

Analysis Of Factors Affecting Debt Policy

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Abstract

Debt policy is one of the crucial aspects in financial management both at the country and company level. Understanding the factors that have an impact on debt policy is very important by collecting and processing data on 57 manufacturing companies listed on the IDX and focusing on variables of profitability, liquidity, asset structure, and company growth. The research method used is panel data regression analysis. The results of the fixed effect model selection test resulted from the Chow test and the Hausman test. Profitability has a negative and significant impact on debt policy, company growth has a positive and significant influence on debt policy. While liquidity and asset structure have no significant impact. With a high level of significance, the independent variables affect DER jointly, as shown by simultaneous testing with the F test. The Adjusted R Square result of 67.6914% supports the idea that the model including the independent variables is responsible for most of the variation in DER. Nonetheless, the last variation of 32.3086% is accounted for by other variables not discussed from this study

Keyword : Profitability, Asset Structure, Liquidity, Growth, Debt Policy

INTRODUCTION

In carrying out its operational activities, companies sometimes face large funding needs to support operational activities. In an effort to meet these funding needs, many companies choose to rely on external funds, one of which is through debt. Debt policy in the company is very important because it can affect the survival of the company. In general, the right debt policy will allow companies to maximize the use of existing funds, accelerate growth, and increase competitiveness in the market. Moreover, with the Covid-19 pandemic which resulted in many companies declining and the high level of competition between domestic and foreign companies which made companies to further develop performance and excellence in order to avoid bankruptcy which certainly requires a lot of financial resources (Mujiono et al., 2021).

A good debt policy can balance the use of debt with the company's ability to maintain liquidity. In other words, liquidity is the company's ability to use current assets that can be easily converted into cash to pay short-term debt without losing significant value. Companies that are experiencing growth also often need additional funds in financing such as purchasing fixed assets or increasing production capacity. This allows the company to take on more debt if it does not have sufficient internal funds. Meanwhile, profitability is the main aspect to assess the extent to which a company is able to generate profits. For companies, profitability not only reflects financial health, but also provides an overview of operational efficiency and the sustainability of the company's future growth. Companies that have high profitability are not only able to generate

greater profits, but also have a stronger appeal to investors and can finance expansion or new investments without relying entirely on external debt. Asset structure describes how a company allocates resources and manages different types of assets in meeting its objectives. Manufacturing companies also tend to have dominant fixed assets such as machinery and production equipment. The author then wishes to conduct research that tests and analyzes the factors that underlie companies in formulating debt policies in manufacturing companies on the Indonesia Stock Exchange with an observation period of 2020-2023.

Profitability

Profitability refers to the ability to earn profits in a certain period by utilizing assets or capital, be it all capital or own capital which reflects how well a company manages and uses facilities to earn profits. Profitability is a factor that needs serious attention, because in order for a company to run well, the company should be in a profitable condition. Without profit, the company will have difficulty seeking investment or capital from outside parties (Tala & Karamoy, 2017). The higher the profitability value, indicating that the company is good at generating profits.

Liquidity

The ability of a company to meet debt is illustrated by the liquidity of its finances that must be repaid in the near future, or the company's ability to pay off debt when due. In other words, the liquidity ratio is used to calculate how capable the company is in fulfilling deadline obligations, both involving external and internal parties of the company. This ratio is useful for evaluating the extent to which the company can finance and complete its obligations (Nurdiana, 2018).

Asset Structure

Asset structure is the difference between total fixed assets and total assets owned by the company. Asset structure explains the part of total assets in the company that can be used as a deferral in obtaining debt. The higher the price of the company's assets, the assets can be used as collateral to get debt. Companies that have large fixed assets prefer to obtain greater debt than companies that have lower fixed assets (Komariah & Nururahmatiah, 2020). If the price of tangible assets obtained by the company is getting bigger, then these assets can be used as collateral which can reduce the risks that arise due to problems such as fixed costs of debt.

Growth

Company growth is the annual increase that can be observed in the amount of assets in the company. Companies that achieve rapid growth usually require a large amount of money. Therefore, borrowing to outside parties is needed. Due to the faster the growth rate in the company, the higher the company will get a loan (Baharuddin, 2022). Companies that experience increased growth in each year indicate that the company is developing or progressing over time (Abduraffi, 2020).

Debt Policy

Debt policy is an important decision for corporate funding. Company managers must choose carefully the various sources of funds to be used, because each source has a different financial impact (Asiva Noor Rachmayani, 2015). Excessive use of debt will threaten the company's finances, because the company will be classified as an extreme leverage category (extreme debt), namely a situation when the company is included in a high level of debt and

cannot eliminate the debt burden (Sunardi et al., 2020). Even so, when the company uses little or no debt, the company is considered unable to maximize outside funds that have the potential to optimize company operations (Hidayat & Triyonowati, 2020).

There are theories regarding debt policy according to Sudana (2015: 153), namely, Trade-Off Theory which states that companies choose to use debt based on the balance between reducing tax costs and financial problems. Pecking Order Theory, which states that managers often choose internal funds over external ones. If external funding is needed, managers decide to use the safest instrument, such as debt. Companies can also keep cash to prevent external funding. Meanwhile, Signaling Theory suggests that companies that can make a profit will be more likely to have more debt, because higher interest payments will be proportional to the pre-tax profits earned (Hidayat & Triyonowati, 2020)

RESEARCH METHODS

This type of research is quantitative research, where the research uses data in the form of numbers which will be tested and produce results in the form of statistical data to see the influence between variables. The data analysis method used for this research is to use the panel data regression evaluation method. Panel data is useful because this research is a combination of cross-section and time series data. Data analysis using evIEWS 12 software.

Table 1. Variabel and Parameter

Variabel	Variable Definitions	Parameter
Debt Policy (Y)	A comparison of total liabilities and total equity that measures the use of debt in funding its operations.	$\frac{\text{Total Liabilities}}{\text{Total Equity}}$
Profitability (X1)	Comparing total assets with net profit after tax to determine the company's ability to generate profits.	$\frac{\text{Total Net Income}}{\text{Total Asset}}$
Liquidity (X2)	Comparison between total current assets and total short-term liabilities to find out how well the company can pay its debts.	$\frac{\text{Total Current Asset}}{\text{Total Current Debt}}$
Asset Structure (X3)	Comparing the amount of fixed assets with total assets (y) is useful to show the composition of the company's assets.	$\frac{\text{Total Fixed Asset}}{\text{Total Asset (y)}}$

Growth	Subtracting total assets (y) from total assets (y-1) and then comparing with total assets (y-1) to measure how much the company is growing.	$\frac{Total Asset(y) - Total Asset (y - 1)}{Total Asset (y - 1)}$
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Sample

In this study, the purposive sampling method was applied, namely a number of samples drawn from a representative and deliberate population. The data required for this research is annual financial report data from manufacturing companies on the Indonesia Stock Exchange during the period 2020-2023.

Table 2. Criteria and Sample

No	Description	A
	Manufacturing companies listed on IDX	110
1.	The company does not publish complete financial reports 2020-2023	(50)
2.	The company does not produce a positive Debt to Equity Ratio value (DER minus)	(3)
	Number of companies studied in 2020-2023	57
	Total data during the study year (4 years x 57 companies)	228

RESULTS AND DISCUSSION

Model selection test

Chow test

The Chow test is a test that functions in determining a suitable model between the Common Effect Model (CEM) and the Fixed Effect Model (FEM) in estimating panel data. The Chow test includes a model comparison test between common effect and fixed effect (Widarjono, 2019). In seeing the choice of the chow test, it can be taken from the cross-section F probability value

Table 3. Chow test results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	5.829362	(56,137)	0.0000
Cross-section Chi-square	241.303643	56	0.0000

The Chow Test results display a cross-section F probability figure of 0.0000. This value is < the significance value of 0.05. When, the cross-section F probability value <0.05 significance

value, the model used is the fixed effect model. From the results obtained, the model chosen is the fixed effect model.

Hausman test

The Hausman test includes a model determination test if the previous model was a fixed effect model. The Hausman test determines between the fixed effect model and the random effect model that should be included in the panel data model. In making the Hausman test assessment, it is seen from the cross-section random probability value.

Table 4. Hausman test results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	22.115743	4	0.0002

The Hausman Test results display a random cross-section probability value of 0.0002. This figure is less than the significance value of 0.05. So, the selected model is the fixed effect model. After running the Chow Test and Hausman Test, the best estimation model result is the fixed effect model.

Panel data regression equation

Panel data regression is a regression method that unites cross-section data and time-series data, which results in a greater number of observations than the use of cross-section data or time-series data separately (Gujarati, 2004). The panel data regression model obtained is as follows:

$$DER = 0.83780 - 1.67163 ROA - 0.08797 CR + 0.93655 SA + 0.20523 GROWTH$$

From the panel data regression equation, there is an explanation:

The constant value is 0.68683, that is, if the ROA (X1), CR (X2), Profitability (X3), and Growth (X4) variables are 0 (zero), then the DER (Y) variable will increase to 0.83780. The ROA variable value (X1) shows a negative direction where when the ROA value increases by 1% and other variables remain constant, the DER value decreases by 1.67163. The CR (X2) variable value has a negative direction where if the CR value increases by 1% and the alleged other variables remain constant, it will reduce the DER value by 0.08797. The SA variable value (X3) has a positive direction where if the SA value increases by 1% and the assumption of other variables remains constant, it will increase the DER value by 0.93655. The value of the Growth variable (X4) has a positive direction where if the Growth value increases by 1% while other variables remain constant, it will increase the DER value by 0.20523.

Hypothesis test

Partial t test

The t test is a test intended to determine whether the influence of the independent variable is significant or not with the dependent variable. Based on the previously obtained estimation model test, the model used is the fixed effect model.

Table 5. Partial t test results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.837810	0.265323	3.157699	0.0020
X1	-1.671632	0.688675	-2.427317	0.0165
X2	-0.087975	0.068004	-1.293669	0.1980
X3	0.936560	0.492679	1.900953	0.0594
X4	0.205236	0.101011	2.031817	0.0441

Effect of Profitability on Debt Policy

The ROA variable produces a t_{count} coefficient value of (-2.427317) with a significance figure of (0.0165). The value of $t_{\text{count}} > t_{\text{table}}$ ($-2.427317 > 1.972141$), meaning that there is a negative impact of ROA on DER. That way, H_1 which states that ROA has a negative effect on DER is proven or verified. This study is in accordance with the research of Saputri (2020), and Ari (2020), which states that profitability has a negative impact on debt policy. This is in line with the pecking order theory, namely that companies use more internal funds in the form of retained earnings, then use equity to finance their company's operations rather than using external sources of funds such as debt.

Effect of Current Ratio on Debt Policy

The result of CR has a t_{count} coefficient number worth (-1.293669) and a significance value of (0.1980). The value of $t_{\text{count}} < t_{\text{table}}$ ($-1.293669 < 1.972141$), then there is no effect of CR on DER. Therefore, H_2 which explains that CR has an effect on DER is not true. This research is in line with the research of Sunardi (2020), Hikmawati (2023) and Santika (2024) who said that liquidity has no effect on debt policy. These results are in line with pecking order theory, namely companies are more inclined to use funds from within such as profitability or retained profits obtained from company operations even though they have sufficient liquidity.

Effect of Asset Structure on Debt Policy

The AS variable contains a t_{count} coefficient value of (1.900953) and a significance value of (0.0594). The value of $t_{\text{count}} < t_{\text{table}}$ ($1.900953 < 1.972141$), then there is no effect of SA on DER. That way, the favorable H_3 that AS affects DER is not accepted. The results of this study are in line with the research of Manoppo (2018), and Saputri (2020) which have research results that the asset structure has no influence on debt policy. This is because there are companies that do not make their fixed assets as debt collateral which makes the proportion of asset structure has no effect on debt policy. In addition, manufacturing companies have a variety of assets, but companies have more fixed assets such as production facilities and machinery used to make the company's fixed assets do not affect the creditor's decision to provide loans or debt.

Effect of Growth on Debt Policy

The Growth variable shows a t_{count} coefficient value of (2.031817) and a significance value of (0.0441). The value of $t_{\text{count}} > t_{\text{table}}$ ($2.031817 > 1.972141$), then Growth has a positive influence on DER. That way, H_4 which indicates that growth affects DER is accepted or proven. The positive growth results state that increasing company growth, increasing the funds needed which will lead to increased use of debt because companies that are increasing tend to need a lot of funds. In line with pecking order theory, where companies choose to use internal funds. However, if internal funds are insufficient, debt will be the main external funding option. These research results are in line with the research of Saputri (2020), and Pasaribu (2020) which states that Growth has a positive effect on debt policy.

F-test

The F test was conducted to determine the impact of the simultaneous relationship between the independent variable and the dependent variable. If the $F_{\text{count}} > F_{\text{table}}$ value, and the significance value < 0.05 . Then, there is a joint influence of the independent variable with the dependent variable.

Table 6. F-test result

R-squared	0.775316
Adjusted R-squared	0.676914
S.E. of regression	0.432002
Sum squared resid	25.56772
Log likelihood	-78.30311
F-statistic	7.879077
Prob(F-statistic)	0.000000

The results of the F test show that H_a is favorable that the variables ROA, CR, SA, and Growth simultaneously affect debt policy (DER). This is evident from the results of $F_{\text{count}} 7.879077 > F_{\text{table}}$ of 2.418445, also the significance value of $0.000000 < \text{the significance level of } 0.05$, that is, it can be seen that ROA, CR, SA, and Growth have a joint effect on debt policy (DER).

Test Coefficient of Determination

The coefficient of determination is a measurement used in regression analysis to assess the effectiveness of the regression model in explaining variations or changes in the dependent variable based on the independent variable.

In accordance with the test results, it can be seen that the Adjusted R-squared value is 0.676914. The results of this coefficient of determination indicate that the independent variables, namely ROA, CR, SA, and Growth can draw the DER variable worth 67.6914%, the remaining 32.3086% is described by other variables that are not included in this research model.

Table 7. Coefficient of determination test results

R-squared	0.775316
Adjusted R-squared	0.676914
S.E. of regression	0.432002
Sum squared resid	25.56772
Log likelihood	-78.30311
F-statistic	7.879077
Prob(F-statistic)	0.000000

CONCLUSION

From the explanation of the test results, it can be seen that the profitability variable has a significant negative impact on debt policy, which means that companies with high profits in investment prefer to use less debt. Liquidity and asset structure variables have no impact on debt policy, based on the fact that companies are more inclined to use internal funds such as profitability, even though they have sufficient liquidity and there are several companies that refuse to make their fixed assets for debt collateral which makes the proportion of asset structure has no effect on debt policy. Meanwhile, company growth shows a positive and significant influence on debt policy because companies that are experiencing growth require more funds

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