

# Study of Capital Structure (IDX 2011-2017): Firm Growth, Firm Size, and CSR Disclosure on Firm Value

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**Abstract**— This research was conducted to analyze the effect of firm growth, firm size, CSR disclosure on firm value with capital structure as an intervening variable. From a population of 18 companies, 12 companies were sampled in this study, using purposive sampling. Data analysis techniques using path analysis. The research results obtained are, firm growth and firm size have no significant effect on capital structure partially. While CSR disclosure partially has a significant effect on capital structure. Simultaneously firm growth, firm size, and CSR disclosure have no effect on capital structure. Firm growth, firm size, and CSR disclosure variables have no significant effect on firm value partially. While capital structure has a significant effect on firm value. Simultaneously, firm growth, firm size, and CSR disclosure have a significant effect on firm value with capital structure as an intervening variable.

**Keywords**— Firm growth, firm size, CSR disclosure, capital structure, firm value.

## I. INTRODUCTION

The magnitude of the allocation of the provision of funds and access associated with efforts to obtain funds to the source of funds, is a matter that affects the development and survival of a company, in the era of competition in the business world which is now increasingly competitive. The capital market can be a provider of external funds for the company. Investors can compete fairly in the capital market, in an effort to get the right information and is needed in relation to invest in a company.

Every investor certainly needs all the important information needed to assess the ability and performance of the company in carrying out its business activities. One source of information that can be obtained and can be used as a basis for making decisions in investment, is financial statements (Usman, 2017). Firm value is defined as the price that investors are willing to pay if the company is to be released or sold (Junita, 2014). The amount of assets owned by a company in the capital market can reflect the value of the company. The value of a company's shares can indicate the value of the firm. The firm value is said to be good, if it is shown by the high value of the shares of the company (Mandasari, 2013).

The company value of each stock is different in size, the difference is caused by various factors that can influence it. In this study, researchers will conduct an analysis related to firm value that is influenced by firm growth, firm size, and CSR

disclosure, through intervening variable of capital structure. Researchers take the object of research in manufacturing companies based on the following backgrounds:

1. Manufacturing companies are more attractive for investors to invest their shares because manufacturing companies are quite large companies generally
2. The type of business in manufacturing companies has developed quite rapidly
3. Manufacturing companies that listed on the IDX, consisting of various industrial sub-sector that can describe the global capital markets response (Iswantoro, 2014).

## II. LITERATURE REVIEW AND HYPOTHESIS

### Firm Value

Firm value describes the results of the performance of one company, which can influence the perception of investors towards the company. The value of a company can be formed through the market value indicator of its shares, which is strongly influenced by the presence of various investment opportunities. If a company is to be sold, the value of a company is determined by a number of prices that are willing to be paid by the prospective buyer (Sari, 2017).

Firm value in addition to reflecting the performance results that have been achieved by the company, can also show how the company's prospects in the future. High firm value can make the market have confidence in the company's current performance and in the prospects of the company. The formula used to determine the amount of firm value is by Tobin's Q as follows (Wardoyo, 2013).

$$Q = \frac{(\text{Equity Market Value} + \text{Debt})}{(\text{Equity Book Value} + \text{Debt})}$$

Description:

Q = Firm value

EMV = Equity market value (closing price x number of shares outstanding)

D = The book value of total debt

EBV = The book value of total equity

### Agency Theory

The agency concept is a contract related to the agent hired by the principal to contribute to the interests of the principal, by giving authority in terms of decision making. The delegation of authority will encourage the agent to carry out

strategies that can benefit the agent, which can trigger a conflict of interest.

Conflicts that occur in agency relationships, due to differences in objectives between agent and principal. The existence of differences in objectives and also the separation between owners and managers of the company, causing agents to act according to their own will, without paying attention to the interests of the principal (Sofiamira, 2017).

*Signal Theory*

Signaling theory suggests things related to the ways in which the company, in giving signals to users of financial statements (Sofiamira, 2017). The financial statements that are used as signs/ signals by the company, must be able to provide information needed for investors and creditors, in an effort related to decision making.

The information contained in the financial statements reported by management to the company is intended to maintain investor interest, so that they continue to invest their funds in the company. In addition, the information conveyed by management is intended in an effort to reduce information asymmetry between the company and external parties (Moeljadi, 2014).

*Firm Growth*

Firm growth can provide positive aspects that are highly desired by the parties involved in the company, both for internal and external parties of the company. Growth can be shown by changes in both the decline and increase in the company's total assets. The level of growth/growth of the company can indicate a company's development or not.

Firm growth shows the company's efforts whether it is able to maintain its position among economic growth, especially in similar business sectors (Suwardika, 2017) [9]. To measure the company's growth rate, namely by calculating the difference in the total assets of the company in the current period, compared to the previous period, to the amount/total assets of the previous period. The growth formula can be displayed as follows (Nadillah, 2017).

$$\text{Firm Growth} = \frac{\text{Total Asset } t - \text{Total Asset } t-1}{\text{Total Asset } t-1} \times 100\%$$

Description:

- t = the current year
- t-1 = previous year

*Firm Size*

Size of the company in a study, can be shown by calculating the amount of assets in one company. The size of the company's assets also shows the rights, obligations and capital owned by the company. Large companies, usually have a strong financial level and large to support their performance, on the contrary will be able to cause agency problems that are relatively greater as well (Pratiwi, 2016).

The size of the company is considered capable of being able to influence the value of the company. If the size of the company gets bigger, it will usually make it easier for the company to get funding sources from both internal and external sides (Dewi, 2013). Related to the method used to

simplify a very large nominal, from the existing nominal numbers on assets, total sales, and company capitalization figures, natural logarithms or abbreviated as Ln are used. The formula used in calculating the size, namely using the logarithm of natural total assets (Gultom, 2013).

$$\text{Size} = \text{Ln} (\text{Total Assets})$$

*CSR Disclosure*

Orientation related to corporate social responsibility, not only centered on the manager or agent and owner or principal, but the company also requires recognition of the existence that comes from the environment around the company. One company's social responsibility is various things/efforts carried out by the company aimed at integrating its concern for the surrounding environment.

Regarding the disclosure of CSR, companies whose business operations relate to the use of natural resources are required to make disclosures. This is contained in law number 40 of 2007, concerning limited liability companies, namely in article 66 paragraph 2 section C and article 74 paragraph 1. To determine the CSR disclosure index numbers, namely by using the formula (Gunawan, 2008).

$$\text{CSR}_{ij} = \frac{\sum X_{ij}}{n_j}$$

Description:

- CSR<sub>ij</sub> = j company's CSR disclosure index
- X<sub>ij</sub> = Number of disclosure scores obtained by the company j
- Dummy variable 1, if an item is disclosed
- Dummy variable 0, if the item is not disclosed
- n<sub>j</sub> = Maximum number of disclosure scores (78).

*Legitimacy Theory*

Legitimacy is a theory related to a series of activities carried out by companies, where these activities do not violate the existence of norms that apply in society (Purwanto, 2011) [15]. If a match has been made between the existence of the company and the norm system that exists in society and the environment, then legitimacy will be obtained.

Community legitimacy becomes a strategic factor in the effort to develop a company for the long term for a company. Legitimacy is a management system within a company, which provides a partisanship orientation towards the community. Legitimacy efforts by companies, in an effort to enhance their reputation, to obtain positive values from the community, can be done one of them through corporate social responsibility efforts (Saraswati, 2012).

*Capital Structure*

Capital structure is a reflection of a form of corporate financial proportion, namely between capital originating from loans / debts, both long-term and also from own capital, as a source of corporate funding (Fahmi, 2015: 179). The funding policy adopted by the company, in determining capital structure, is aimed at making company value more optimal. Good and bad things related to capital structure, will be able to have an impact on the value of a company.

To calculate the value of capital structure, it is done by comparing the total debt with the total assets owned by the company (debt to asset ratio/DAR). The greater the value of DAR, illustrates the composition of the total debt that is also greater, so that it can make the burden borne by the company will be even greater for outsiders. The formula used for DAR (Fahmi, 2015: 128) [17] is:

$$\text{Debt to Asset Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

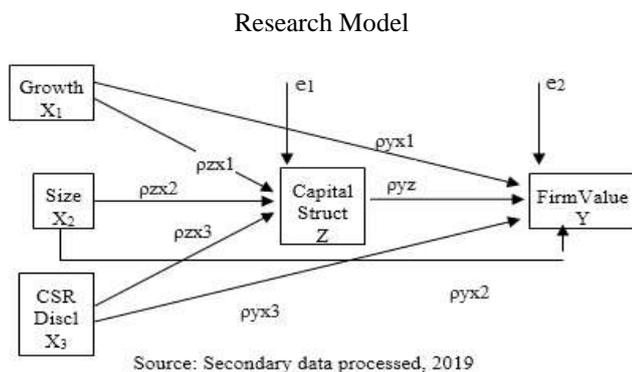
**Stakeholder Theory**

Stakeholder is a system that is based explicitly on a review of an engagement between the company and its environment, which recognizes the nature of mutual influence between the two parties, which is complex and dynamic. Stakeholders and companies influence each other, which is reflected in social relations between the two parties, in the form of a relationship of responsibility and accountability (Putri, 2016).

Stakeholders' interests should be considered by the company, because stakeholders are parties who can exert direct and indirect influence on the activities and policies that will be decided/implemented by the company. Based on the basic assumptions that exist in stakeholder theory, which states that the company can not be separated / will always be related to the surrounding social environment (Rindawati, 2015).

**Conceptual Framework**

The relationship between all variables in this study, namely growth, size, CSR disclosure, capital structure, and firm value, which has been presented can be shown in the conceptual framework below:



**Description:**

- X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub> -----> independent variable
- Z -----> intervening variable
- Y -----> dependent variable
- e -----> error standard

**Hypothesis**

Hypotheses are conjectures that are assumed to be true for a time and must be verified. Based on the problems that have been formulated, the hypotheses in this study are:

1. Firm growth, firm size, and CSR disclosure have a significant effect on capital structure.

2. Firm growth, firm size, and CSR disclosure have a significant effect on firm value.
3. Capital structure has a significant effect on firm value.
4. Firm growth, firm size, and CSR disclosure have a significant effect on firm value with capital structure as an intervening variable.

**III. METHODOLOGY**

This type of research is a quantitative descriptive study. This study uses quantitative data, with secondary data sources from annual reports on food and beverage sub-sector manufacturing companies listed on the Indonesian Stock Exchange for the period 2011-2017, obtained by documentation techniques.

**Population and Sample**

Population is all collection of elements that can reflect special characteristics, which can be used to draw a conclusion (Sanusi, 2016: 87). The population used in this study is 18 manufacturing companies from the food and beverage sub-sector on the Indonesian Stock Exchange in the period 2011-2017. Samples are part of selected population elements (Sanusi, 2016: 87). Whereas the samples used were 12 companies obtained using the purposive sampling method.

**Data Analysis Technique**

The hypothesis testing process needs to be carried out at the stage of data analysis, in an effort to obtain evidence regarding the influence of the independent variables being studied can significantly affect the dependent variable. Hypothesis testing is carried out to find out whether there is a significant influence, between independent variables on dependent variable. Data analysis techniques used in this study include:

1. Classical assumption test (include test for normality, autocorrelation, multicollinearity, and heteroscedasticity).
2. Path Analysis, is a method that examines the direct and indirect effects of various variables in a study (Widarjono, 2015: 212).

**IV. RESULTS AND DISCUSSIONS**

**Results**

The elaboration related to the results of research on the analysis of the effect of firm growth, firm size, and CSR disclosure on firm value with capital structure as an intervening variable, will be elaborated from the retrieval of data obtained from annual reports of 12 manufacturing companies from the food and beverage sub-sectors, which are the sources of their research. After that, an analysis will be conducted which is adjusted to the formulation of the problem and hypothesis, which have been mentioned in the previous section.

In this study there are 2 (two) structural equations, namely:

- (1)  $Z = \rho_{zx1}X_1 + \rho_{zx2}X_2 + \rho_{zx3}X_3 + e_1$
- (2)  $Y = \rho_{yx1}X_1 + \rho_{yx2}X_2 + \rho_{yx3}X_3 + \rho_{yz}Z + e_2$

In this study, the data used in the analysis process include: total assets, items of corporate social responsibility disclosure, total debt, total equity, closing stock prices, and also total

outstanding shares, obtained from annual reports manufacturing companies form food and beverage sub-sectors which are listed in Indonesian Stock Exchange in 2011-2017.

*Classic assumption test results*

The classic assumption test is done with the intention to be able to obtain the accuracy of the data, get an unbiased estimator value and can be more efficient. The results of the classic assumptions made for structural 1 and structural 2, show the results that the data used in this study are normally distributed, free from autocorrelation, multicollinearity, and heteroscedasticity.

*Path analysis results*

Data processing used SPSS program, with multiple linear regression tests for the path diagram, obtained the following results:

**Independent variables on intervening variables test results**

Variables	Coefficient Regression	t <sub>count</sub>	Sig t	Description
Firm Growth (X <sub>1</sub> )	0,074	0,685	0,495	Not significant
Firm Size (X <sub>2</sub> )	0,215	1,585	0,117	Not significant
CSR Disclosure (X <sub>3</sub> )	-0,302	2,221	0,029	Significant
t <sub>table</sub>	1,991			
Constanta	0,268			
R	0,249			
R Square	0,062			
F <sub>count</sub>	1,765			
F <sub>table</sub>	2,720			
Sig F	0,161			Not significant
N	84			
Capital Structure (Z)	Dependent variable			

Source: Secondary data processed, 2019

The results of data processing for structural 1 in table above, show that, between firm growth and firm size on capital structure, there is no significant effect. As for CSR disclosure on capital structure, there is a significant influence. These results are not in accordance with the statement of the first hypothesis which states that firm growth, firm size and CSR disclosure have a significant effect on capital structure. Thus the statement on hypothesis 1 is rejected.

Results of data processing for structure 2 for the influence of independent variables on the dependent variable through intervening variables can be seen in the following table 2.

The results of data processing from structural 2 in table below, show that firm growth, firm size, and CSR disclosure do not have a significant effect on firm value. With reference to these results, the statement on the second hypothesis which states that, firm growth, firm size, and CSR disclosure have a significant effect on firm value is rejected. As for the effect of variable capital structure on firm value, the results have a significant effect. Thus, the statement on the third hypothesis

is accepted. For the results of the effect of firm growth, firm size, and CSR disclosure variables on firm value with capital structure as an intervening variable, significant results are obtained. These results indicate that the statement on the fourth hypothesis is accepted.

**The results of independent variable test on dependent variable through intervening variable**

Variables	Coefficient Regression	t <sub>count</sub>	Sig t	Description
Firm Growth (X <sub>1</sub> )	0,119	1,252	0,214	Not significant
Firm Size (X <sub>2</sub> )	-0,002	0,015	0,988	Not significant
CSR Disclosure (X <sub>3</sub> )	0,113	0,926	0,357	Not significant
Capital Structure (Z)	-0,502	5,137	0,000	Significant
t <sub>table</sub>	1,991			
Constanta	4,039			
R	0,541			
R Square	0,292			
F <sub>count</sub>	8,160			
F <sub>table</sub>	2,487			
Sig F	0,000			Significant
N	84			
Firm Value (Y)	Dependent variable			

Source: Secondary data processed, 2019

*Discussion*

1. Effect of firm growth, firm size, and CSR disclosure on capital structure

The results obtained indicate that partially, the effect of firm growth and firm size variables is not significant to the capital structure variable. For CSR disclosure variable significantly influence the capital structure variable. These results mean that, whether or not the growth of the company, whether large or small the size of the company under study, does not have any effect on the determination of capital structure policies in the company. Conversely, for CSR disclosure variables, the more number of points disclosed and implemented by the company, will form a good image of the public, especially the investors. Simultaneously, the three independent variables do not significantly influence the capital structure variable.

2. The effect of firm growth, firm size, and CSR disclosure on firm value

The results of partial and simultaneous regression of the influence between independent variables firm growth, firm size, and CSR disclosure on firm value, the result is that there is no significant effect. The results of the study give the meaning that, although the company has a good growth rate, for companies that are small or large scale, which have carried out various activities related to social responsibility in the environmental, social, and business activities related to the benefit of the community in around the company, it turns out these efforts have not been able to form a good image that has an impact on increasing the value of the company itself. The management has a big responsibility, rather it can increase the value of a good

company, so that it can attract investors to invest with the company.

3. Effect of capital structure on firm value

The effect of capital structure on firm value in this study, from the results of the regression tests that have been carried out, the result is a significant negative effect. These results can be interpreted that, the capital structure funded by the company itself can directly lead to increasing company value. The company's ability to finance its own capital needs, making more appraisal for outsiders who in this case are investors. At a certain level the application of debt use policies can increase / add value to the company. The company management does not need too much funding from outside parties, because it can still finance its own main needs related to its main activities.

4. The effect of firm growth, firm size, CSR disclosure on firm value with capital structure as an intervening variable

Simultaneously, firm growth, firm size, and CSR disclosure have a significant effect on firm value with capital structure as an intervening variable. To find out the magnitude of the effect of capital structure as an intervening variable in mediating the effect of the independent variables consisting of firm growth, firm size, and CSR disclosure on the dependent variable firm value, it is necessary to calculate the value of the indirect effect and the total value of all these variables. The amount of direct influence, indirect effect, and the total effect can be seen in the following table:

**Direct effect, indirect effect, and total variable effect**

Research Variables	Capital Structure		Firm Value		Results
	DE 1	DE 2	IE	TE	
Firm Growth	0,074	0,119	-0,037	0,082	IE<DE
Firm Size	0,215	-0,002	-0,108	-0,110	IE<DE
CSR Disclosure	-0,302	0,113	0,152	0,265	IE>DE
Capital Structure		-0,502			

Source: Secondary data processed, 2019

Description:

- DE = Direct Effect
- IE = Indirect Effect
- TE = Total Effect

The results of the indirect effect between firm growth, firm size, and CSR disclosure to firm value through the intervening capital structure variable, are smaller than the direct effect. This means that, capital structure as an intervening variable cannot mediate the effect of CSR disclosure on firm value. So it can be stated that the capital structure variable cannot mediate the effect between independent variables firm growth, firm size and CSR disclosure on firm value.

V. CONCLUSIONS AND SUGGESTIONS

Conclusions

Referring to the results of research and discussion in the previous section, researchers can conclude that, partially only CSR disclosure variables are significant to the capital structure

variable in structural 1, while the capital structure variable also significantly influences the firm value variable in structural 2. The capital structure variable as an intervening variable, cannot mediate the effect of firm growth, firm size, CSR disclosure on firm value.

Suggestions

The suggestions that researchers can put forward based on the results of research that has been done is that, the management can make various decisions in investing and obtain an overview related to investment opportunities that refer to the results of this research. In addition, the results of research that have been done, can provide benefits in the development effort in a study, so that the results can be more generalized. By conducting research in different sub-sectors, expanding the time span of research carried out, and using other research variables, it is hoped that it can increase the value of the accuracy of research results to be obtained.

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