

The Effect of Capital Structure on Company Value in Automotive and Component Sector Companies in Go Public Period 2015 - 2019

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Abstract

This study aims to analyze the capital structure, firm value in the go public automotive and component sectors as well as the effect of capital structure on firm value. The analysis technique used is simple regression analysis with the SPSS program. The sample used is 9 companies taken using the purposive sampling method. The Independent variable is proxied by DER (Debt to Equity Ratio) and PBV (Price to Book Ratio). The results of the analysis show that the variables of capital structure and firm value have a significant negative effect. This means that a decrease in the capital structure will increase firm value.

Keywords – capital, capital structure, company value, automotive sector, component sector

Abstrak

Penelitian ini bertujuan untuk menganalisis struktur modal, nilai perusahaan pada sektor otomotif dan komponen yang go public serta pengaruh struktur modal terhadap nilai perusahaan. Teknik analisis yang digunakan adalah analisis regresi sederhana dengan program SPSS. Sampel yang digunakan adalah 9 perusahaan yang diambil dengan menggunakan metode purposive sampling. Variabel independen diproksikan dengan DER (*Debt to equity Ratio*) dan PBV (*Price to Book Ratio*). Hasil analisis menunjukkan bahwa variabel struktur modal dan nilai perusahaan berpengaruh negatif signifikan. Artinya, penurunan struktur modal akan mengakibatkan kenaikan nilai perusahaan.

Keywords – modal, struktur modal, nilai perusahaan, sektor otomotif, sektor komponen

INTRODUCTION

Competing in the world of the automotive business is getting tougher, supported by the demand market which is the higher the motor vehicle needs to support daily activities. It is the one that made the companies automotive compete in the increasing value of the company. The amount of profit the company gets after the sale will depend on the amount of capital obtained from the shareholders (Sa'diyah, C., & Widagdo, B., 2020). Thus, proper planning is needed so that the money that comes in is used when production is well organized so that capital can be used to the maximum.

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In companies which capital is partially obtained from debt, it will be very risky and risky for the company. Because the debt is greater than the company's capital so that when the company's capital is used as collateral, it will not be able to cover the entire debt. It is different from a company that only relies on its capital, it will be safer but the company will find it difficult to expand because of the limited capital obtained. In addition to the negative things that the company gets when the source of funding is mostly supported by debt, the company will also get a positive side or profit from the existence of the debt. Companies that have debt will get interested in the loan, the amount of interest on this loan can be used by the company to reduce the amount of tax that the company gets. The higher the interest rate on the loan, the lower the tax value will be.

The result of the company is profit. The size of this profit will affect the size of the company in which will have an impact on the value of the company. The greater the value of the company, the easier the company to gain the trust of investors. Hence, it is easier for the company to get additional capital from within the company and outside the company. The higher the profit earned by the company, the value of the company's assets will also increase. Therefore, in the future, the company will be easier to grow and develop. Companies with such cases usually have issued shares on the stock market or stock exchange.

Some large companies cover the lack of capital by adding debt from outside the company (Sa'diyah, C., 2021). It is necessary to regulate the appropriate capital structure so as not to pose a negative risk for the company. Companies that capital only rely on funds from outside the company will certainly be very risky for the development of the company. Thus, it needs a balance related to debt, capital, and company assets. This balance will be analyzed later in this study.

Table 1. Company Value Calculation Data as Measured by *Price to Book Value* in Automotive and Component Sector companies Period: 2015 – 2019

No.	Company Code	2015	2016	2017	2018	2019	Average
1	ASII	1.92	2.39	2.15	1.91	1.5	1.97
2	AUTO	0.76	0.94	0.92	0.63	0.51	0.75
3	PRAS	0.12	0.17	0.23	0.18	0.15	0.17
4	BOLT	3.68	2.32	3.2	3.08	2.59	2.97
5	GJTL	0.34	0.64	0.42	0.39	0.33	0.42
6	IMAS	0.93	0.51	0.24	0.55	0.32	0.51
7	INDS	0.12	0.26	0.39	0.66	0.59	0.40
8	LPIN	0.05	0.11	0.15	0.1	0.1	0.10
9	SMSM	1.19	3.57	3.95	3.75	3.51	3.19
Average		1.01	1.21	1.29	1.25	1.07	1.17

Source: Indonesia Stock Exchange (Data processed)

From Table 1, the value of the company will be considered good by investors if the value is more than 1. The higher the annual PBV value, the better the company's growth will be. If the PBV value is above 1, it can be interpreted that investors are willing to pay higher than the book value. However, if investors do not dare to pay more than one, the book value will be higher than the stock price on the market (Suta, Agustina, and Sugiarta, 2016). In AUTO, PRASS, GJTL, IMAS, INDS, LPIN companies the average PBV each year is below 1, so it can be ascertained that the company's growth will not experience growth in a better direction. The high and low value of the company can be influenced by

two factors, namely factors from within the company and factors outside the company (Brigham & Houston 2015).

Based on Table 2, the average debt in the automotive and component sector companies has increased every year. Companies that experience a lack of funding will take debt to cover the lack of capital. However, having debt that is too high will be very risky for the company and will cause risky problems in the future. With the amount of debt owed by the company, the amount of tax will be lower (Hermuningsi, 2013). But, with the existence of the debt, financial managers are still required to produce an optimal capital structure because it will have an impact on the value of the company and if the amount of debt value is higher than the number of other costs, it will cause the risk of bankruptcy for the company (Hermuningsi, 2013).

Table 2. Calculation Table of Average Debt in Automotive and Component Sector Companies
Period: 2015 - 2019

Year	Average Debt
2015	17,329,832,506.029
2016	17,476,473,354,290
2017	17,759,137,333,926
2018	18,942,747,493,374
2019	24,437,317,978,423

Source: Indonesia Stock Exchange (Data processed)

Based on the above phenomenon, the author is interested in researching firm value in automotive and component sector companies. There are 13 companies listed on the Indonesia Stock Exchange website or IDX for the automotive and component sector.

LITERATURE REVIEW

Capital structure is a comparison between the total value of liabilities or debt with the total value of equity or total capital. Total liabilities consist of short-term debt and long-term debt. Total capital consists of the number of common shares, additional paid-in capital, and retained earnings. In the company's balance sheet, the capital structure has something to do with the company's long-term spending. In the financial structure, there is a capital structure where on the right side of the financial structure or the liability side there is a combination or combination of several items and part of the company's long-term sources of spending into the capital structure (Warsono, 2003).

The purpose of a general company is to maximize profit, but maximizing profit is considered inappropriate as a basis for making decisions in the financial sector, experts in the field of finance formulate the normative goal of a company to maximize the value of the company. Therefore, the value of the company becomes very important because it reflects the company's performance which can affect investors' perceptions of the company (Satiti & Sa'diyah, C., 2020). If the company's value is good, then the company's performance is good because the company's value reflects a company's condition.

RESEARCH METHODS

The research used in this research is descriptive research using a quantitative approach. A quantitative approach is a process of finding knowledge that uses data in the form of numbers as an analytical tool. The location of this research is the Indonesia Stock Exchange and secondary data

obtained from the website *www.idx.co.id*. The sampling technique used the purposive sampling method and obtained 9 samples of companies. The dependent variable is proxied by Price to Book Value and the Independent Variable is proxied by Debt to Equity.

RESULTS AND DISCUSSION

Capital structure in this study is the independent variable (X) and is proxied by the debt to equity ratio (DER). From the results of the analysis obtained data and explanations as follows:

Table 3. Calculation of DER

No.	Company Code	2015	2016	2017	2018	2019
1.	ASII	0.94	0.87	0.89	0.98	0.88
2.	AUTO	0.41	0.39	0.37	0.41	0.37
3.	PRAS	1.13	1.30	1.28	1.38	1.57
4.	BOLT	0.21	0.15	0.65	0.78	0.66
5.	GJTL	2.25	2.20	2.20	2.35	2.02
6.	IMAS	2.71	2.82	2.38	2.97	3.75
7.	INDS	0.33	0.20	0.14	0.13	0.10
8.	LPIN	1.78	8.26	0.16	0.10	0.07
9.	SMSM	0.54	0.43	0.34	0.30	0.27
Average		1.14	1.85	0.93	1.04	1.08

Source: Indonesia Stock Exchange (Data processed)

Table 3 is the result of the calculation of the debt to equity ratio (DER) of the automotive and components sector period 2015 - 2019. The DER value on companies each year tends to be volatile. Companies whose DER values go up and down are not too far away from AUTO (Astra Otopart, Tbk) and ASII (Astra International, Tbk) companies, namely AUTO with a value range of 0.41 to 0.39 and ASTRA ranging in value from 0.98 to 0.88. Companies that have a high risk of LPIN companies (Multiprima Prosperous, Tbk) with a DER value of 8.26 in 2016. The amount of LPIN's debt value is 426,243,285.86 with an equity capital of 51,595,020,389. Of course, this is very risky because the value of debt is many times greater than the value of equity capital.

Debt to equity (DER) is proxied as an independent variable where the minimum value is 0.07, namely LPIN companies in 2019. The capital structure of LPIN in 2019 is dominated by own capital/equity of 303,298,783,362 and debt of 21,617,421,367. The maximum DER value is 8.26, namely the LPIN company in 2016. In 2016 the LPIN company carried out a large debt of 426,243,285,867 with 51,595,020,389 equity capital.

Firm value in this study is the dependent variable (Y) and is proxied by price to book value (PBV). From the results of the analysis obtained data and explanations as mentioned in Table 4. Based on Table 4 of the data above, the PBV value in the automotive and component sector companies for the period 2015–2019 tends to fluctuate. The highest PBV value was in the SMSM company (Safe Perfect, Tbk) in 2017 of 3.95 and the lowest PBV value was in the LPIN company (Multiprima Prosperous, Tbk) in 2015 of 0.05. This is certainly very risky because the shares are undervalued by the public or undervalued which has an impact on reducing investment from investors and becomes a very important problem so that countermeasures need to be taken so that the company value in LPIN companies increases again (Brigham & Houston 2015). Internal factors are dividend decisions, capital structure, risk, and profit growth.

Table 4. Calculation of PBV

No.	Company Code	2015	2016	2017	2018	2019
1.	ASII	1.92	2.39	2.15	1.91	1.50
2.	AUTO	0.76	0.94	0.92	0.63	0.51
3.	PRAS	0.12	0.17	0.23	0.18	0.15
4.	BOLT	3.68	2.32	3.20	3.08	2.59
5.	GJTL	0.34	0.64	0.42	0.39	0.33
6.	IMAS	0.93	0.51	0.24	0.55	0.32
7.	INDS	0.12	0.26	0.39	0.66	0.59
8.	LPIN	0.05	0.11	0.15	0.10	0.10
9.	SMSM	1.19	3.57	3.95	3.75	3.51
Average		1.01	1.21	1.29	1.25	1.07

Source: Data Processed

The dependent variable is proxied by the price to book ratio (PBV) where the minimum value of 0.05 at the LPIN company in 2015 the year-end stock market value was only IDR 269 while the book value was 5,481.92 while the maximum value of the PBV variable was the SMSM company in 2017 with a year-end stock market value of IDR 1,255 while the book value of 317.47. This is because the stock market value has almost doubled from its book value and the stock market value tends to rise significantly. Meanwhile, the average DER is 120.9333 with a standard deviation of 143.17970. The normality test in this study used the one-sample Kolmogorov Smirnov test which was analyzed from the residuals and saw the spread of the residuals. P-Plot Normality Test.

Table 5. Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		44
Normal Parameters ^{a,b}	mean	.0000000
	Std. Deviation	5.23776757
Most Extreme Differences	Absolute	.104
	Positive	.104
	negative	-.094
Test Statistics		.104
	asympt. Sig. (2-tailed)	.200 ^{c,d}

Source: Data Processed

Table 5 is a normality test with the *One-Sample Kolmogorov-Smirnov Test* value of 0.104 with a significance of 0.200. It can be concluded that the tested data is normally distributed because the significance value of the normality test results is greater than 0.05 (Yuliara, 2016). In addition, the Kolmogorov one sample normality test - Smirnov test shows the result of the P-Plot Normality test. It can be concluded that the residual point follows the ordinal line which means that the data is normal. The following are the results of the analysis of the effect of variable X (capital structure) as proxied by DER on variable Y (company value) as proxied by PBV:

Table 6. Simple Linear Regression Test

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	151,094	23.077		6,547	.000
	x	-.284	-.124	-.330	-2.294	.027

Source: Data Processed

Linearity test is used to identify the existence of a bond between the independent variable and the dependent variable. And the regression direction of the independent variable and the dependent variable is linear or not. The following is a table of analysis results using the linearity test:

Table 7. Linearity Test

			Sum of Squares	df	Mean Square	F	Sig.
transform2_Y	Between	(Combined)	63,879	40	1,597	3,443	.118
* transform_X	Groups	linearity	5.725	1	5.725	12.342	.025
		Deviation from Linearity	58,154	39	1,491	3.214	.131
	Within Groups		1.856	4	.464		
	Total		65,735	44			

Source: Data Processed

Table 7 of the linearity test analysis above can be concluded that between the independent variables and the dependent variable there is a relationship because the linearity significant value of 0.025 is less than 0.05 and in the Deviation from Linearity section a significant value of 0.131 where the value is greater than 0.05 so that it can be concluded that the independent variable (X) with the dependent variable (Y) contains linearity. In this Heteroscedasticity test using the Park test method which is done by raising the residual. After the LN transformation (Natural Logarithm) was performed, the independent variable was regressed. The following table shows the heteroscedasticity test using the Park test method and its analysis:

Table 8. Heteroscedasticity Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	12,540	1,800		6,968	.000
	transform_X	-.333	.176	-.280	-1.893	.065

a. Dependent Variable: transform_Y

Source: Data Processed

From Table 8, it shows a significant value of 0.065 which is greater than 0.05, it can be concluded that there is no symptom of heteroscedasticity. So the regression model has met the assumption of

heteroscedasticity. In this study, the autocorrelation test used is the DW-test to see if there is a correlation between the nuisance errors in the study period. Based on Table 8 Autocorrelation Test obtained DW value of 1.931 with the equation $DW_{test} du < DW < 4-du$ as follows: $1.5660 < 1.931 < 2.434$ so it can be concluded that the regression model is free from autocorrelation or has met the assumption of autocorrelation.

Table 9. Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. error of the Estimate	Durbin-Watson
1	.223 ^a	.050	.027	.85968	1,931

a. Predictors: (Constant), LnX1

b. Dependent Variable: LnY1

Source: Data Processed

From the results of the simple linear regression test above, the relationship between independent variables or capital structure proxied by Debt to equity ratio (DER) is negative with the dependent variable or firm value proxied by Price to book value (PBV). It can be seen from the probability of 0.027 is smaller than the value of 0.05, then between these two variables no significant effect. In addition, to analyze the probability value, it can also be seen from the value of -2,294 which is greater than the value of 2,017, this proves that there is a negative influence between the capital structure variable and the firm value variable.

The results of this analysis accept the hypothesis concluded by previous researchers that the relationship between capital structure and firm value is positive. Previous research that is not in line with the results of the analysis of this study such as research by Abidin (2014), Manoppo and Arie (2016), Meidiawati and Mildawati (2016) which concluded that there was a positive influence between capital structure on firm value. The results of this study are more inclined to previous research by Pasaribu *et al* (2016), Safitri and Wahyuati (2015) where the results of the analysis are negative between capital structure and firm value.

Table 10. Termination Coefficient Test

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.330 ^a	.109	.088	117.70801	

a. Predictors: (Constant), x

b. Dependent Variable: y

Source: Data Processed

R-square in Table 10 shows how big the contribution of the independent variable in explaining the variation of the dependent variable. R square value shows the number of 0.109 or 10.9 %, which means that the diversity of the dependent variable price to book value (PBV) can be explained by the independent variable debt to equity ratio (DER) of 10.9 %, while 89.1 % is the contribution of variables that are not included in this research model.

CONCLUSION

The value of the capital structure of the manufacturing sector for the 2015-2019 period tends to fluctuate. Automotive and component sector companies rely on debt to procure company operations. Considering that the automotive and components sector is a sector that requires more capital costs than other sectors. Moreover, the automotive and component sector companies seek to increase the value of the company by circulating shares on the stock exchange or stock market. The higher the stock price, the better the value of the company in the eyes of investors. The more shares issued, the easier it will be for the company to expand. Based on the results of a simple linear regression test between capital structure and firm value there is a significant relationship. With a negative effect of 10.1%. This negative effect means that the lower the DER value will affect the increase in the PBV value. The results of this study can be used by investors as a basis for making decisions in the investment world. The results of this study can be used as additional learning and theory implementation media in lectures.

REFERENCES

- Abidin, Zainal et al. (2014). The Influence of Capital Structure, Dividend Policy and Size on Firm Value (Study on Property Companies on the Indonesia Stock Exchange). *Journal of Management Insights*, Vol.2 No.3.
- Brigham, EF, & Houston, JF (2015). *Fundamentals of Financial Management (8th ed.)*. USA: Cengage Learning.
- Hermuningsih, Sri. (2013). Pengaruh Profitabilitas, Growth Opportunity, Struktur Modal terhadap Nilai Perusahaan pada Perusahaan Publik di Indonesia. *Buletin Ekonomi Moneter dan Perbankan*.
- Manoppo, Heven and Arie, Fitty Valdi. (2016). The Influence of Capital Structure, Company Size and Profitability on the Value of Automotive Companies Listed on the Indonesia Stock Exchange for the Period 2011-2014. *Journal of EMBA*, Vol.4 No.2
- Meidiawati, Karina and Mildawati, Period. (2016). The Influence of Size, Growth, Profitability, Capital Structure, Dividend Policy on Firm Value. *Journal of Accounting Science and Research*, Vol.5 No.2.
- Pasaribu, Mirry Yuniyanti. (2016). The Influence of Capital Structure, Ownership Structure and Profitability on Company Value in Basic and Chemical Industry Sector Companies Listed on the Indonesia Stock Exchange in 2011-2014. *Journal of Business Administration*, Vol.35 No.1
- Sa'diyah, C. (2021). Analysis Of Factors Affecting Adoption Of Financial Technology Application. *Sentralisasi*, 10(1), 57–70.
- Sa'diyah, C., & Widagdo, B. (2020). Indonesia's Capital Market Reaction Election Events. *Sentralisasi*, 9(2), 97–107.
- Safitri, Norma and Wahyuati, Aniek. (2015). The Influence of Capital Structure and Investment Decisions on Profitability and Firm Value. *Journal of Management Science and Research*, Vol.4 No.2
- Satiti, Novita Ratna., Sa'diyah, C. (2020). Indonesian Management and Accounting Research The Effect of Financial Literacy on Malang District Society's Financial Behavior. *Indonesian Management and Accounting Research*, 19(02).
- Suta, IWP, Agustina, PAA, & Sugiarta, IN (2016). The Effect of Debt Policy on Firm Value with Institutional Ownership as Moderating Variable. *Journal of Business And Entrepreneurship*, 12(3), 173–185
- Warsono. 2003. *Manajemen Keuangan Edisi Ketiga*, Malang: Bayu Media Publishing.