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Letter of Acceptance for Abstract

Dear Authors: Aang Munawar

We are pleased to inform you that your abstract (ABS-113, Oral Presentation), entitled:

"Determinants of Corporates Leverage in Indonesia"

has been reviewed and accepted to be presented at ISBEST 2019 conference to be held on 23 - 24 October 2019 in Tangerang Selatan, Indonesia.

Please submit your full paper and make the payment for registration fee before the deadlines, visit our website for more information.

Thank You.

Best regards,

Joko Rizkie Widokarti, S.E., M.M.
ISBEST 2019 Chairperson

Determinants Of Corporates Leverage In Indonesia

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Abstract

This paper examines the determinants of corporate leverage with the determining factors are bond yield, company size, and liquidity. The research samples include 22 companies that present a complete report with the determination of the sample through a purposive sampling method. The study uses the data panel using Eviews 8 program application. The analysis of data panels conducted first conducted the classical assumption test and the second through the model selection test is Chow test, Hausman test, and Lagrange multiplier test. The selected model is a random effect model. Regression model developed in three models total debt, long term debt and short term debt. The results showed that in total debt and short term debt model are a partially bond yield has no effects on leverage while the company size and liquidity significantly negative affects on leverage. In long term debt model is a partially bond yield has positive effect on leverage, size has no effect on leverage, and liquidity has positive effect on leverage. The results of this study can identified that leverage pattern in line with short term debt.

Keywords; leverage, bond yield, size, likuidity.

I. Introduction

Decision-making in determining the balance between debt and capital is an independent challenge for managers. Since the discovery of the theory of [1] that the capital structure is irrelevant in investment decisions, it has emerged a more progressive literature. According to [2] in the pecking-order theory states that the main issue of the company's capital structure decision is the assymmetric information between the manager and the investor regarding the company's internal conditions, and the argument that the manager has to do with the old shareholders. Both problems caused the company to have a hierarchy of funding starting from internal cash flows, debts, new decisions on the final stock issuance. There is even an opinion that this theory states that stocks will never be issued because they have the highest information asymmetric problems. This became the basis of [3] testing this theory by analyzing the relationship between the internal funding deficits with the changes in the company's debt levels and finding that both variables have a one-on-one relationship, which indicates that the internal funding deficit will always be financed through debt, and stocks are not an external funding

alternative that the company will choose. On the other hand, the trade-off theory states that the company has an optimal debt level in its capital structure, due to the advantages and costs of debts. The advantage of this funding source is the ability to tax deductions when the company uses more debt in its capital structure. [4] found that tax is one of the main considerations in determining the company's capital structure decision. Shareholders have an incentive to increase the use of debt to reduce the amount of idle cash flows, so that company managers do not use it priority for investments that do not improve shareholder welfare.

Too high debt levels cause companies to have a higher risk of failing to pay. Another problem that can arise is the behavior of asset substitution is at lower risk to high-risk assets. This behavior arises due to the loss of these risky assets impacting debtholders, not shareholders. Underinvestment is also a possible behavior, in which the manager will release profitable investment opportunities it has because the benefits of the investment are enjoyed larger by debtholders, thereby resulted in the transfer of welfare from shareholders to debtholders. These three problems lead to higher funding costs when the company has too much debt levels. The optimal debt level is when the profit of the debt is comparable to the costs it brings.

The company's debt-level research was conducted by researchers such as [5] and [6] found that the company has a target leverage level and seeks to adjust its level of debt to this point, when in an under-or overlevered position. The tradeoff theory finds its support through their research. But on the other hand, [7] found that the more profitable a company is, the lower ratio of the debt will be. [2] found that the internal funding deficit significantly affects the change in the debt level of the company. Both studies are in line with the prediction of pecking-order theory. [8] have identified factors that affect the capital structure are the value of collateral assets, non-debt tax shields, growth, uniqueness, industrial classification, company size, volatility, and profitability.

The bond rating is issued by an institution or a bond rating agent that aims to assess the company's performance and be used to decide on bond eligibility and to know the risk level. Research conducted by [9], [10], [11] and [12] stated that there was a negative and

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significant influence of bond ratings against bond yield which meant the higher the bond rating then the yield to maturity bond gets smaller. One factor that can affect yield bonds is laverage, leverage is one of the risk factors faced by investors in investing in bonds. The more that is used to generate profit, the greater the use of resources and with a fixed financial expenses that is also known as financial leverage. The results of the research conducted by [12], [13] that the leverage that is proscribed with debt equity ratio (DER) or leverage can have a positive and significant effect on the yield bonds indicating that the greater the leverage then bond yield will increase (the larger). The research conducted by [14]; [15]; [16] leverage has no effect on bond yield. [17] showed that credit ratings greatly influence the company's leverage decisions. The main implications that can be tested from credit ratings and leverage is that companies near the issue of ranking changes will reduce net debt relative to equity compared to fixed-ranking companies due to discrete costs and benefits associated with varying levels of rating. This can imply first that a company close to either a change of upgrade or downgrade will issue a below average debt amount than a company not near a change in rating. The second thing is implying that the company of a certain level of ratings will issue above the average debt if it is more unidentified closer to the upgrade direction because they are better credit quality. In addition, it implies also that the effect of credit rating for companies at all levels of ranking; the second, on the other hand, it may not be significant for companies with high rankings, such as rating AAA.

[8] and [5] found that the company with more tangible assets, potentially collateral, tends to have a relatively lower bankruptcy cost,resulting in higher debt capacity. The company's size has a positive and significant effect on the ratio of net debt problems at a rate of 5%, consistent with [18] and [5] that larger companies tend to have higher leverage, because they have lower cash flow volatility, better access to capital markets, and less likely to be financially depressed. According to [8] found that the company's size negatively affects short-term debts because short-term debt costs are greater than long-term debts. The importance of this study suggests that the various costs and benefits associated with leverage may not be too significant. In this sense, although results indicate that capital structure is systematically selected.

[19] have analyzed the influence of liquidity on the company's capital structure. Empirical studies have shown that there is a negative influence on liquidity of leverage. Furthermore, [20] found the same thing that there is a negative influence on the liquidity of the leverage.

Based on the background above, it is known that the leverage phenomenon has evolved regardless of the ideal balance of debt with equity and there are differences in the findings of the factors that affect it.

II. METHODOLOGY

The type of research used in this thesis is causative research. According to [21], causative research is research designed to measure the relationship between research variables, or analyze the effect of a variable on other variables. In this study the data used is panel data and analyzed using EViews 8.

Operational Variable

TABLE 1.
OPERATIONAL VARIABLE

Variable	Measurement	Formula	Refference
Yield (Independent 1)	Current Yield	$\dfrac{\text{Coupon Interest}}{\text{Bond Price}}$	[(22]
Size (Independent 2)	Total Asset	Ln Total Asset	[23]
Liquidity (Independent 3)	Current Ratio	$\dfrac{\text{Current Asset}}{\text{Current Liablilities}}$	[22]
Leverage (Dependent 1)	Debt Asset Ratio	$\dfrac{\text{Total Debt}}{\text{Total Asset}}$	[(22]
Leverage (Dependent 2)	Long Debt Asset Ratio	$\dfrac{\text{Ttl Long Term Debt}}{\text{Total Asset}}$	[22]
Leverage (Dependent 3)	Short Debt Asset Ratio	$\dfrac{\text{Ttl Short Term Debt}}{\text{Total Asset}}$	[22]

Source: processed by various sources

Population and Research Sample In this study the population used is manufacturing companies listed on the Indonesia Stock Exchange (IDX) and registered in Indonesia Board Pricing Assets period in 2012-2016. The data collection technique used as a sample is purposive sampling, which is the technique of determining the sample with certain considerations [24]. The sample of this study consisted of 22 companies for 5 years, so the total sample studied was 110 data.

Descriptive statistics Descriptive statistics are statistics used to analyze data by describing or describing data that has been collected as it is without intending to make conclusions that apply to the public [24]. This descriptive statistic was carried out to describe the overall sample taken in this study.

Panel Data Regression Model Selection According to [25], there are three tests to choose panel data estimation techniques. First, the chow test is used to choose between common effect or fixed effect models. Second, thirst test is used to choose between the best fixed effect model or random effect in estimating panel data regression. The three lagrange multiplier tests are used to ascertain which models will be used, the basis for this test is if the results of fixed and random tests are inconsistent.

Classic Assumption Test Testing classical assumptions depends on the estimates used [26]. If in the model testing, a common effect model or fixed effect model is chosen, it is necessary to test the classical assumption, otherwise if the model is chosen random effect model, it is not necessary to test the classic assumption. The classic assumption test used is multicollinearity test and heteroscedasticity test.

Hypothesis Testing Determination Coefficient The coefficient of determination is a variation of the effect of independent variables on the dependent variable, or it can also be said as a proportion of the effect of all dependent variables.

Simultaneous Testing According to [23] F statistic test is used to show whether all independent variables entered into the model have a joint influence on the dependent variable.

Partial Testing According to [23] statistical tests basically show how far the influence of an explanatory / independent variable individually in explaining the variation of the dependent variable.

III. RESULTS and DISCUSSIONS

TABLE 2
DESCRIPTIVE ANALYSIS OF RESEARCH VARIABLES

Description	DAR	LDAR	SDAR	YIELD	CR	Total Asset
Mean	0.577545	0.279636	0.298091	0.097818	1.510000	65.21326
Median	0.610000	0.260000	0.270000	0.100000	1.355000	16.03907
Maximum	0.850000	0.600000	0.740000	0.120000	4.340000	1314.371
Minimum	0.290000	0.000000	0.090000	0.070000	0.410000	2.025630
Std. Dev.	0.132521	0.125002	0.135670	0.011916	0.650929	193.3485
Skewness	-0.207831	0.404139	1.178758	-0.618599	1.160261	5.236541
Kurtosis	2.051511	3.153113	4.195542	2.610605	5.355719	31.59485
Observations	110	110	110	110	110	110

Source: EViews 8 Output Results

Based on table 2, it is known that the average DAR of 57.75% has a number of 44% being under the average and the rest on the average DAR. The average LDAR of 27.96% has a number of 53% being under the average and the rest on the average LDAR. The average SDAR of 29.81% has a number of 60% being under the average and the rest on the average SDAR. Yield an average number of 9.78% and a number of 34% have a Yield rate below the average. The average

of CR is 1.51 times and a number of 60% had below average CR numbers. Total asset have an average number is Rp 65 milyard and a number of 87% have below average Total asset.

Selection of Regression Models

Chow Test In Table 3, you can see the Prob value. Cross-section Chi-square of 0.00 <0.05. Prob value. Chi-square cross-section is smaller than 0.05, then H0 is rejected and the regression model that is right to use in this study is the fixed effect model.

TABLE 3
REDUNDANT FIXED EFFECTS TESTS

Equation: FEM

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	13.231483	(21,85)	0.0000
Cross-section Chi-square	159.650585	21	0.0000

Source: Eviws 8 Output Results

Hausman Test In Table 4 The results of the Hausman test indicate the Prob value. The random cross-section in this study was 0.45008. This value is greater than 0.05, so H0 is accepted and the regression model that is right to use in this study is a random effect model.

TABLE 4
CORRELATED RANDOM EFFECTS - HAUSMAN TEST

Equation: REM

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.940907	3	0.4008

Source: EViews 8 Output Results

Lagrange Multiplier test The test results of lagrange multiplier in Table 4 can be seen from the Prob value. Breusch-Pagan (BP-value) obtained is 0.0000. This value is smaller than 0.05 so Ho is rejected and the right regression model to be used is a random effect model.

TABLE 5
LAGRANGE MULTIPLIER (LM) TEST FOR PANEL DATA

Sample: 2012 2016

Total panel observations: 110

Null (no rand. effect)	Cross-section	Period	Both
Alternative	One-sided	One-sided	

	100.2943	1.374827	101.6691
Breusch-Pagan	(0.0000)	(0.2410)	(0.0000)

Panel Data Regression Analysis The results of the selection of the regression model show that the random effect model is the most appropriate model used in this study. The results of panel data regression analysis with a random effect model can be seen in Table 6.

TABLE 6
Panel Data Regression Analysis

Variables	Dependent		
	DAR	LDAR	SDAR
Yield	0.8148	1.1923**	-0.3335
Size	-0.0316**	0.0134	-0.0484***
CR	-0.0547***	0.0373**	-0.0960***
C	1.111***	-0.1181	1.2874***
R^2	0.1411	0.0787	0.3923
Prob (F)	**	**	***

Description; * significant at >5%, ** significant at < 5%, ***significant at <1%

The results of panel data analysis in Table 6 can form panel data regression equations as below:

DAR = 1.111 + 0.8148 Yield - 0.0316 Size - 0.0547 CR+ ε1

LDAR = - 0.1181 + 0.1923 Yield + 0.0134 Size + 0.0373 CR+ ε2

SDAR = 1.203 - 0.3335 Yield - 0.0484 Size - 0.096 CR+ ε3

The interpretation of the regression equation above is as follows:

1) Intercept

Debt Asset Ratio value is 1.111 or 1.111 times, if the variables of Yield, Size and Current Ratio do not affect on DAR. Long Term Debt Asset Ratio value is minus 0.1181 or minus 0.1181 times, if the variables of Yield, Size and Current Ratio do not affect on LDAR. Short Term Debt Asset Ratio value is 1.2874 or 1.2874 times, if the variables of Yield, Size and Current Ratio do not affect on SDAR.

2) Effect Yield on Leverage

In Total Debt Model, the coefficient of yield is 0.8148 or 81,48%, meaning that if yield has increased by one unit, then value of leverage will increase by 0.8148 assuming the value of other variables remains.

In Long Term Debt Model, the coefficient of yield is minus 0.1923 or 19.23%, meaning that if yield has

increased by one unit, then value of leverage will increase by 0.1923 assuming the value of other variables remains.

In Total Debt Model, the coefficient of yield is minus 0.3335 or 33.35%, meaning that if yield has increased by one unit, then value of leverage will decrease by 0.3335 assuming the value of other variables remains.

3) Effect Company Size on Leverage

In Total Debt Model, the coefficient of size is minus 0,0316 or 3,16%, meaning that if size has increased by one unit then value of leverage will decrease by 0,0316 assuming the value of other variables remains.

In Long Term Debt Model, the coefficient of size is 0,0134 or 1.34%, meaning that if size has increased by one unit then value of leverage will increase by 0,0134 assuming the value of other variables remains.

In Short Term Debt Model, the coefficient of size is minus 0,0484 or 4,84%, meaning that if size has increased by one unit then value of leverage will decrease by 0,0484 assuming the value of other variables remains.

4) Effect Liquidity on Leverage

In Total Debt Model, the coefficient of liquidity is minus 0,0547 or 5,47%, meaning that if liquidity has increased by one unit then value of leverage will decrease by 0,0547 assuming the value of other variables remains.

In Long Term Debt Model, the coefficient of liquidity is 0,0373 or 3,73%, meaning that if liquidity has increased by one unit then value of leverage will increase by 0,0373 assuming the value of other variables remains.

In Short Term Debt Model, the coefficient of liquidity is minus 0,096 or 9,6%, meaning that if liquidity has increased by one unit then value of leverage will decrease by 0,096 assuming the value of other variables remains.

Classic Assumption Test
The results of the selection of panel data regression model selection obtained the best model used is a random effect model so that the classical assumption test is not necessary.

Hypothesis Testing Determination Test The coefficient of determination in this study is used to determine the amount of contribution given by the independent variable to the dependent variable. The results obtained by the R-square value of 0.1479 shows that the independent variables (bond yield, company size, and liquidity) simultaneously provide effect on leverage of 14.79% while the rest is affect by other variables outside the research.

F Test Regression analysis results in table 5 can be seen the significant value of Prob (F-statistics) obtained at 0.0010. This value is smaller than 0.05, H_0

is rejected and it can be concluded that the independent variables (bond yield, company size, and liquidity) simultaneously affect leverage.

Effect Yield on Leverage

The results showed that in total debt models and short-term debts resulted in findings that the yield had no effect on the leverage. It is not in accordance with the findings of [12]; [13] but supported the findings of [14]; [15]; and [16]. These findings proved that companies more using short-term debt instruments, where short-term use of debt was simpler in the loan disbursement process compared to the issuance of Bonds. [27] emphasized the conflict agency between top managers and shareholders. [28] demonstrates the long-term use of debt, despite generating more tax benefits, but also improving bankruptcy cost and agency costs. This confirms that the short-term use of debt decreases the agency conflicts, and thereby reduces the level of risk. Furthermore in the long-term debt model resulted in positive yield findings positively affect the leverage so that the findings support findings by [12]; and [13]. These findings confirm that the yield affects the long-term leverage due to the yield determined by the price of the bond, the interest rate of the coupon and the maturity period. While the selection of short-term debt sources are only determined by the interest charged. The use of large short-term debts, indicating that the financial costs of the company became larger according to the findings of the [8] which found that short-term debt costs were greater than long-term debts.

Effect Company Size on Leverage

In long-term debt models, the company's size findings have no effect on the leverage, while in the total model of debt and short-term debt model results in the company's size findings of negative effect on leverage. The findings did not support the findings of [5], and [18], but supported findings from [8] which found that the company's size negatively affects on term debt short-term debt costs are greater than long-term debt. These findings suggest that the larger company size in the form of large total assets of the results of increasing the company's capacity will increase sales and the proceeds of the sales can reduce the short-term debt. But at the time of management requires funding, the management quickly increases the short term debt due to the faster and simpler debt binding process although the cost is relatively higher than the bond.

Effect liquidity on Leverage

In the long term debt model resulted in the company's liquidity findings of positive effect on the leverage in accordance with the theory of [22], while

the total model of debt and short-term debt resulted in liquidity findings negative effect on leverage. This corresponds to the findings of the findings of [19] and [20]. Of the three independent variables taken in this study demonstrated management behaviour in the fulfillment pattern more considering the speed and simplicity of the debt disbursement process even though according to the findings of the term loan short financial costs become more expensive so it is less efficient.

IV. CONCLUSION AND RECOMENDATION

The use of bonds as an alternative to fulfill more efficient funds needs is still less the main choice of corporate management than the use of short-term debt. This makes the company to decline its competitiveness from the angle of the burden of the financial sector coupled with the operational sector is still relatively low productivity. Since the use of short-term debt dominates the company's total debt, the yield has no effect on leverage. In line with the dominance of short-term use of debt, this research resulted in the company's size findings and the liquidity of the company's negative impact on leverage.

In order to increase the competitiveness of the company, it is necessary to improve in best practices management and simplifying mechanisms, systems and bonds issuance procedures more efficiently.

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