# Capital Structure Analysis, Business Risk And Asset Structure Of Companies Value In Manufacturing Companies Listed On Indonesian Stock Exchange

by Sriyono Sriyono



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### Abstract:

The purpose of this study is to know and analyze whether there are pengarauh between capital structure, business risk and asset structure to the value of companies listed on the Stock Exchange in 2011-2015. The sample used are 7 manufacturing companies of miscellaneous industry sector with textile and garment sub-sector period 2011-2015 with purposive sampling method. This type of research uses quantitative analysis method. The analytical technique used is descriptive statistical analysis. The hepotesis test uses classical assumption test, multiple linear regression and model feasibility test. The results of this study indicate that the capital structure, business risk and asset structure simultaneously significantly influence the value of the company with a significant value of 0.006. The result of partial research of capital structure has significant influence to firm value while business risk and asset structure have no influence to company value.

Keywords: modal structure, business risk, assets structure and corporate value..

# I. INTRODUCTION

Today's basic needs of society actually develop into complementary needs that are felt to be changing very rapidly, those needs are clothing (clothing). Being a complementary need that is rapidly changing rapidly because fashion is subject to change. Where these changes require people involved in the textile industry to compete tightly to increase the value of the company. Company value is very important for a company to reflect the wealth of a company. In addition, the value of the company is always considered by investors as material for investment decisions.

The value of the company is important for companies with high company value, the prosperity of the owner of the company is also high, the value is reflected in the stock price, if the higher the stock price, the higher the company's value is what the

company owner or shareholder wants (Brigham, 2013). Several factors affect company value, namely capital structure, business risk and asset structure. According to (Nia RositawatiFau, 2015) (Sriyono, 2019) in the capital structure the use of debt is considered as a source of funding has its own advantages and disadvantages. The advantage of using debt obtained from taxes is debt interest in lieu of high tax reductions and management discipline in managers paying debt obligations, while losses using debt are related to agency costs and bankruptcy costs resulting from using too much debt.

Excessive use of debt will also pose business risks. If there is a high-risk business financing decision, the value of the company will fall in the eyes of investors in the event of bankruptcy. So that requires a lot of company assets to be sold to pay off the amount greater than the return on the value of the shares that are invested in the company (Brigham,



2013). The asset structure is a reflection of a portion of the total assets that can be used as collateral. According to Brigham (2013), said that in general every company has assets as collateral for debt so that younger companies get debt from companies that do not have assets that are collateral. So companies that easily obtain funding sources so that it can affect the increasing value of the company (Westan, 1999)(Fitriana, 2019).

Value of the company (Y1) is the value of the company is the price that is willing to be paid by prospective buyers if the company is sold (Husnan, 2000: 7). The measurement scale used by the company value variable is Price To Book Value (PBV) because it is more effective and consistent for all companies and PBV can be used for comparison between the same companies as a guide to the existence of under or overvaluation. (Weston and Brigham, 2005: 306) where the market price uses annual closing prices, (PBV) can be calculated with the following formula:

$$PBV = \frac{STOCK MARKET PRICE}{STOCK BOOK VALUE}$$

Capital structure (X1) is a comparison or balance between long-term debt with own capital. according to Riyanto (2001: 22) the ratio uses Debt Equity Ratio which is a ratio that measures the ability of companies to meet obligations with their own capital with the following equation:

Dept Equity Ratio (DER) = 
$$\frac{\text{TOTAL AMOUN OF DEBT}}{\text{OWNER 'S EQUITY}}$$

Business risk (X2) is considered as an adverse or unfavorable event that may occur in the future (Yuliani, 2010). risk is measured using Degree Operating Leverage (DOL) with the formula:

$$DOL = \frac{\sigma EBIT}{\sigma SALES}$$

The standard deviation formula ( $\sigma$ ) is obtained from (Suharyadi (2013: 54):

$$S = \sqrt{\frac{\sum (X - \overline{X})^2}{n - 1}}$$

Explanation:

s = Standard deviation

n = Total amount of data / observations in the sample

X= The value of each data / observation in the sample

 $\overline{X}$  = The average value calculated in the sample

 $\Sigma = Amount$ 

Asset structure (X3) is an asset or economic resources owned by a company to be utilized in the future, in the asset structure consists of several types of assets including fixed assets, intangible assets, current assets, and non-current assets (FithYuniarIchwan&DiniWidyawati, 2015: 5). The structure of assets uses the formula:

Asset structure = 
$$\frac{\text{FIXED ASSETS}}{\text{TOTAL ASSETS}}$$

H1: Capital structure affacts the value of the company in Manufacturing companies listed on the Indonesia Stock Exchange.

H2: Business risk affects the value of the company in manufacturing companies listed on the Indonesia Stock Exchange

H3: Asset Structure affects the value of the company in Manufacturing companies listed on the Indonesia Stock Exchange.

# II. METHOD

This study uses a quantitative approach. This study takes object in the IDX companies of various textile and garment sub-sector industries as well as all data about the company's financial statements in 2011 -20015. The population of this study is 17 companies, but there are 10 companies whose financial reports are incomplete. Then the remaining 7 companies are PT EratexDjajaTbk (ERTX), PT Ever Shine Tex bk (ESTI), PT Indo-Rama Synthetics Tbk (INDR), PT Pan Brothers Tbk (PBRX), PT Ricky Putra (RICY), PT Sunson Textile GlobalindoTbk Manufacturer Tbk (SSTM), PT Nusantara Inti Corpora Tbk (UNIT). The sample selection is done based on the purposive sampling method with the aim of getting samples that are in accordance with the research objectives



## III. RESULT

Descriptive Statistical Analysis

Table 1 Descriptive Statistics Analysis Results

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
X1_DER	35	.270	3.365	1.44720	.678871
X2_DOL	35	.003	.625	.07777	.110372
X3_SA	35	.208	2.767	.59920	.520870
Y_PBV	35	.081	3.365	1.10758	.876541
Valid N (listwise)	35				

Source: Data that has been processed PASW Statistics 18.0

Based on the table 1 can be explained as follows:

- a. The standard deviation of the Debt To Equity Ratio (DER) is smaller than the average value or it is said to not vary.
- b. The standard deviation of the Degree of Operating Leverage (DOL) is greater than the average or is called variable.
- c. The value of the standard deviation of the Asset Structure (STA) is smaller than the average value or it is called not to vary.
- d. The standard deviation of the Price Book Value (PBV) is smaller than the average value or it is called un variable.

Classic assumption test

a. Normality test

Based on the picture belog shows that the data spread forms dots close to the diagonal line, it can be concluded that the data is normally distributed.

Normal P-P Plot of Regression Standardized Residua

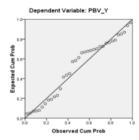


Figure 1 Normality test

Source: Data that has been processed PASW Statistics 18.0

Multicollinearity Test

Table 2 Multicollinearity Test Results

	Collinearity Statistics			Г		
Model	Toler	Tolerance V		VIF Information		Information
1 (Con	stant)					
DER	_X1			İ		Multicollinearity
		(	0.856	1.	168	free
DOL	_X2			l		Multicollinearity
		(	0.986	1.0	014	free
STA_	_X3			İ		Multicollinearity
		(	0.849	1.	177	free

Coefficients<sup>a</sup>

a. Dependent Variable: Y\_PBV

Source: Data that has been processed PASW Statistics 18.0

Based on the results of the Multicollinearity Test above the tolerance value calculation results show that there are no independent variables that have a tolerance value <0.10 and no VIF value> 10, so it can be concluded that the regression model is feasible to use.

# **Butocorrelation** Test

Table 3 Autocorrelation Test Results Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.573°	.329	.264	.752135

Predictors: (Constant), STA\_X3, DOL\_X2,DER\_X1 Dependenr Variable PBV\_Y

### Model Summary<sup>b</sup>

Model	Durbin-Watson	Information	
1	1.409	No Autocorrelation	

- a. Predictors: (Constant), STA\_X3, DOL\_X2,DER\_X1
- b. Dependent Variable: PBV\_Y

Source: Data that has been processed PASW Statistics 18.0

The results below show that the value of Durbin Watson (DW) = 1,409. Then the results stated that the regression model did not experience autocorrelation. This is in accordance with the second provision which states "If the



DW value is between -2 and +3, then there is no autocorrelation.

# b. Heteroscedasticity Test

Judging from the graph below shows that the results of the data are spread randomly, it can be concluded that there is no heteroscedasticity.



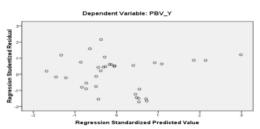


Figure 2Heteroscedasticity Test

Multiple linear analysis

Table 4Multiple Linear Regression Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	В	Std. Error	Beta		
1 (Constant )	273	.419		652	.519
DER_X1	793	.205	.614	3.860	.006
DOL_X2	.397	1.177	.050	.338	.738
STA_X3	338	.269	.201	1.258	.218

Predictors: (Constant), STA\_X3, DOL\_X2, DER\_X1

Dependent Variable: PBV\_Y

Source: Data that has been processed PASW Statistics 18.0

Based table 4 can be explained is as follows:

- a. A constant of -0,273 which means that if all the independent variables are equal to zero, then the mency cost is -0,273.
- b. Capital structure variable (X\_1) has a regression coefficient of 0.793 where it means that each capital structure (X\_1) increases by one unit, then agency cost  $(\overline{Y})$  will increase by 0.793 units assuming other variables are constant.

c. The business risk variable (X\_2) has a regression coefficient of 0.397 where it means that each business risk (3/2) increases by one unit, then agency cost  $(\overline{Y})$  will increase by 0.397 units

d. Asset structure variable (X\_3) has a regression coefficient of 0.338 which means that each asset structure (X\_3) goes up by one unit, then agency

assuming other variables are constant.

cost (Y) will go up by 0.338 units assuming other variables are constant.

Model feasibility test

a. F test

Table 5F test result

12		
AN	OVA	b

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	8.586	3	2.862	5.059	.006 <sup>a</sup>
Residual	17.537	31	.566		
Total	26.123	34			

- Predictors: (Constant), STA\_X3, DOL\_X2,DER\_X1
- Dependent Variable: PBV\_Y

Source: Data that has been processed PASW Statistics

Based on the table 5 shows that the influence of independent variables capital structure (X<sub>1</sub>), business risk (X<sub>2</sub>) and asset structure (X<sub>3</sub>) on the dependent variable firm value (Y) simultaneously. Obtained a value of 0.006. Thus it can be concluded that the significant value is 0.006 < 0.05 which means that H\_1 is accepted and [H] \_O which means that there is an influence between capital structure (X\_1), business risk (X\_2) and asset structure  $(X_3)$  on the dependent variable firm value (Y)

b. T test

Table 6T test result

# Coefficients

Model			Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
1 (Constant)	273	.419		652	.519
DER_X1	793	.205	.614	3.860	.006
DOL_X2	.397	1.177	.050	.338	.738
STA_X3	338	.269	.201	1.258	.218

a. Dependent a. Variable: PBV\_Y



Source: Data that has been processed PASW Statistics 18.0

# 1) Hypothesis Testing 1

Based on 6 test capital structure variables can be obtained t-value of 3.860, while a significant value of 0.006. So that the resulting significant value is smaller than the probability value of 0.05 or 5% or 0.006> 0.05 then H0 is rejected and Ha is accepted. The first hypothesis can be concluded that capital structure (X\_1) has a significant effect on firm value (Y), thus Hypothesis 1 is accepted.

# 2) Hypothesis Testing 2

Based on the above test business rick variables can be obtained t-value of 0.338 while a significant value of 0.738. So that the resulting significant value is smaller than the probability value of 0.05 % or 0.738> 0.05 then H0 is accepted and Ha is rejected. It can be concluded the first hypothesis that business risk (X\_2) does not have a significant effect on firm value (Y), thus Hypothesis 2 is rejected.

# 3) Hypothesis Testing 3

Based on the above asset structure text variables can be obtained t-value of 1.258 while a significant value of 0.218. So that the resulting significant value is smaller than the probability value of 0.05 or 5% or 0.218> 0.05 then H0 is accepted and Ha is rejected. The first hypothesis can be concluded that the structure of assets (X\_3) does not have a significant effect on firm value (Y), thus Hypothesis 3 is rejected.

c. R<sup>2</sup> test 11
Table 7R<sup>2</sup> test result

# Model Summary<sup>b</sup> Model R R Square Adjusted R Square Std. Error of the Estimate 1 .573° .329 .264 .752135

Predictors: (Constant), STA\_X3, DOL\_X2, DER\_X1 Dependenr Variable PBV\_Y

Source: Data that has been processed PASW Statistics 18.0

Based on the table 7 the calculation results of 0.331 or 32.9% shows the contribution of the independent variable can be explained by the dependent variable

of 32.9%. This means that the contribution of the independent variables consisting of Capital Structure, Business Risk and Asset Structure can be explained by the dependent variable namely the Company Value of 32.9% while the remaining 67.1% is influenced by other variables outside the research model.

# IV. CONCLUSION

The capital structure variable partially has an influence on the value of the company, while the business isk variable and the asset structure partially has no influence on the value of the company in manufacturing companies listed on the Indonesia Stock Exchange with various industrial sectors and the textile and garment sub-sector in the period 2011-2015.

The optimal capital structure of a company is an attraction for investors, therefore the company must be able to manage risks and assets to produce optimal company value as well.

I suggest to other research is to add other variables that influence the independent variable Company Value in terms of firm value practices such as profitability variables, company size etc.

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