# EFFECT OF CAPITAL STRUCTURE ON RETURN ON EQUITY: A SURVEY ON ISSUERS OF CATEGORIES JII70 OF THE INDONESIA STOCK EXCHANGE

#### Badruzaman Jajang

Department of Accounting, Faculty of Economics, Universitiy of Siliwangi, Indonesia Email: <u>jajang.badruzaman@unsil.ac.id</u>

# ABSTRACT

The research conducted in this study is the effect of the capital structure on return on equity, the survey was conducted on issuers in the JII70 with a sample of 32 issuers. The data taken are financial report data for 2016 and 2017. Based on the results of data processing with the SPSS version 25, it shows that the capital structure has a positive and significant effect on return on equity. This positive influence shows that effective use of debt will have an impact on return on equity increasing. But this increase in capital structure is a result of debt expansion. Therefore debt needs to be controlled and evaluated so that its use is effective which will ultimately have an impact on return on equity.

#### **KEY WORDS**

Capital structure, return on equity, financial report, survey, business.

Business risk is a very important indicator in determining the optimal capital structure. The business risk of each company will be different, this depends on the type of industry, thus the capital structure will vary greatly.

One of the important decisions faced by financial managers in relation to company operations is the decision on Capital Structure, namely financial decisions relating to the composition of debt, prefer shares and ordinary shares that must be used by the company.

Decision Capital Structure taken by the manager, not only affects the profitability of the company but also affects the risks faced by the company, because the capital structure contains the cost of debt and the cost of equity as a burden or risk for a company.

Capital Structure is a funding choice between debt and equity. Determination of the right capital structure will determine the success of a company in achieving its objectives. Determination of the size of capital requires the right solution so that available funds can maintain the continuity of the company.

Based on this background the researcher is interested in examining the effect of capital structure on return on equity, a survey of issuers in the category JII70.

## LITERATURE REVIEW

Debt and capital are sources of corporate financing in carrying out company activities. The funding source is used by companies to purchase assets both current assets and fixed assets. In financing current assets, the source used comes from short-term debt, while financing for fixed assets comes from long-term debt and equity. The sources of financing both debt and equity require costs, because the source of financing must be used effectively and efficiently to produce maximum returns.

Various methods used to analyze the success of the company related to the effectiveness of the use of financing sources, one of which is return on equity, which measures the level of profits associated with invested capital or equity. *Return On Equity* (ROE) is a ratio to measure net income after tax with own. *Return On Equity* is a measurement of income (*income*) that is available to the owners of the company (both ordinary shareholders and preferred shares) for the capital they invest into the company.

In general, the higher the *return* or return obtained, the better the value of the company and vice versa if the *return* or return obtained is low then the worse the value of the company. Thus ROE will determine the value of the company. Then the formula used to measure the performance is *Return On Equity* (ROE) = Net profit after taxes / Shareholders' equity (Van Horne, James C., John M. Wachowicz, Jr. 2008) or ROE = Net Income / Average Total Stockholders' Equity (Wiliams, Susan F, Bettner and Carcello, 2008).

The capital invested in the company is made the basis for measuring the level of success of the company in carrying out its activities. However, in carrying out the activities of the company the funds used are not only sourced from equity but from debt, both short-term debt and long-term debt. Therefore it is necessary to analyze the proportion of debt used in the company; the results of the analysis will reflect the effectiveness of the use of debt. If debt is used effectively, it will support the success of the company, but if the debt is not used effectively, it becomes a burden on the company which ultimately impacts on the company's performance. The proportion of debt with equity is known as the capital structure or capital structure.

The mixture of debt and equity, a business use, is called its *capital structure* (Libby, Robert, Patricia A. Libby, Daniel G. Short. 2011). Capital structure is a mixture of a firm's long-term debt, short-term debt, common equity and preferred equity. When analysts refer to capital structure, they are most likely to refer to a firm's debt-to-equity (D/E) ratio, the Debt-to-Equity Ratio as a Measure of Capital Structure (https://www.investopedia.com/terms/c/ capitalstructure.asp).

With a combination of debt and capital as a source of assets and operational financing, it is expected to provide maximum benefits, because in the source of funds contained costs, both the cost of debt and the cost of equity. Thus, with these assets must generate maximum income to finance debt in the form of interest to the debtor and dividends that must be given to investors. The two sources of financing are described in the chart as follows (Gapenski, Louis C, 2005):



Figure 1 – Trade-Off Theory of Capital Structure

In figure 1 above, shows what is most relevant to the financing decision not only the cost of debt or just the cost of equity but the weighted average cost (combination) of the two components. Weighted average costs are displayed on the chart as dashed lines labeled "average capital costs." At zero debt (Y axis), the company is financed by all equity, so the average cost of capital is only the cost of its equity. When a business first starts using debt financing, it adds a lower cost component to its capital structure, and therefore the average cost of financing decreases. However, when the proportion of debt financing increases, both the cost of equity and the cost of debt increase, and at an increasing rate. At some point, increased component costs outweigh the fact that more low-cost debt components are being used, and the average cost of capital outflows. Beyond this point, the cost of average capital starts to increase.

There are four factors that influence decision making Structure capital (Housten and Brigham; 2010): business risk; the firm's tax position; financial flexibility; managerial conservatism or aggressiveness.

#### METHODS OF RESEARCH

The method used in this research is descriptive analysis. Then the variables studied consisted of capital structure as an independent variable and dividend payout ratio as a dependent variable.

The population in this study was all issuers include the category JII70 Index in Indonesia Stock Exchange which consists of 70 listed companies into the *list* JII70 Index constituents per 28 November 2018. Then the sample of this research is the issuer who met the study criteria as the following:

1. Issuers who distribute dividends in 2016 and 2017.

2. Reporting the Long Term at the end of 2016 and 2017.

Based on the criteria set, out of 70 issuers obtained 34 issuers who meet the criteria set by the researcher consisting of:

No	Code	Emitter	No	Code	Emitter
1	LPPF	Matahari Dept Store Tbk	17	KLBF	Kalbe Farma TBk
2	LSIP	PP London Sumatra Indonesia Tbk	18	KAEF	Kimia Farma Tbk
3	MAPI	Mitra Adiperkasa Tbk	19	JSMR	Jasa Marga (Persero)Tbk
4	MNCN	Media Nusantara Citra Tbk	20	ITMG	Indo Tambangraya Megah Tbk
5	MYOR	Mayora Indah Tbk	21	ISAT	Indosat Tbk
6	PGAS	Perusahaan Gas Negara Tbk	22	INTP	Indocement Tunggal Prakars TBk
7	PTBA	Bukit Asam Tbk	23	INDF	Indofood Sukses Makmur Tbk
8	RALS	Ramayana Lestari Sentosa Tbk	24	ICBP	Indofood CBP Makmur Tbk
9	SCMA	Surya Citra Media Tbk	25	AALI	Astra Agro Lestari Tbk
10	SIDO	Industi Jamu danFarmasi Sido Muncul Tbk	26	ACES	Ace Hardware Indoenesia Tbk
11	SIMP	Salim Ivomas Pratama Tbk	27	ADRO	Adero Energy Tbk
12	SMBR	Semen Baturaja (Persero ) Tbk	28	AKRA	AKR Corporindo Tbk
13	UNTR	United Tractors Tbk	29	AUTO	Astra Otoparts Tbk
14	UNVR	Unilever Indonesia Tbk	30	ASII	Astra International Tbk
15	WTON	Wijaya Karya Beton Tbk	31	BMTR	Global Mediacom Tbk
16	LINK	Link Net Tbk	32	ELSA	Elnusa Tbk

Table 1 – Research Subject

Source: IDX Indonesia 2018.

To test used analysis, the authors performed a correlational test to determine whether there are influences and extent of their influence on structure of capital return on return on equity.

To see how far the Traffic models in explaining variations in the dependent variable. The correlation coefficient is between zero and one. The  $R^2$  means the variables are dependent and explained very limited. A value that is close to independent variables is needed to predict the dependent variables. In general, the cross section is relatively low, while for the data period (Time Series) and time section, usually has a high coefficient determination.

Hypothesis is a temporary solution to the research problem; therefore the formulation of research problems is usually arranged in the form of a question sentence. Testing hypotheses to be done with the author with the following:

Ho1:  $\rho = 0$  Capital structure does not affect Return on Equity;

Ha1: p≠0 Capital structure affects Return on Equity.

The trust level used in this study was 95% with a 5% significance level ( $\alpha = 0.05$ ). It is often used in social science which shows the real two variables correlation.

## **RESULTS AND DISCUSSION**

Based on the recapitulation of data collected by researchers on the variables of capital structure and return on equity in 2016 and 2017, then the processing is carried out using the SPSS Version 25 program, the results of which are described in table 2 as follows:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
wouer					R Square Change	F Change	df1	df2	Sig. F Change
1	,425 <sup>ª</sup>	,181	,168	,2405856	,181	13,678	1	62	,000
a. Prec	lictors	(Constant	), Capital Structure						

The effect of capital structure on Return on Equity is 0.181 or 18.1% is significant where F is calculated < Ftable is 0.00 < 0.05 while the influence of other factors on ROE is 0.819 or with an epsilon coefficient of 0.905. The influence of other factors that affect ROE outside the capital structure is very large; it is possible to influence the management competencies for managing assets.

Then the regression equation from the results of processing the data can be described in table 3 as follows:

	Model	Unstandardized Coefficients		Standardized Coefficients	т	Sig	Correlations		
		В	Std. Error	Beta	1	Sig.	Zero-order	Partial	Part
4	(Constant)	,066	,048		1,379	,173			
ľ	CS	,156	,042	,425	3,698	,000	,425	,425	,425
a. Dependent Variable: Return On Equity									

Table 3 – Coefficients

Model		Sum of Squares	Df	Mean Square	F	Sig.			
	Regression	,792	1	,792	13,678	,000 <sup>b</sup>			
1	Residual	3,589	62	,058					
	Total	4,380	63						
a. Dependent Variable: Return On Equity									
b. Predictors: (Constant), Capital Structure									

# Table 4 – ANOVA<sup>a</sup>

Based on table 3 above, the regression equation that can be made is Y = 0.066 + 0.156X and based on Table 4 the regression equation shows significant meaning that the equation is feasible to use. The regression equation shows a positive slope of the mean shows if there is an increase in the capital structure then has an impact on the Return on Equity but this positive effect shows that the use of debt is actually used effectively. This is in accordance with the results of the study Khalid Ashraf CHISTI,Khursheed ALI, Mouh-i-Din SANGMI (2013) Elisabeth Mueller (2002, Abeywardhana, DKY (2015), Abor, Joshua (2005). But it is different from the results of research conducted by Anas Ali Al-Qudah. (2017), Mahfuzah Salim (2012), Mohamed Khalifa M. Tailab (2014), T. Velnampy. & J. Aloy Niresh (2012), that structure capital has a negative relationship with profitability with the ROE indicator.

#### CONCLUSION

Based on the results of the 2016 and 2017 financial statement data processing on JII70 companies with a sample of 32 issuers, capital structure has a positive effect on return on equity, meaning that if the capital structure increases, the return on equity will increase, but this capital structure increase there is a limit because the increase in capital structure is due to an increase in debt. Therefore companies must be able to determine the optimal limit of capital structure; this is illustrated by Gapenski, Louis C, (2005: 395).

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