

# Analysis of Factors Affecting the Company's Debt Policy with Pecking Order Theory in Wholesale and Retail Companies in Indonesia

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**Abstract**— Debt policy is one of the decisions related to company funding made by the manager. This study aims to determine the effect of profitability, asset structure, and growth rate by using control variables of firm size and sales growth on debt policy. Using multiple linear regression analysis method, the result showed that profitability and asset structure had a significant negative effect to company policy. Company growth rate, firm size, sales growth has a significant positive effect on debt policy. This is in accordance with the assumption of pecking order theory. Meanwhile, the Independent sample T-test shows that there is no real difference between the debt policy of wholesale and retail companies listed in Indonesia Stock Exchange.

**Keyword**— Debt Policy; Profitability; Asset structure; Growth rate; Firm size; Sales growth; Pecking order theory

## I. INTRODUCTION

In 1999, Sunder and Myers said that the theory most relevant to debt policy was the pecking order theory. However, several empirical studies conducted afterwards concluded that the pecking order theory cannot be said to be the most relevant theory. Determining the appropriate debt policy depends to the conditions and type of company itself. Pecking order theory explains the existence of a hierarchy of funding in companies where managers choose to use internal funds first in the form of retained earnings. When an external source is insufficient, the manager will use an external funding source that starts from a source that has the smallest risk, namely debt, preferred stock, and then common stock as an alternative financing.

There are many factors that influence the manager's decision in determining the company's debt policy. According to Brigham and Houston (2005), the factors that influence debt policy are sales stability, asset structure, growth rate, profitability, firm size, management attitude, lender attitude, and market conditions. Profitability is the ability of a company to obtain profits or the amount of return as long as the company operates. According to Brigham and Houston (2011), profitable companies use less debt than those who do not. This is because the high profitability indicates that the company has internal funds with a large retained profit to finance the company's activities.

The asset structure is a combination of current assets and non-current assets owned by the company. According to Schoubben and Van Hulle (2004), when a company has a larger proportion of fixed assets, the larger the internal fund reserves of the company derived from the depreciation of these assets will be. Company growth can indicate company funding needs. The higher the company's growth rate, the greater the company's funding needs is. Therefore, managers will tend to use debt as an alternative funding with the smallest risk.

## II. LITERATURE REVIEW AND HYPOTHESIS

Pecking order theory describes a level in the search for corporate funds which shows that companies prefer to use internal equity in financing investment and implementing it as a growth opportunity. When external financing is needed, the company will issue securities from the safest order. Therefore, the company will start from issuance of debt securities, then mixed securities such as converted bonds, then equity financing as a last resort. Furthermore, internal financing requires the lowest cost of acquisition, followed by the issuance of debt that requires quite low costs, and equity financing that requires the highest cost. In addition, in the stock market, investors will catch a negative signal if a company issues shares and captures a positive signal if the company issues debt.

Profitability is the ability of a company to make a profit through its business operations by using assets owned by the company. Increased profitability participates in increasing retained earnings, so the company has more internal funding sources.

In accordance with the pecking order theory which has the first funding order with the source of internal funds in the form of retained earnings, so the composition of own capital is increasing.

According to Brigham and Houston (2005), the asset structure is the determination of how much the composition of its current assets and fixed assets. When a company has a larger proportion of tangible assets, the company has reserves of funds from internal sources in the form of residual value of depreciation on the company's fixed assets. Then, the company will reduce the use of debt when the proportion of fixed assets increases. This is in accordance with the pecking order theory which prioritizes its internal funding sources.

Based on the pecking order theory, the company will choose the choice of external funds, namely debt to meet the company's funding needs when internal funds are not enough. This is in accordance with the statement of Brigham and Gapenski (1996) stating that companies with high growth rates tend to require greater funds. To fulfill this, the company will choose a cheaper source of funds which is issuing debt securities rather than issuing new shares that requires greater emission costs.

Company size is the amount of assets owned by the company during a certain period. Larger scale companies can access capital markets more easily than small-scale companies can. This convenience shows that the company is flexible and able to get funds. The larger the size of a company, the greater the use of the company's debt is.

Kaaro (2001) states that sales growth is the magnitude of the company's sales figures from each period. This shows productivity capabilities that are ready to compete in the market. The higher the company's sales growth, the greater the level of corporate acceptance will be.

Based on the results above, the following is the formulation of the hypothesis:

H1: Profitability has a negative effect on debt policy of Wholesale and Retail companies.

H2: Asset Structure has a negative effect on debt policy of Wholesale and Retail companies.

H3: Growth rate has a positive effect on debt policy of Wholesale and Retail companies.

H4: There are differences in Wholesale company debt policies with the Retail company's debt policy.

### III. RESEARCH METHOD

The population in this study is wholesale and Retail companies listed on the Indonesia Stock Exchange. While the selection of samples using purposive balance sampling method, we obtained 48 samples of wholesale companies and obtained 48 samples of retail companies.

To examine the effect of this study, we use multiple linear regression analysis and data analysis tools are used to see the differences in wholesale and retail company debt policies using the Independent sample t-test.

In this study, we also conduct a test classic assumption to ensure that the data used in the study were normally distributed; there were no symptoms of multicollinearity, no autocorrelation, and no symptoms of heteroscedasticity. If the model used has passed the classical assumption test, then it can be said that the model will yield the Linear Unbiased Estimator (Ghozali: 2011).

### IV. RESULTS AND DISCUSSION

#### A. Normality Test

Based on the test results, it shows that wholesale and retail company data is normally distributed. This is indicated by the Jarque Bera test of wholesale companies of 0.517794 and retail of 0.505697 > 0.05, so H0 is accepted and it can be said that the data is normally distributed.

#### B. Heteroscedasticity Test

Based on the test results, it shows the effect of each independent variable is not significant to the absolute value of the residual where the significance value is greater than 0.05. Therefore, it can be concluded that the data is free from heteroscedasticity problems.

### C. Multicollinearity Test

Based on the test results, it shows there is no multicollinearity problem in the variables tested, where the correlation coefficient between variables is greater than 0.80.

### D. Autocorrelation Test

In this study, an analytical tool used in the autocorrelation test is the Durbin Watson test. With this test, the DW value will be obtained. The results showed that the data was free from autocorrelation problems where  $dU < DW \text{ value} < 4 - dU$ .

### E. Linear Regression Test Results

The linear regression model used in this study is as follows:

$$TDR = \alpha + \beta_1 Prof_{it} + \beta_2 AS_{it} + \beta_3 GR_{it} + \beta_4 S_{it} + \beta_5 SG_{it} + \varepsilon_{it}$$

Before testing the model, the researchers previously tested to know which model most suitable to be used in this model. The examiner performs the Chow Test, the Hausman Test, and the Lagrange Multiplier Test. Based on the results of the three methods; it was found that the suitable model used in this study was the Common Effect (OLS).

TABLE 1. REGRESSION RESULTS FOR WHOLESALE AND RETAIL SECTORS

1. Wholesale				
Variable	Coeff.	Std. Error	t-Stat.	Prob.
PR	-0.63	0.164	-3.835	0.0004**
AS	-0.518	0.108	-4.766	0.0000**
GR	0.142	0.066	2.149	0.0374*
S	0.00238	0.11	2.054	0.0462*
SG	-0.03	0.11	-2.559	0.0142*
C	0.967	0.268	3.595	0.0008**
R-Squared		0.583408		
Prob (F-Statistic)		0		
2. Retail				
Variable	Coeff.	Std. Error	t-Stat.	Prob.
PR	-0.213	0.106	-1.995	0.0525*
AS	-0.418	0.179	-2.33	0.0247*
GR	0.714	0.243	2.933	0.005**
S	0.011	0.006	1.714	0.0938*
SG	-0.035	0.008	-4.31	0.0001**
C	1.209	0.217	5.563	0.0000**
R-Squared		0.484191		
Prob (F-Statistic)		0.000026		

Note: \*\* Significant at 1% Level; and \* Significant at 5% Level

Source: EViews Output (2018)

Table 1 shows that for wholesale companies, the value of R2 is 0.583408. This means that profitability, asset structure, growth rate, company size, and sales growth rate can explain the debt policy of 58%. Meanwhile, the model for retail companies has a R2 value of 0.484191. This means that the company's growth rate, company size, and sales growth rate are able to explain the debt policy of 48%.

The description of the results of the partial regression test (t test) in the wholesale company is as follows:

- Profitability (PR) has a negative effect on debt policy with a significance level of 0.0004 which is significant at level 1% with a negative coefficient of value -0.630233.
- The asset structure (AS) has a negative effect on debt policy with a significance level of 0.0000 which is significant at the level of 1% with a negative coefficient of value -0.518921.
- The company's growth rate (GR) has a positive effect on debt policy with a significance level of 0.0374 which is significant at the 5% level with a positive coefficient of 0.142841.
- Firm size (S) has a positive effect on debt policy with a significance level of 0.0462 which is significant at the 5% level with a positive coefficient of 0.023879.
- Sales growth rate (SG) has a negative effect on debt policy with a significance level of 0.0142 which is significant at the 5% level with a negative coefficient of -0.030399.

The description of the results of the partial regression test (t test) in retail companies is as follows:

- a. Profitability (PR) has a negative effect on debt policy with a significance level of 0.0525 which is significant at the 5% level with a negative coefficient of value -0.21341.
- b. The asset structure (AS) is against debt policy with a significant level of 0.0247 level 5% with a negative coefficient of value -0.41833.
- c. The company's growth rate (GR) has a positive effect on debt policy with a significance level of 0.0054 which is significant at the 1% level with a positive coefficient of 0.714524.
- d. The size (S) of the company has a positive effect on debt policy with a significance level of 0.0938 which is significant at the 5% level with a positive coefficient of 0.011332.
- e. Sales growth rate (SG) of the company has a negative effect on debt policy with a significance level of 0.0001 which is significant at the level of 1% with a negative coefficient of value -0.03537.

#### F. Independent Sample T-Test Different Test

Different test of Independent Sample T-test is used to determine whether there is an average difference between two groups that are not related (free) to one another. Previously the Kolmogorov-Smirnov test and the Levene's Test of Equality Error Variance were tested.

Based on research results, the value of sig. (2-tailed) is  $0.234 > 0.05$ , so it can be concluded that there is no difference between the wholesale company's debt policy and the retail company's debt policy.

TABLE II. INDEPENDENT SAMPLE T-TEST TEST RESULTS

	TDR								
	Levene's Test for Equality of Variance		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	3.706	.057	1.197	94	.234	.05332	.04455	-.03514	.14178
Equal variances not assumed			1.197	91.251	.234	.05332	.04455	-.03517	.14182

Source: SPSS Output (2018)

#### V. CONCLUSIONS

Based on the results of the regression analysis above, it was found that profitability and asset structure as well as sales growth control variables has a significant negative effect on debt policy. The company's growth rate and firm size control variables have a significant positive effect on debt policy. This result is in accordance with the pecking order theory which assumes the existence of a funding hierarchy where managers prioritize internal funding sources as a source of financing for the company. For managers, preferably before making funding decisions using debt, they must first examine the factors that affect debt itself. This is because all decisions taken by managers can affect the value of the company both directly and indirectly. For creditors and investors, it is also advisable to pay attention to the variables mentioned above so that creditors and investors are not mistaken in making decisions to invest and to provide loan.

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