ANALYSIS OF THE EFFECT OF PROFITABILITY, ASSET STRUCTURE, *FREE CASH FLOW* AND COMPANY SIZE ON DEBT POLICY WITH COMPANY VALUE AS A MODERATION VARIABLE IN MANUFACTURING COMPANIES LISTED ON THE IDX 2016 – 2021

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Abstract

This study aims to determine the effect of profitability, asset structure, free cash flow and company size on debt policy with company value as a moderation variable. The research design used was causal associative. The population in this study is manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2021 period and the number of samples used is 51 companies with 306 observations. The data analysis method used is multiple linear regression analysis using STATA software. The results showed that profitability has a positive and significant effect on debt policy, asset structure has a positive and significant effect on debt policy, free cash flow is positive and significant on debt policy, company size is positive and insignificant on debt policy. The results of the moderating variable test show that company value can moderate the relationship between profitability to debt policy, company value can moderate the relationship between asset structure to debt policy, company value can moderate the relationship between free cash flow to debt policy and company value can moderate the relationship between company size to debt policy.

Keywords:. Free cash flow, Debt Policy, Company Value, Profitability, Asset Structure, Company Size

Introduction

In essence, in carrying out its operational activities, the company needs funds or capital so that the company's goals in obtaining profits are met. The question is where the source of the funds is obtained. Based on the *pecking order theory*, funding decisions have the following order: internal funds, debt and stock issuance (Santoso, 2020). The source of funding for a company can be met through internal sources derived from the company's retained earnings and external sources derived from creditors and investors. Internal sources of funds are not sufficient Companies can use external funds through debt first and only issue equity as a last resort (Purba et al., 2018).

The decision to choose the source of funds is important for the company because it will have an influence on the company's risk in the future. Many companies are successful and grow because they make the right funding decisions (Erwin et al., 2018). However, there are also many companies that eventually go bankrupt because they make too many debt loans. Not a few companies choose to use funds from debt loans to capital their company's operational activities.

This research uses manufacturing companies consisting of basic industrial and chemical sectors, consumer materials industry sectors and various industrial sectors. Researchers considered several factors thought to influence debt policy: profitability, asset structure, *free cash flow* and company size. Profitability according to Kasmir (2002) is a ratio that shows the ability of a company to generate profits by using all the capital owned.

Projected profitability with *Return On Asset* (ROA) describes the rate of return generated on all assets owned by the company. The higher the ROA, the higher the *rate of return*, meaning the higher the profit obtained by the company. This makes it easier for companies to get loans that are used to add assets to get higher profits. Asset structure according to Riyanto (2004) is a balance or comparison between current assets and fixed assets. Companies that have high fixed assets will use a lot of long-term debt in their funding. Large fixed assets as well as the offer of ease of debt provision and the opportunity to invest will be a consideration for companies to take debt policies (Hardiningsih and Oktaviani, 2012). *Free* cash flow according to Bridgham and Houston (2018) is a number of available cash that can be taken without jeopardizing the company's ability to operate and generate cash flow in the future. The size of the company is a measure of the size of the assets owned by the company. If the size of the company is large, the company has more stable cash flow, lower bankruptcy risk and the company has easy access to credit.

Previous studies examining the effect of asset structure on debt policy have also been inconsistent. The results of the study (Feryyanshah &; Sunarto, 2022) stated that asset structure has no effect on debt policy. Debt policy is a policy carried out by companies to carry out their operations using financial debt or financial *leverage* (Brigham and Houston, 2006). In research conducted by (Mujino &; Wijaya, 2021) shows a positive influence between debt policies on company value.

Based on the background above, this study wants to answer "Does profitability, asset structure, *free cash flow* and company size affect debt policy with company value as a moderation variable?".

Method

The design used in this study is causal associative, which is research that aims to analyze the influence or causal relationship between two or more variables (Sunyoto, 2013). This study aims to analyze the effect of profitability, asset structure, *free cash flow* and company size on debt policy with company value as a moderation variable. This research was conducted on the Indonesia Stock Exchange (IDX). The research data used are the financial statements of manufacturing companies listed on the IDX in the period 2016 – 2021 obtained through internet media by visiting the www.idx.com website and website of each related company. The population in this study amounted to 184 companies. From the results of sample selection, 51 companies were obtained with a period of 6 years (2016-2021), so the research observation data amounted to 306 samples (51 times 6 years). The sampling technique in this study was using *purposive sampling techniques.*

The sample selection criteria in this study are; (1) manufacturing companies that were successively listed on the Indonesia Stock Exchange in the 2016-2021 period, (2) companies that use rupiah currency units in their financial statements and have complete data to be used in this study, (3) manufacturing companies that earned profits during the 2016-2021 period, (4) manufacturing companies that published their financial statements on the Indonesia Stock Exchange (IDX) website or on the websites of each company for the 2016-2021 research period.

The data analysis method used in this study is multiple linear regression analysis, where the software used is *STATA software*. This analysis aims to determine the direction of the relationship between the independent variable and the dependent variable. Whether each independent variable has a positive or negative relationship, and predicts the value of the dependent variable if the independent variable increases or decreases.

Result

The descriptive statistical analysis test in this study can be seen in the table below:

Table 1. The Descriptive Statistical

Variabel	Obs	Mean	Std.Dev	Min	Max
Y	306	2224.866	834.3632	1007	4909
X1	306	2270.539	1036.953	64	9307
X2	306	2115.373	697.9805	1007	3653
X3	306	2060.533	731.5889	193	3914
X4	306	2078.791	827.6609	1005	7893

Z	306	1885.105	614.7556	1002	2997

Source: STATA Output Results, 2023.

Test Selection of Estimation Model

Table 2. Test Chow

Source	SS	df	MS
Model	154883666	545	2816066.66
Residual	57445731.4	250	229782.926
Total	212329398	305	696161.959
F (50, 250) = 9,12			
Prob > F = 0,0000			

Source: STATA Output Results, 2023.

The significance probability value is less than 0.05 (0.0000 < 0.05). So it can be concluded that the results of the *chow-test* used are fixed *effect model* (FEM).

Table 3. Hausman Test

Variabel	Coefficients			
	(b) FEM	(B) REM	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
X1	.0983032	.1385014	-.0401982	.0132173
X2	.0718019	.0732381	-.0732381	.0427094
X3	.016824	.0666261	-.049802	.011522
X4	.0679112	.0660849	.0018263	.0057151
Z	-.0430919	-.0475839	.0044921	.0062547
chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B) = 15,53				
Prob>chi2 = 0.0083				

Source: STATA Output Results, 2023

The significance probability value is less than 0.05 (0.0083 < 0.05). So it can be concluded that the *hausman* test results used are *fixed effect model* (FEM) models.

Table 4. Simultaneous Significance Test

Regresi Data Panel

Number of obs	= 306
F(4, 301)	= 22,84
Prob > F	= 0.0000
R-squared	= 0.2328
Adj R-squared	= 0,2226
Root MSE	= 735,64

The significance probability value is less than 0.05 (0.0000 < 0.05). So it is concluded that the value of profitability, asset structure, *free cash flow* and company size together affect (simultaneously) debt policy.

Table 5. Partial Significance Test (T-Test)

y	Coef	Std.Error	t	P>|t|	[95% Conf.Interval
X1	.2190707	.0472178	4.64	0.000	.1261518
X2	.1790604	.0679072	2.64	0.009	.0454275
X3	.2116364	.0636184	3.33	0.001	.0864432
X4	.04087	.0526563	0.78	0.438	-.0627511
Cons	827.6341	174.5469	4.74	0.000	484.1474

Source: STATA Output Results, 2023.

It can be concluded that the variables of profitability, Asset Structure &*; Free Cash Flow* have a positive and significant effect on debt policy, while Company Size has a positive but not significant effect on manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2021 period.

Table 6. Determination Coefficient Test

Regresi Data Panel

Number of obs	= 306
F(4, 301)	= 22,84
Prob > F	= 0.0000
R-squared	= 0.2328
Adj R-squared	= 0,2226
Root MSE	= 735,64

The independent variables namely profitability, asset structure, *free cash flow* and company size were only able to explain the debt policy of 0.2328 or 23.28%.

Table 7. Panel Regression Hypothesis Test

y	Coef	Std.Error	t	P>|t|	[95% Conf.Interval

X1	.2190707	.0472178	4.64	0.000	.1261518
X2	.1790604	.0679072	2.64	0.009	.0454275
X3	.2116364	.0636184	3.33	0.001	.0864432
X4	.04087	.0526563	0.78	0.438	-.0627511
Cons	827.6341	174.5469	4.74	0.000	484.1474

Source: STATA Output Results, 2023.

Table 8. Hypothesis Test of Moderating Variables

y	Coef	Std.Error	t	P>|t|	[95% Conf.Interval
Cons	962.8115	215.2102	4.47	0.000	539.2986
X1	.2190982	.0472059	4.64	0.000	.1262016
X2	.1788652	.0678903	2.63	0.009	.0452637
X3	.2123677	.063606	3.34	0.001	.0871973
X4	.0419759	.0526531	0.80	0.426	-.0616403
z	-.0735413	.068523	-1.07	0.284	-.2083879
X1_Z	.3347933	.0419776	7.98	0.000	.2521888
X2_Z	.3937373	.0647601	6.08	0.000	.2663007
X3_Z	.3935781	.061422	6.41	0.000	.2727104
X4_Z	.1617511	.0571106	2.83	0.005	.0493674

Source: STATA Output Results, 2023.

Discussion

1. **Profitability has a positive and significant effect on debt policy**
   The high profitability of a company illustrates a company has good performance and prospects. High profitability is the expectation of shareholders to be distributed in the form of dividends, but management's expectation if high profitability can be used as investment financing aimed at advancing the value of the company. The way that can be used to overcome problems between shareholders and managers is one of choosing funding from debt in the hope that according to the wishes of shareholders to improve a company and also be able to enjoy dividends.
2. **Asset structure has a positive and significant effect on debt policy.**
   Companies with high asset structure have significant fixed assets, so it will be easier to receive loans in the form of debt from outside parties, fixed assets have a positive correlation to the debt ratio due to the high utilization of tangible assets to borrow debt, thus causing a high debt policy.
3. ***Free Cash Flow* has a positive and significant effect on debt policy.**
   The existence *of high free cash flow* in a company tends to force management to distribute to shareholders in the form of dividends. On the other hand, management tends to want to hold free cash *flow* so that they still have control over the free cash owned by the company. Due to high dividend payments, forcing company management to seek additional funds from external parties in this case is debt, so that management can still realize its investment plans, pay off debt, buy *treasury* shares and increase liquidity. Thus agency conflicts between managers and shareholders that occur due to the existence of *free cash flow* can be resolved by increasing debt.
4. **The size of the company has a positive and insignificant effect on debt policy.**
   Company size is a size or asset to describe the size or size of a company and is also one of the factors that need

to be considered in determining the level of debt policy that will be carried out by the company. Small companies are very vulnerable to changes in economic conditions and tend to be less profitable whereas companies of large size have large value assets that can be pledged in funding sources. So that the company can increase the use of its debt.

5. **The value of the company is able to moderate the effect of profitability on debt policy.**
The higher the stock price, the more confident investors will be in giving up their capital to be managed by the company. The company will have more funds to carry out the company's operational and investment activities. And in the end the company gets profitability / profit that also increases. High profitability within the company can cause agency conflicts that occur between managers and shareholders. And to reduce agency conflicts, increasing the use of debt is a solution that can be taken by companies.

6. **The value of the company is able to moderate the influence between asset structures on debt policy.**
Company value is an investor's perception of a company that is often associated with stock prices. High stock prices make the company's value also high (Hermuningsih &; Wardani, 2009). The higher the stock price, the more confident investors will be in giving up their capital to be managed by the company. The company will have more funds to carry out the company's operational and investment activities. This can lead to agency conflicts between managers and shareholders. And to reduce agency conflicts, increasing the use of debt is a solution that can be taken by companies. This is in line with agency *theory* which states that to reduce agency conflicts, a supervisory mechanism is needed that can align the interests of management with shareholders. In carrying out this supervision, agency costs are needed. The company's effort to reduce *agency costs* is to increase debt, because with the use of debt, there will be less idle funds that managers can use for less necessary needs

7. **The value of the company is able to moderate the effect of *free cash flow* on debt policy.**
Free cash flow is one indicator to measure a company's ability to return profits to shareholders through debt reduction, dividend increase or share buyback (Zurriah, 2021). The existence of debt can be used to control excessive use of *free cash flow* by management, thereby avoiding wasted investment. The high value of *free cash flow* in the company and strengthened by the high value of the company will result in an increase in the use of debt within the company. Increased value of the company.

8. **Corporate value is able to moderate the effect of company size on debt policy.**
A large company size tends to increase investor confidence in investing so that the company's value will certainly increase. Companies with large sizes can also easily access the capital market, this is because they have flexibility and the ability to get funds. With this convenience, it is seen by potential investors and investors as a positive and good signal for investment decision making, which can reflect the value of the company in the future where the growth prospects are good so that the size of the company can have a positive influence on the value of the company.

Conclusion

Profitability, asset structure, *free cash flow*, company size have a positive and significant effect on debt policy in manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2021 period. Meanwhile, the size of the company has a positive and insignificant effect on debt policy in manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2021 period. Nilai Companies can moderate the relationship between profitability and debt policy in manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2021 period and can also moderate the relationship between asset structure and debt policy in manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2021 period. Company value can moderate the relationship between *free cash flow* and company size to debt policies in manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2021 period.

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