreased, but the percentage decline in net income is higher. The company also experiences an increase in the burden on creditors as a source of corporate capital which causes the debt burden to be borne by the company which reduces the amount of profit received by the company. The results of this study state that Profitability (ROE) does not effect the Capital Structure (DER).

#### Effect of Profitability on Stock Prices

Based on the results of the above research regarding the influence of profitability (ROE) on stock prices in automotive companies which states that t-count> t table, namely 3.525> 2.034, with a significance value of 0.001 <0.05 where t count is in the receiving area of Ha so that Ha is accepted and Ho is rejected. This states that Profitability (ROE) has a partially significant effect on share prices in companies listed on the Indonesian stock exchange in the period 2013 - 2014.

ROE can show a company's ability to generate profit after tax by using its capital owned by the company. This ratio is important for shareholders because it is to determine the effectiveness and efficiency of the company's capital management. This indicates, the higher this ratio, the more efficient the use of own capital is carried out by the company. Vice versa, the lower this ratio, the inefficient in the use of own capital by the company. So that this ratio becomes a benchmark in buying shares.

## The Effect of Capital Structure on Stock Prices

Based on the results of the above research regarding the influence of capital structure on stock prices in automotive companies which states that t count <table that is -0.531 <2.034 with a significance value of 0.599> 0.05 where t count is in the area of acceptance Ho is accepted and Ha is rejected. This states that the Capital Structure (DER) does not have a partially significant effect on stock prices in automotive companies listed on the Indonesian stock exchange for the period 2013-2017.



The higher the financial risk of the company, the lower the share price, because investors are more interested in share prices that are not too burdened with debt, this means that investors pay attention to how much capital they pay to the company to generate their net profit. So that this ratio provides a general indication of the feasibility and financial risk of the company.

# *Effect of Profitability on Stock Prices through Capital Structure as an intervening variable*

Based on the research results above, the direct effect of profitability (ROE) on capital structure (DER) and the influence of profitability (ROE) on stock prices, and the effect of profitability (ROE) on stock prices through the capital structure (DER). Based on the results of hypothesis testing 4, the amount of direct influence between profitability on capital structure is 0.535 or 53.5%, and the effect between profitability on stock prices through the capital structure (indirect effect) is amounting to 0.022 or 2.2%. This means that the value of the indirect effect is smaller than the direct effect, which indicates that profitability affects stock prices without capital structure or the effect of profitability on stock prices is better if not through the capital structure.

The results of this study state that Profitability (ROE) has a significant and positive effect on stock prices but the effect of Capital Structure (DER) as an intermediary variable on profitability with stock prices is very small because in this study the result is 0.022%. In other words, the coefficient of the direct influence of the independent variable on the dependent variable is much greater than the coefficient of the indirect effect.

#### 5. CONCLUSION

Based on the results of the research and discussion described in the previous chapter, it can be concluded that profitability does not have a significant effect on capital structure. Profitability has a significant effect on stock prices. Capital structure has no significant effect on stock prices. Capital structure is not an intervening variable because the direct effect of profitability on stock prices is greater.

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