



THE EFFECT OF PROFITABILITY, FIRM GROWTH, AND FIRM SIZE TO THE CAPITAL STRUCTURE OF MANUFACTURING FIRMS IN INDONESIA STOCK EXCHANGE IN 2017-2018

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Abstract

The research aims to know an affection between profitability, firm growth, and firm size to the capital structure of manufacturing firms in the Indonesia Stock Exchange in 2017-2018. The method used of research is quantitative method with secondary data obtained from the company's annual report with 78 samples. The data analysis technique uses the requirements analysis test, classic assumption test, multiple regression equation test, and hypothesis test. The research results partially show that profitability and company size have positive and significant effects on capital structure; company growth has a negative and significant effect on capital structure; and simultaneously affect the capital structure.

Keywords: Profitability, Firm Growth, Firm Size, Capital Structure

Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh profitabilitas, pertumbuhan perusahaan, dan ukuran perusahaan terhadap struktur modal pada perusahaan manufaktur di Bursa Efek Indonesia tahun 2017-2018. Metode penelitian yang digunakan adalah metode kuantitatif dengan data sekunder yang diperoleh dari laporan tahunan perusahaan sebanyak 78 sampel. Teknik analisis data menggunakan uji analisis persyaratan, uji asumsi klasik, uji persamaan regresi berganda, dan uji hipotesis. Hasil penelitian secara parsial menunjukkan bahwa profitabilitas dan ukuran perusahaan berpengaruh positif dan signifikan terhadap struktur modal; pertumbuhan perusahaan berpengaruh negatif dan signifikan terhadap struktur modal; dan sekaligus mempengaruhi struktur modal.

Kata Kunci: Profitabilitas, Pertumbuhan Perusahaan, Ukuran Perusahaan, Struktur Modal

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INTRODUCTION

In general, companies need capital to run and expand their business. Companies can obtain capital through two programs, namely own capital (internal) and loans (external loans). Therefore, companies, in this case financial managers, need to manage well so that the company does not make the wrong decision, whether to use the capital itself or a loan or use both.

PT Asia Paper Mills has debts of up to Rp 588.36 billion to its creditors. The company, which is a paper and cardboard producer, must hand over its assets to a curator to pay off the debt. The assets will then be sold by the curator and the proceeds from the sale will be made available to the creditor. A total of 50 creditors have been verified and recognized by the curator. As for 50 creditors consist of 47 concurrent creditors with debts of IDR 209 billion, one separatist creditor with debts of IDR 370.61 billion, and the rest preferred creditors whose payments are prioritized, such as employee salaries, taxes, and electricity bills (Sari, 2017).

In contrast to PT Asia Paper Mills which tends to use loans, PT Lion Metal Works Tbk. (SINGA) increased the share capital of PT Singa Purwakarta Jaya (SPJ) by 59,800 shares with a nominal value of IDR 1 million / share. Through this transaction, SINGA issued Rp. 59.8 billion controls 99.99% of SPJ shares. In this case, the Director of SINGA, Lawer Supendi, said the basis of the transaction was to support the subsidiary's business to become an industrial area. In addition, it can convert shareholder debt into shares in subsidiary companies (Dwijayanto, 2018).

When viewed from the importance of decisions in choosing a capital structure, the company, in this case the financial manager, expected can understand well what factors can affect the capital structure. There are many factors that can affect the capital structure such as profitability, asset structure, company size, business risk, liquidity, company growth, and others.

PT Tunas Baru Lampung Tbk. (TBLA) experienced a decrease in net income which resulted in decreased profitability in 2018 (Kalla, 2019). Even though it has decreased profitability, TBLA still uses its own capital as a capital expenditure budget, but does not rule out the possibility of using loans (external funding). Sourced from this news, it can be seen that if profitability decreases, for business continuity, company funding tends to remain from its own capital and does not rule out if the company will seek loans from external parties.

Sales of PT Indocement Tunggal Prakarsa Tbk (Indocement) have decreased from 2018 by 1.2% or 49 thousand tonnes (Liptutan 6, 2019). The decline in sales that occurred did not make Indocement choose to make loans to external parties, but preferred to maintain strong cash flow in increasing the company's capital. Therefore, if sales decline, the company will continue to use its own capital by strengthening cash flow and cash equivalents rather than making loans from banks.

Small and medium entrepreneurs have the potential to develop their business, but are constrained because MSMEs have limited capital. Access to bank loans is difficult for MSMEs to get because banks see the size of the business and the many requirements when applying for a loan from a bank. Therefore, if the size of the company gets bigger, it will make it easier to access loans from external parties and vice versa.

Research with the title factors affecting capital structure has been done before. One of his studies was conducted by Ferdina Watiningsih (2018) which shows that "profitability has a negative and significant effect on capital structure, company size has a positive and significant effect on capital structure, reliability has a positive and significant effect on capital structure,

company growth has a positive and insignificant effect on capital structure, Capital structure, as well as profitability, company size, reliability, and company growth simultaneously have a significant influence on the capital structure of banks listed on the IDX in 2008-2016 ”.

The results of the study are different from those from Samuel Nduati Kariuki and Charles Guandaru Kamau (2014) where the results show that company growth has a positive and significant effect on capital structure, company size has a negative and significant effect on capital structure, profitability has a positive and significant effect on structure. Capital, and asset structure have a positive and insignificant effect on the capital structure of food and beverage companies in Kenya.

In addition, the results of research from Wayan Wardita and Made Purba Astakoni (2018) show that profitability has a negative and significant effect on capital structure, growth rates have a negative and significant effect on capital structure, and company size has a positive and significant effect on capital structure. Furthermore, research conducted by Argi Alvareza and Topowijono (2017) shows the results of company size have a significant effect on capital structure, profitability has no significant effect on capital structure, and company growth has a significant effect on capital structure.

Based on the background previously described, the formulation of the problem in this study are:

1. Does profitability affect the capital structure?
2. Does company growth affect the capital structure?
3. Does the size of the company affect the capital structure?

The purpose of this study is to find empirical evidence whether profitability, company growth, and company size affect the capital structure of manufacturing companies listed on the IDX in 2017-2018.

LITERATURE REVIEW

Capital Structure

Capital structure is a combination or balance between debt and equity (preferred stock and common stock) that a company uses to plan to acquire capital (Ambarwati, 2010). The capital structure is a description of the form of the company's financial proportion, namely between the capital owned by long-term liabilities and its own capital (shareholders' equity) which is the source of financing for a company. (Fahmi, 2011).

Companies in operating their business in conjunction with developments that occur generally require additional capital. When the company is established, the owner can choose from which sources of funds will be used, whether the one chosen is from his own capital or requires a loan from an external party. Every decision taken will always have an impact. Therefore, certain considerations are needed by the company to regulate the mix of capital sources that will be used (Astuti, 2004).

Profitability

Profitability is a ratio that has the use of measuring the potential of a company to generate profits from its usual business activities (Hery, 2016). The ability to get company profits with existing company resources can be interpreted as profitability (Harahap, 2010).

Profitability ratio analysis is usually used to answer the following questions (Samryn, 2012):

1. The company's ability to earn gross profit

2. How to finance investment management
3. Questions related to the adequacy of income that common shareholders receive from investments made in company ownership

Firm Growth

Company growth is the development a company makes when running its business. Company growth can also be interpreted as changes that occur in the company when running its business in terms of sales growth and company profits (Pearce & Robinson, 2008). In addition, company growth is a stage in the life cycle of the company where the company is able to get a source of income (Wisnu, 2019).

According to Aisjah (2012), company growth is highly expected because it will have a positive impact on internal and external parties of the company. From an investor's point of view, a company's growth is a notification that the company has profitable opportunities and the expectation of a better return.

Firm Size

Company size can be interpreted as a picture of the size of the company as measured by total assets, total sales, and average total assets. In general, companies are divided into three categories, namely large, medium, and small companies (Wati, 2019). Sholichah stated that the ratio of the size of a business in a company or organization can be called the size of the company. In addition, Prasetyorini classified the size of a company as determined by its total assets, stock market value, and others. (Hery, 2017).

According to Subroto (2014) large companies have advantages over small companies, where large companies have a lot of resources so that they will be more resilient when economic turmoil and not easily bankrupt. However, large companies have bigger consequences if they go bankrupt so there is likely a role for the government to help.

Framework

The Effect of Profitability on Capital Structure

Companies that have a high rate of return on investment that will use debt tend to be less (Brigham & Houston, 2013). According to Hanafi (2004) profitability is one of the factors that can affect the capital structure. Besides that, Vuran *et al.* (2017) argues based on the pecking order theory which states that a profitable company does not have to depend on external funds, the company will prefer to use internal funds from past accumulated profits.

The Effect of Firm Growth on Capital Structure

Companies with high growth rates tend to use more debt than companies with low growth rates (Sulindawati *et al.*, 2017). According to Brigham dan Houston (2013) Rapid growth requires companies to rely more on external capital. Apart from that, Gharaibeh (Gharaibeh, 2015) argues that firms are more likely to borrow when growth opportunities increase.

The Effect of Firm Size on Capital Structure

The level of convenience for a company to obtain funds through the capital market can be determined from the size of the company. Small companies generally lack access to an organized capital market, for both bonds and stocks (Sawir, 2004). According to Sitanggang (2013) large companies will find it easier to get to the capital market. The bigger the company, the easier it is for the company to get both internal and external funds (Hery, 2017).

RESEARCH METHODOLOGY

The method used in this research is quantitative method. The scope used is a manufacturing company listed on the IDX in 2017-2018. The data used is secondary data obtained from the company's annual report. The data source is taken from the website www.idx.co.id.

The sampling technique used in this study was nonprobability sampling with a purposive sampling method. The criteria used by researchers are:

1. Manufacturing companies listed on the Indonesia Stock Exchange in 2017-2018
2. Manufacturing companies that publish the 2017-2018 annual report on the IDX
3. Manufacturing companies that reported positive profits during 2017-2018

Based on these three criteria and seeing Issac Michael's table with an error rate of 5%, the number of samples obtained is 78 companies. Data processing using SPSS software.

The capital structure in this study is proxied by DER (*Debt to Equity Ratio*) (Fahmi, 2011; Farid, 2017; Sugeng, 2017), profitability is proxied by ROA (*Return On Assets*) (Hanafi & Halim, 2018; Hery, 2018; Prawironegoro, 2010), company growth is proxied by sales growth (Poernawarman, 2015; Tambunan, 2008; Wati, 2019), and firm size is proxied by the natural logarithm of total assets (Asnawi & Wijaya, 2005; Sayidah, 2018; Wati, 2019).

RESULTS AND DISCUSSION

Data Analysis

Descriptive statistics transform raw data into a form that makes it easy for readers to understand and interpret the meaning of the data or numbers displayed. Its main use is to describe answers to answers from observations (Sarwono, 2006). This study uses the minimum, maximum, mean, standard deviation, and frequency distribution values.

Table 1. Descriptive Statistics

	N	Min.	Max.	Mean	Std. Deviation
DER (Y)	78	,12	6.39	,9237	1.00212
ROA (X ₁)	78	,00	,48	,0786	,08148
Growth (X ₂)	78	-,17	,77	,1300	,13557
Size (X ₃)	78	25.80	33.40	28.5774	1.52104
Valid N (listwise)	78				

Normality Test Result

Value of Asymp. Sig. (2-tailed) obtained is 0.200 > 0.05, meaning that the data is normally distributed.

Table 2. Normality Test

One-Sample Kolmogorov-Smirnov		
		Unstandardized Residual
N		78
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	,80624863
Most Extreme Differences	Absolute	,056
	Positive	,056
	Negative	-,045
Test Statistic		,056
Asymp. Sig. (2-tailed)		,200 ^{c,d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Linearity Test Result

The significance value of Deviation from Linearity on Profitability is $0.101 > 0.05$. The significance value of Deviation from Linearity in Company Growth is $0.330 > 0.05$. The significance value of Deviation from Linearity on Company Size is $0.568 > 0.05$. The conclusion is that each independent variables has a linear relationship with the capital structure.

Multiple Linear Regression

The multiple linear regression equation obtained is:

$$Y = -12,666 + 3,504X_1 - 3,249X_2 + 3,756X_3$$

Table 3. Multiple Linear Regression

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-12.666	6.024		-2.102	,039		
	LN_ROA	3.504	1.487	,246	2.357	,021	,970	1.031
	LN_Growth	-3.249	1.064	-,323	-3.054	,003	,946	1.057
	LN_Size	3.756	1.814	,216	2.071	,042	,973	1.027
a. Dependent Variable: LN_DER								

Multicollinearity Test Result

Table 3 shows the tolerance value for profitability of 0.970, company growth of 0.946, and company size of 0.973. In addition, the VIF value of profitability is 1.031, company growth is 1.057, and company size is 1.027. Each independent variables has a tolerance value > 0.10 and $VIF < 10$, it can be concluded that there is no multicollinearity in the regression model.

Heteroscedasticity Test Result

Table 4 shows the significance value of profitability of 0.461, company growth of 0.634, and company size of 0.170. Each independent variables has a significance value > 0.05, it can be concluded that heteroscedasticity does not occur in the regression model.

Tabel 4. Heteroscedasticity Test

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	6.208	3.724		1.667	,100		
	LN_ROA	-,682	,919	-,086	-,742	,461	,970	1.031
	LN_Growth	-,315	,658	-,056	-,479	,634	,946	1.057
	LN_Size	-1.552	1.121	-,160	-1.385	,170	,973	1.027

a. Dependent Variable: Abresid

Autocorrelation Test Result

Table 5 shows the Durbin Watson value of 2.225. If seen from the Durbin Watson table with a significance level of 5% with a sample size (n) 78 and the number of independent variables (k) 3, a lower limit value (dL) of 1.554 and an upper limit (dU) of 1.713 will be obtained. After calculating the value (4-dU) of 2.287, it can be concluded that the value of d lies between dU and (4-dU), namely $1.713 < 2.225 < 2.287$, which indicates that autocorrelation does not occur.

Tabel 5 Autocorrelation Test

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,466 ^a	,217	,186	,82243	2.225

a. Predictors: (Constant), LN_Size, LN_ROA, LN_Growth
 b. Dependent Variable: LN_DER

Hypothesis Test

The Effect of Profitability on Capital Structure

Partial hypothesis testing on profitability as proxied by Return on Assets produces a significance value of $0.021 < 0.05$ and $t \text{ count} > t \text{ table}$ ($2.071 > 1.993$), H_0 is rejected. This means that there is a positive and significant influence on the capital structure.

This can happen because if company profits increase, external parties will increase their confidence in the company's ability to pay off loans.

The results of this study are in line with the results of research conducted by Lara Al Ashry and Halkadri Fitra (2019) dan Ngatemin, *et al.* (2019).

The Effect of Firm Growth on Capital Structure

Hypothesis testing partially on company growth as proxied by sales growth produces a significance value of $0.003 < 0.05$ and $t \text{ count} > t \text{ table}$ ($|-3.054| > 1.993$), H_0 is rejected. This means that there is a negative and significant influence on the capital structure.

An increase in sales will cause income and profits to increase so that the company can cover operating costs and pay off company debts and increase its own capital.

The results of this study are in line with the results of research conducted by Wayan Wardita and Made Purba Astakoni (2018).

The Effect of Firm Size on Capital Structure

Hypothesis testing partially on company size as proxied by natural logarithms of total assets produces a significance value of $0.042 < 0.05$ and $t \text{ count} > t \text{ table}$ ($2.071 > 1.993$), H_0 is rejected. This means that there is a positive and significant influence on the capital structure.

The bigger the company if measured by total assets owned, the company's financial resilience has a good value in front of creditors so that it is easier to get loans.

The results of this study are in line with the results of research conducted by Ni Putu N. S. and I Gusti N. A.S. (2018) and Chrysan Kirana Warsiman and Ratnawati Kurnia (2014).

CONCLUSION

Based on the formulation of the problem, hypothesis testing, and previous discussion, the conclusions obtained are:

1. Profitability has a positive and significant effect on capital structure.
2. Company growth has a negative and significant effect on capital structure.
3. Company size has a positive and significant effect on capital structure.

RECOMMENDATION

1. For companies, the independent variables in this study has a significant influence on the capital structure so that it can be used as a consideration for making decisions about the use of optimal capital structures.
2. For investors, before investing in a company, it is necessary to pay attention to the capital structure owned by the company and to know its positive and negative impacts.
3. For future researchers, it is hoped that it can expand the scope of research on the factors that affect the capital structure. The factors that affect the capital structure vary widely, including asset structure, business risk, taxes, liability, dividend policy and others.

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