

Capital Structure, Profitability and Firm Value: An Empirical Analysis

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This study is aimed to determine the effect of Corporate Structure on Firm Value with profitability as a moderating variable. The sample used in this research was companies listed in LQ 45 on the Indonesia Stock Exchange in 2012-2016, which were 38 companies using a purposive sampling method. The independent variable was the capital structure measured by Debt to Equity Ratio (DER), and Profitability was proxied by the Return On Asset (ROA). The dependent variable was the Firm Value as measured by the ratio of Price Book Value (PBV). The results show that Capital Structure and Profitability have a significant effect on Firm Value.

Key words: *Capital Structure, Profitability, Firm Value.*

Introduction

In principle the goal of the company is to create an increase in the prosperity of shareholders by increasing the value of the company. The theory of the firm states that the company's main goal is to maximize the value of the company (Jensen and Meckling 1974). Carrying out financial functions can increase the prosperity of shareholders; this ability can be stated as a company value (Brigham and Gapensi, 1996). Increasing the value of the company will attract investors to invest in shares of the company. Before investors invest in a company, they will make a stock valuation based on the information they get from the capital market (Winardi, 2001). Company value is the value of earnings in the future (Van Homes & James, 1995). The interest of investors to invest in 2018 has decreased due to a decrease of 10.29%. The average transaction value per day on the IDX during the past week compared to the previous week, namely to IDR7.31 trillion. This condition was followed by a decline in the average daily transaction volume from 9.67 billion shares last week, to 9.36 billion shares this week, down 3.2%. The market capitalization value for the week also decreased by 0.06%, to Rp6.79 trillion from Rp.6.80 trillion, at the close of last week (katadata.co.id,

2018). This value dropped 20.2% compared to last year which reached Rp. 111.7 trillion (katadata.co.id, 2018). In 2018 the LQ45 stock index with the largest liquid market capitalization constituents, was also volatile. Down 0.77 points (-0.08%), the LQ45 perched at 951.88. As for the weekly basis, throughout August 27-31 2018, the JCI fell by -49.71 points or equal to 0.83%. The same goes for the LQ45 index, down -11.79 points, equivalent to 1.25%. The decline in the prices of shares during the past week has been fairly even. Of all the LQ45 constituents, only 23 of them managed to rise from the previous week's closing price (24/8). All other shares experienced a decline in closing prices compared to the previous day. (Investment.kontan.co.id, 2018)(see table 1).

Table 1: Stock Price as of August 2018.

No	Saham	Harga (31/8)	Harga (24/8)	%
1	LPPF	7.5	6.475	15,83
2	ITMG	28.3	25.9	9,27
3	TPIA	5.5	5.05	8,91
4	INDY	3.27	3.01	8,64
5	SMGR	9.45	8.75	8
6	EXCL	3.18	2.95	7,8
7	INTP	17.725	16.5	7,42
8	PGAS	2.14	1.995	7,27
9	TLKM	3.49	3.29	6,08
10	BBNI	7.8	7.425	5,05
11	BBTN	2.75	2.63	4,56
12	HMSP	3.83	3.68	4,08
13	BJBR	1.93	1.855	4,04
14	KLBF	1.345	1.3	3,46
15	UNVR	43.85	43	1,98
16	BMRI	6.9	6.775	1,85
17	SRIL	344	338	1,78
18	PTPP	1.9	1.875	1,33
19	SSMS	1.3	1.285	1,17
20	LPKR	356	352	1,14
21	UNTR	34.4	34.2	0,58
22	ELSA	362	360	0,56
23	INKP	19.1	19	0,53
24	ADHI	1.49	1.495	-0,33
25	SCMA	2.1	2.11	-0,47
26	PTBA	4.05	4.07	-0,49

27	WSBP	390	392	-0,51
28	ANTM	870	875	-0,57
29	WSKT	1.895	1.915	-1,04
30	BBCA	24.8	25.075	-1,1
31	WIKA	1.55	1.57	-1,27
32	GGRM	73	74	-1,35
33	JSMR	4.53	4.6	-1,52
34	ASII	7.25	7.375	-1,69
35	ICBP	8.675	8.875	-2,25
36	ADRO	1.865	1.91	-2,36
37	INCO	3.8	3.9	-2,56
38	BBRI	3.18	3.27	-2,75
39	MEDC	870	895	-2,79
40	BKSL	123	128	-3,91
41	BSDE	1.2	1.25	-4
42	INDF	6.375	6.675	-4,49
43	BRPT	1.715	1.805	-4,99
44	MNCN	905	965	-6,22
45	AKRA	3.61	3.85	-6,23

Source: Data BEI

Based on the stock price table above, almost half of the stock price has decreased. This indicates that investors are reluctant to invest in LQ 45 shares. Capital structure has become one of the important investment consideration factors. This is related to the risks and income that investors will receive. Investors will carry out various analysis related to the decision to invest in the company through information, which can come from the company's financial statements. Capital structure theory explains that corporate funding policies relating to debt and equity are used to maximize company value (Husnan and Pudjiastuti, 2004).

Company value can be influenced by several factors, one of which is the capital structure. Capital structure has become one of the important investment consideration factors. This is related to the risks and income that investors will receive. Capital structure is a comparison of the value of debt with the value of own capital reflected in the company's financial statements at the end of the year. Capital structure is very important for the company because it will affect the magnitude of the risk borne by the shareholders and the magnitude of the rate of return or expected level of profit (Brigham and Houston, 2006). The right capital structure is expected to increase the value of the company. Capital structure is measured using the Debt to Equity Ratio (DER).

Company value can also be influenced by the size of the profitability generated by the company. Weston and Copeland (1997) define profitability as the extent to which a company generates profits from sales and investment of the company. If the company's profitability is good, then investors will see the extent to which the company can generate profits from sales and investment of the company. High profitability shows that the company is also good, because the higher the profitability, the higher the income received by the company. Profitability can be measured by ROE (Return on Equity). The greater the ROE results, the better the performance of the company.

Research on capital structure, profitability and company value has been carried out by several previous researchers. The results in previous studies still show inconsistent results regarding capital structure, profitability and firm value. Therefore, the authors are interested in re-examining the influence of capital structure, profitability and firm value.

Based on the description above, the formulation of the problem from this study is:

1. How does the capital structure affect the value of the company?
2. How does the effect of profitability on company value?

Literatur Review

Capital Structure

Capital structure is the composition of funds that can be used and allocated by the company. These funds can be obtained from two sources, namely: long-term debt and own capital (Gitman, 2006). Capital structure is sourced from debt, preferred stock and own capital used to obtain capital (Brigham and Houston, 2003). Capital structure is a mix or proportion of the company's long-term permanent funding indicated by debt, preferred stock equity and ordinary shares (Van Horne and Wachowicz, 2007). The financial structure describes the overall arrangement next to the balance sheet credit consisting of short-term debt, long-term debt, share capital and reinvested profits. A combination of debt and equity that can maximize the price of a company's stock is an optimization of capital structure (Brigham and Houston, 2006). The capital structure of a company is influenced by several factors, namely: interest rates, earnings stability, asset structure, the level of risk from assets, the amount of capital needed, the state of the capital market, the nature of management and the size of a company.

Capital Structure Theory

Previous research has been carried out by researchers to empirically test various theories regarding capital structure. The following are some theories about capital structure,

including: Traditional Approaches (Sawir, 2004), Modigliani and Miller Theory, Trade-off Theory (Myers, 2001), Pecking Order Theory (Myers, 1984), Information Asymmetry Theory (Myers, 2001), Signaling (Spence, 1973) and Agency theory (Jensen and Meckling, 1976)

Profitability

According to Weston and Bringham (1997) profitability is a measure of overall management effectiveness aimed at the size of the level of profits obtained in relation to sales or investment. Measuring the level of management effectiveness can be done by knowing how much the profitability ratio is owned by the community. With the company's profitability ratio analysis, management can control the development of the company over time.

According to Kasmir (2008) the purpose of profitability ratios for a company, as well as for parties outside the company, are:

1. To measure or calculate profits earned by a company in a particular company.
2. To assess the position of company profits in the previous year with the current year.
3. To assess the development of profits from time to time
4. To assess the amount of net income after tax with own capital.
5. To measure the productivity of all company funds used both loan capital and own capita; and
6. Other purposes.

Meanwhile, the benefits obtained are:

1. Knowing the level of profits obtained by the company in one period.
2. Knowing the position of company profits in the previous year with the current year.
3. Knowing the development of profits from time to time.
4. Know the amount of net income after tax with own capital.
5. Know the productivity of all company funds that are used both in loan capital and own capital; and
6. Other benefits.

Value of Firm

According to Keown (2000) company value is the market value of outstanding debt securities and company equity. According to Brigham and Houston (2006), company value is a value that can be determined from the distribution of results as company performance, company value seen from the maximization of shareholder wealth intended to maximize the company's stock price. Corporate value is also defined as market value because the value of a company

can provide maximum shareholder prosperity if the company's stock price increases. From that understanding, the value of the company is measured using stock prices. Company value shows the value of various assets owned by the company, including the securities issued. The value of the company going public in addition to showing the value of all assets is also reflected in the market value or price of its shares, so that the higher the stock price reflects the high value of the company. Stock prices can also be an indicator of management's success in managing company assets, while the value of public companies is determined by the stock market (Walsh, 2003). According to Brigham & Ghapenski (1994) in (Walsh, 2003) management should managing assets efficiently in an effort to improve financial performance and corporate value. One of the fundamental tasks of managers is to increase or maximize company value (value of the firm). The value of the company shows the value of various assets owned by the company, including the securities that have been issued.

Capital Structure and Firm Value.

In the 1950s Modigliani and Miller disputed the traditional view of capital structure. Their research results in a capital structure that does not affect company value. In the next study Modigliani and Miller included tax factors into their research, and it was concluded that the value of companies affected by debt ownership would be higher than the value of the company without debt ownership. They assume that the increase in company value is due to tax savings. Other research shows that there is a significant influence on the ownership structure and value of companies in Indonesia, Korea, Malaysia, and is not significant in Thailand (Driffield, Mahambare, and Pal 2007). Based on theoretical studies and the basic logic above, the first hypothesis in this study is:

H1: Capital structure affects the value of the company

Profitability and Firm Value

Maintain stability and increase profits can be seen as a positive signal by investors regarding a company's performance. This happens because companies that have increased profits reflect that the company has a good performance, giving rise to positive sentiments from investors, which can make the company's stock price increase (Azhar and Wijayanto 2016; Mediasi and Sedana 2015; Varaiya, Kerin, and Weeks 1987). Increasing stock prices on the market means that the value of the company increases in the eyes of investors. Based on the theoretical study above, the hypothesis in this study are:

H1: Profitability affects the value of the company.

Research Methodology

The type of research used is explanatory research. According to Singarimbun and Effendi (1995: 4) explanatory research is research that explains the causal relationship between research variables and testing hypotheses that have been formulated previously. The object of the research used in this study is companies listed in the LQ-45 index for the period 2012-2015. The use of this object is because the LQ-45 Index consists of selected stocks through various selection criteria, so that it will consist of stocks with high liquidity and market capitalization. The growth of the LQ-45 index in 2014 was recorded at 25%. Based on data from the Financial Services Authority (OJK) the LQ-45 index was at 886.58 points, equivalent to a 31.13% increase from 2013 in the same period. The capitalization value also increased to Rp. 3,292 trillion from Rp. 2,418 trillion in the same period.

Collection Method

The data used in this study is a survey sample. The method of collecting data with survey samples is done by collecting and analyzing information related to the problems raised in this study on the companies that are a part of the sample.

The population used in this study were 45 companies registered in the LQ45 index for the period of 2012-2016. While the samples are selected using a purposive sampling technique, that is, samples must meet predetermined criteria. The company that is the sample in this study was chosen based on certain criteria, namely (Hussain, Abidin, Ali & Kamarudin, 2018):

1. Companies that are consecutively registered in the LQ45 index for the 2012-2016 period
2. Consecutive companies have not suffered losses in the 2012-2016 period
3. Companies that provide complete financial data relating to research.

Based on the sampling process, there are 38 companies that meet the three criteria above. With the research period during 2012-2016, the number of observations was 190 samples (38 companies X 5 years).

Dependent variable (dependent) in this study is the value of the company. The value of the company is reflected in the price of its shares. Therefore, company value can be measured by Price to Book Value (PBV), which is a comparison between stock market prices and stock book values expressed in units of time. While the independent variable is the capital structure; capital structure can be measured using the Debt to Asset Ratio (DAR). This ratio is calculated by dividing total debt by total assets expressed in percentages. A high ratio shows that the greater the ratio, the greater the role of external funds to spend on assets and

the greater the risk of creditors. The other dependent variable in this study is profitability measured by using ROA (Return on Assets), which is a ratio that describes the company's ability to generate profits from assets owned. This study uses multiple linear regression tests (Ghozali, 2006).

Hypothesis testing is done with the following hypothesis:

To test Hypothesis 1, the statistical equation is used as follows:

$$PBV = \alpha + \beta_1 DER + e$$

To test Hypothesis 2, the statistical equation is used as follows:

$$PBV = \alpha + \beta_1 ROA + e$$

Result and Discussion

The classical assumption test used in this study includes the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. The normality test can be done by looking at the significance of Kolmogorov-Smirnov (K-S). From the data table above, the known significance value of 0.200 is greater than 0.05 which means that the data in this study is normally distributed. Using the multicollinearity test, it can be said that this research is free from multicollinearity, seen from the tolerance value > 0,10 and VIF < 10 from the table above. The tolerance value and VIF fulfil the criterion. The level of significance of these variables is above 5% or 0.05, therefore it can be concluded that the regression model is free from the assumption of heteroscedasticity. Symptoms of autocorrelation can be detected using the Durbin-Watson (DW) test. From the Durbin-Watson (DW) test it is known that the value of 1,590 with the criterion of DW value between -2 and 2. This means there is no autocorrelation (see table 2).

Table 2: Classic Assumption Test

	Test Normality		Test Multikolinierity		Uji Heteroskedastisity	Uji Autokorelasi
	Z	P	Tolerance	VIF	Sig	DW
Unstandardized Residual	0,093	0,20				1,590
DER			.935	1.069	0,190	
ROA			.935	1.069	0,001	
Durbin-Watson						

Table 3: Summary of Parameter Model Estimation Results Y

Model	R	R ² (Adjusted R ²)	B	SE	β	t
Model 1	.780	.604				
Constan			-3.171	.662		-4.790
ROA			.665***	.039	.805***	17.019
DER			.451***	.137	.156***	3.305

*** Significance at the 0.01 level; ** Significance at the 0.05 level; * Significance at the 0.1 level

Based on table 3 analysis of determination coefficient obtained an adjusted R Square value amounting to 0.604, which means that Firm Value will be influenced by independent variables at a rate of 60.4%. While the rest is influenced by other variables that are not included into this study. That the regression model built has met the fit model criteria that the F-statistic probability value is 0.000 (less than 0.05), so the regression model can be used to predict the dependent variable that is Firm Value. Based on table 3, when associated with the hypothesis test that the authors propose to have the meaning as follows:

1. Debt to Equity Ratio variable shows significant effect on Firm Value. This is indicated by the significance value of $0.00 > 0.05$, then H_0 is rejected. So it can be concluded that CSR partially has an effect on Firm Value.
2. Return on Asset variables shows significant effect on Firm Value. This is indicated by the significance value of $0.001 < 0.05$, then H_0 is rejected. So it can be concluded that Return on Asset partially affects the return Firm Value.

Discussion

Profitability has an influence on the value of the company. This means that if the value of profitability rises or increases, the value of the company also increases. A higher value of profitability indicates that the income received by the company is also getting higher. With high profitability, it can be said that the company's ability to generate profits is also good. This will increase investor confidence or attract investors to increase stock demand. Increasing demand for shares will cause the share price to increase, increasing the value of the company. In line with the results of research conducted by researchers (Kodongo, Mokoaleli-Mokoteli, and Maina 2014; Naceur and Goaid 2010; Varaiya and Kerin 1987), profitability affects the value of the company. Besides profitability, the results of this study show that capital structure also affects the value of a company. Where companies have more debt than their own capital, investors can be discouraged to invest, because investors assume

that debt ownership greater than their own capital has the obligation to pay high interest and raises concerns that the company will have difficulty in fulfilling the interest obligations. Conversely, if the proportion of debt held by the company is smaller than the equity of the investors, the investors assume that the company is prevented from the obligation of high interest. These results reinforce the research conducted by several previous studies which stated that capital structure affects the value of the company (Chen and Chen 2011; Khoirunnisa, et al., 2018; Ruan and Tian 2011; Welch 2004).

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