

# The Effect of DER and Interest Rate on Company Value

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**Abstract**—The main goal of every company is to get the maximum profit. Besides that, when the company has reached a mature phase, the most difficult thing is how the company maintains its existence, stability, and faces competitors, so that the company can still be favored by investors. There are many factors that can affect a company's value, including DER and interest rates. The purpose of this study is to determine how the influence of these two factors on company value. The statistical analysis method used is panel data regression. Panel data regression analysis is a combination of cross section with time series data. Researchers are interested in examining the value of companies in the tourism sector which are listed on the Indonesia Stock Exchange (IDX) in 2013-2017. DER has no significant effect on stock prices. Interest rates have a significant effect on stock prices. DER and Interest Rate have a significant effect on Stock Prices.

**Keywords:** *capital structure, interest rate, company value*

## I. INTRODUCTION

A good company not only has a profit that continues to grow, but also a company must be able to create good corporate value. The main goal of companies that have gone public is to increase the prosperity of owners or shareholders through increasing the value of the company [1]. The value of the company becomes a perspective for investors to measure the extent to which the company has good prospects in the future. The company's value is reflected through the market price of the company's shares [2]. The company's goals can be realized if the company has good financial performance. Signaling theory states that an increase in profits will give a positive signal to investors that the company is profitable and is expected to provide welfare to shareholders through high stock returns. For the efficient use of company funds, it can be realized through the level of returns, measures of management achievement, and dividends distributed. The results of research conducted by Mardiyati, et al [3] and Sumanti and Mangantar [4] show that profitability has a positive effect on firm value, but in contrast to research conducted by Warouw, et al. which states that profitability has no effect on company value [5].

Companies to support their business continuity need funding. Corporate funding decisions affect the company's capital structure. In a managerial perspective, the core of the funding function is how the company determines the optimal source of funds to fund various investment alternatives, so as to

maximize the value of the company which is reflected in its share price [6]. Tourism is a potential sector that must be developed and maintained to encourage the development of a country or a tourist area and one of the development sectors that is currently being promoted by the government. The growth of Indonesia's tourism sector that is sustainable (sustainable) with a large size in recent years reached 25.68%. According to the World Travel Tourism Council (WTTC), Indonesia's achievement is the 9th fastest in the world, number 3 in Asia, and number 1 in Southeast Asia. This makes foreign and domestic investors interested in investing in the tourism sector in Indonesia. Minister of Tourism (Menpar) Arief Yahya said tourism became one of the sectors in Indonesia with the fastest investment growth rate. In 2017 tourism investment grew 32% from the previous year [7].

In accordance with the background that has been explained then the problem formulation was built as follows:

- Does the capital structure have a positive effect on company value.
- Does the interest rate have a positive effect on the value of the company.

In accordance with the explanation in the formulation of the problem discussed above, the purpose of this study is to obtain empirical evidence regarding

- Effect of capital structure on firm value.
- Effect of interest rates on the value of the company.

The value of the company is the present value of the expected cash flow of the company, or the value of future companies discounted at the level of capital costs. Company value describes how well management manages the company. Company value will be reflected in the market price of its shares [2]. The company's value in this study is proxy using the stock price at the date of issuance of the financial statements. The value of the company must reach its maximum point because this is very important for the company. The higher the company's value, the higher the company's achievements and the welfare of shareholders.

Capital Structure is a balance or comparison between foreign capital and own capital. Foreign capital in this case is long-term and short-term debt. Meanwhile, equity capital is divided into retained earnings and ownership of the company.

The indicator of this variable is the debt to equity ratio (DER). Debt to Equity Ratio, is the ratio used to assess debt with equity. This ratio is useful to know the amount of funds provided by the borrower (creditor) with the owner of the company, in other words this ratio is to find out every rupiah of its own capital used as collateral for debt [8]. The capital structure is also very important because the financial position of a company can be influenced by whether or not the company's capital structure. A large obligation will also cause interest expense for the company.

Since August 19, 2016 Bank Indonesia (BI) has used the 7-day Reserve Repo Rate or referred to as the 7-day BI Rate as a reference for new interest rates [9]. Repo is the activity of buying securities with an agreement to sell again and reserve Repo, on the contrary, selling securities with an agreement to buy again. Thus, in the structure of monetary operations tenor, policy interest rates will shift from a one-year tenor (360 days) to a shorter tenor of 7 days. The purpose of this change is to strengthen the effectiveness of monetary policy, so that it is more responsive to changes in policy interest rates and their impact on money market and banking interest rates. The 7-day Repo Rate announcement schedule is once a month after the monthly Board of Governors' Meeting. After the announcement of the RDG results every month the 7-day Repo Rate will remain the same for a month until the RDG announcement the following month.

## II. RESEARCH METHODS

This study uses quantitative research methods, because the purpose of this study is to determine the effect of capital structure and interest rate on company value. The object of this research is a company engaged in the tourism sector which is listed on the Indonesia Stock Exchange with a research year from 2013 to 2017. The methodology used in this study is a quantitative method by examining the relationship between capital structure, interest rates, and firm value. In this study, researchers will collect secondary data, that is the source of data obtained by reading, studying, and understanding through other media sourced from literature, books, and company documents [10]. The statistical test used is panel data regression analysis. Panel data is a combination of cross section (cross section) with time series data [11]. The target population in this study are tourism sector companies listed on the Indonesia Stock Exchange. The sampling technique uses stratified random sampling, which is to take proportional random samples from each group in each Islamic tertiary institution. Determination of the number of samples using Slovin formula. the sample frame is taken based on the Slovin formula contained in Suliyanto with a margin of error (e) of 5% [12].

## III. RESULTS

Simultaneous test is conducted to test whether the independent variables simultaneously or jointly have a significant influence on the dependent variable. With the provisions of decision making, if the value of prob. (F statistic)  $< 0.05$  (significance level of 5%), then  $H_0$  is rejected, which means that the independent variable has a significant influence on the dependent variable together. However, if prob. (F

statistic)  $> 0.05$  (significance level of 5%), then  $H_0$  is accepted, which means the independent variable does not affect the dependent variable together. Following are the simultaneous test results:

TABLE I. RESULTS OF SIMULTANEOUS INFLUENCE

Weighted Statistics				
R-squared		0.072454	Mean dependent var	1.106465
Adjusted R-squared	R-	0.052290	S.D. dependent var	0.446579
S.E. of regression	of	0.434746	Sum squared resid	17.38838
F-statistic		3.593241	Durbin-Watson stat	1.050992
Prob(F-statistic)		0.031436		

Source: Eviews 10, 2019

Based on table 1, it was found that the value of prob. (F-statistic) of 0.031436  $< 0.05$ ; then  $H_0$  is rejected, which means DER and Interest Rate have a significant effect on stock prices.

Partial test is done to determine the value of the regression coefficient individually on the dependent variable whether significant or not. Provisions for partial test decision making that is if the value of prob. (p-value)  $< 0.05$  (significance level of 5%), then  $H_0$  is rejected, which means the independent variable has a significant effect on the dependent variable partially. But if the value of prob. (p-value)  $> 0.05$  (significance level of 5%), then  $H_0$  is accepted, which means the independent variable has no significant effect on the dependent variable partially. Here are the partial test results:

TABLE II. RESULTS OF PARTIAL INFLUENCE

Variable	Coefficient	Std. Error	t-Statistic
C	6.670145	0.318179	20.96353
DER?	0.001517	0.001028	1.476504
SB?	-5.848938	2.978514	-1.963710

Source: Eviews 10, 2019

Based on table 2, it can be concluded that:

### A. DER Variable

Tcount value of the DER variable is 1.476504 with a p-value of 0.1432. Because the value of prob. (p-value)  $> 0.05$  (significance level of 5%) or 0.1432  $> 0.05$ , then  $H_0$  is accepted and the conclusion is that DER has no significant effect on stock prices.

### B. Interest Rate Variables

Tcount value of Interest Rate variable of -1.963710 with a p-value of 0.0526. Because the value of prob. (p-value)  $> 0.05$  (significance level of 5%) or 0.0526  $> 0.05$ , then  $H_0$  is accepted and the conclusion is that the interest rate has no significant effect on stock prices. However, if the significance level is 10%, then the prob value. (p-value)  $< 0.05$  or 0.0526  $< 0.1$  which shows  $H_0$  is rejected and the conclusion is that the interest rate has a significant effect on stock prices.

**TABLE III. DETERMINATION COEFFICIENT TEST**

R-squared	0.072454	Mean dependent var	1.106465
Adjusted R-squared	0.052290	S.D. dependent var	0.446579
S.E. of regression	0.434746	Sum squared resid	17.38838
F-statistic	3.593241	Durbin-Watson stat	1.050992
Prob(F-statistic)	0.031436		

Source: Eviews 10, 2019

Based on Table 3, it can be seen that the coefficient of determination R<sup>2</sup> is 0.072454 or 7.24%. The coefficient of determination (R<sup>2</sup>) basically measures how far the model's ability to explain the variation of independent variables [13]. This shows that the independent variable consisting of DER and Interest Rate is able to explain the dependent variable which is the Share Price of 7.24% while the remaining 92.76% is explained by other variables outside the study.

#### IV. DISCUSSION

##### A. Effect of DER on Company Value

The Debt to Equity Ratio (DER) is a ratio to measure the level of financial leverage. DER compares total debt with total equity. The lower the DER, the more companies use their own capital compared to adding funding from debt. The higher the DER, the higher the company is financed by debt. DER does not significantly influence the value of the company means that the size of the company's debt does not really affect the value of a company. Regardless of the amount of debt used by companies in corporate spending, the value of the company does not change [14].

##### B. Effect of Interest Rate on Company Value

Interest rates have a significant effect on company value. The higher the interest rate, the higher the value of the company. High interest expense will have an impact on the company's profit decline. If there is a decrease in profits, the company's cash flow will also decrease. This will make investors less interested in investing so that it will cause stock prices to decline, and consequently will reduce the value of the company. The interest rate that is too high will affect the present value of the company's cash flow, so that investment opportunities that exist will not be attractive anymore [15].

#### V. CONCLUSION

Based on the results and discussion, it can be concluded that DER has no significant effect on stock prices, Interest rates have a significant effect on stock prices, DER and Interest Rate have a significant effect on Stock Prices, where DER and Interest Rates are able to explain the dependent variable

namely Share Price of 7.24% while the remaining 92.76% is explained by other variables outside the study.

From the results of data processing above, it can provide theoretical and practical benefits. In theory, this research can provide knowledge about the value of the company along with the factors that influence it, to add references to further researchers. Practical benefits for investors from this research can provide information and as a material consideration for investors in making investment decisions.

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