# THE EFFECT OF PROFITABILITY, FREE CASH FLOW, SALES GROWTH, FIRM SIZE ON INDONESIAN DEBT POLICY WITH LIQUIDITY AS MODERATING VARIABLES IN MAIN SECTOR COMPANIES REGISTERED IN INDONESIA STOCK EXCHANGE IN 2015-2018

# Yola Yolanda, Erlina, Murni Daulay

Universitas Sumatera Utara Yolayolanda30@yahoo.co.id

Abstract: This study aims to determine the effect of profitability, free cash flow, sales growth and firm size on corporate debt policy. In addition, this research also tries to prove whether liquidity can be used as a moderator in the research model. This type of research is a quantitative descriptive study. This research was conducted on the Main Sector Companies listed on the Indonesia Stock Exchange in the 2015-2018 period. Sample selection using purposive sampling technique shows that the research sample is 30 companies with a period of 4 years of research, so the number of observations in this study is 120 data. The data analysis method used in this research is Panel Data Regression Analysis which is done with the help of Eviews 9. The results of the study indicate that profitability has a negative and significant effect on debt policy in the main sector companies listed on the Indonesia Stock Exchange. Similarly, free cash flow also has a negative and significant effect. Firm size has a positive and significant influence on debt policy. Whereas liquidity apparently cannot be used as a moderating because it is proven unable to strengthen or weaken the independent variables used in this study.

**Keywords**: Profitability, free cash flow, sales growth, firm size, liquidity, debt policy

## 1. INTRODUCTION

Companies that use more debt than their own capital will increase the value of the company, and will also get tax savings, because the use of debt raises interest costs and can be deducted from taxable profits, so the taxes paid by companies become smaller or tax savings occur. However, if more and more companies use debt at first will increase the value of the company, but to a certain extent the use of debt if debt continues to be added, then the value of the company will decrease, because the risk of bankruptcy is greater than the impact of tax savings (Sudana, 2015).

Table 1. Comparison of Loans Position in Various Sector

Sector	2015	2016	2017
Agriculture (Plantation, Animal Husbandry, Fisheries, etc.)	17.973	16.264	16.170
Mining	6.165	5.860	5.875
Processing industry	10.211	8.485	8.494
Electricity, Gas & Clean Water	46.490	44.881	47.052
Building	113.530	104.114	103.986

Trading, Hotels & Restaurants	3.155	2.384	2.404
Transport & Communication	18.794	17.642	17.812
Finance, Rentals & Financial Services	194.955	214.873	217.599
Services	243.825	232.722	233.447
Other Sectors	100.022	83.321	84.075

Note:

- \*) Billion IDR
- \* Data as of March 31, 2017
- \* The economic sector grouping is based on the standards used by Bank Indonesia and the Central Statistics Agency
- \* Financial sector figures are dominated by program loans

Based on Table 1, it can be seen that various economic sectors in Indonesia are proven in meeting their funding needs in addition to using internal funds in the form of equity and retained earnings, also using external funds, namely debt. Because the debt policy is one of the ways in which the company's management to source external funding for a company, that is, as we know, one of the functions of debt is as additional funds used to fund company operations to increase company value.

This study uses the main sector companies consisting of agriculture and mining sectors. In the table above the agricultural sector companies, which consist of the plantation, livestock, fishery, etc. subsector, have experienced a decrease in debt each year from the period 2015 to 2017, so that economic conditions in this sector can be said to be in good condition because the total debt is seen to decline from year to year. Whereas in mining sector companies, the level of debt from the period of 2015 and 2016 experienced a decrease in debt, but in 2017 the level of debt increased again. Mining sector companies added funds through debt in 2017 to stabilize the company's economy. But with the increase in debt requires companies to be careful in managing their economy, because one of the causes of business failure is the amount of debt owned by the company which can result in companies unable to pay debts or go bankrupt. So it can be concluded that the main sector companies in meeting their funding needs in addition to internal funds in the form of retained earnings and own capital, the company also uses additional external funds, namely debt. Several factors that allegedly played a role in debt policy include profitability, free cash flow, sales growth and firm size.

Based on the phenomena and explanations that occur above and the inconsistency of the results of previous studies, researchers are interested in conducting research with the title "Effect of Profitability, Free Cash Flow, Sales Growth, Firm Size on Debt Policy With Liquidity as a Moderating Variable Listed on the Indonesia Stock Exchange Period 2015 -2018".

# 2. LITERATURE REVIEW

# 2.1. Agency Theory

Agency theory explains the existence of a cooperative relationship between the shareholders as the principal and management as the agent. Agency theory as a contract of one or more people, namely the principal uses other people (agents) to provide some services for their interests (principals) which includes delegating some decision-making rights to the agent.

There are several alternatives to reduce agency cost, first, profitability will assess the company's ability to achieve profits. Free cash flow will be used for the benefit of the company. Third, sales growth with high levels of sales and profits tends to use debt as a source of external funds that is greater than companies with low sales levels. Fourth, firm size has greater access to funding from various sources.

# 2.2. Debt policy

The debt policy is carried out by the company's management in obtaining sources of financing for the company to finance the company's operational activities. Debt policy has a disciplined effect on managers because a large enough debt will cause financial difficulties and also the risk of bankruptcy (Setia, 2008).

# 2.3. Profitability

Profitability ratios are ratios to assess a company's ability to achieve profits. This ratio also provides a measure of the effectiveness of a company's management. This is indicated by the profits generated from sales activities, use of assets and use of capital. The point is the use of this ratio shows the efficiency of the company (Kasmir, 2017). Insider parties do not want to share profits with creditors so that the tendency of smaller corporate debt arises. At a low level of profitability, the company will use debt to finance operational activities. Conversely, at a high level of profitability, the company will tend to reduce the use of debt. This problem is caused by companies that allocate most of their profits to retained earnings so that they rely on internal resources and use low debt but when faced with low profitability the company uses high debt as a mechanism for transferring wealth between creditors to the principal. This clearly illustrates that profitability has a negative effect on debt policy. Because companies with a high rate of return on investment (profitability), the use of debt will be relatively lower because the high rate of return allows companies to finance most of the operational activities using these funds.

#### 2.4. Free Cash Flow

The company's free cash flow and shows that the cash flows generated from operating and investing activities are exactly the same as the cash flows received by debt and equity holders (financing activities). This equation requires a different version of the cash flow statement in which all financial related cash flows, such as interest costs are not included in the cash flows from operating activities. The cash flow statement version can be used to evaluate and appreciate financial policy formulation. More specifically, provide shareholders and all parties interested in the company and operations (managers, lenders, etc.) with information about the company's ability to distribute dividends, to issue new debt and in general the company's ability to meet its obligations (Dimitrios, 2006). A higher debt policy for a company will require funds from the equity market because debt financing will be relatively cheaper for the company. In addition, it will be easier for

companies to manage debt because the risk of bankruptcy is relatively low (Agrawal, 1994). Then the higher the free cash flow the company produces, the lower the debt policy will be.

## 2.5. Sales Growth

Sales growth is sales volume in the coming years, based on historical sales volume growth data (Rudianto, 2009). Sales growth is a company with relatively stable sales that can more safely obtain more loans and bear a higher fixed burden than companies with unstable sales (Houston, 2006). For companies with high levels of sales and profits, the tendency of these companies to use debt as a source of greater external funding is compared to companies with lower sales levels. This shows that the higher the sales growth, the higher the debt policy.

## 2.6. Firm Size

Firm size is a value that indicates the size of a company. Firm size indicated or valued by total assets, total sales, total profits, tax expenses and others (Houston, 2010). Firm is the size of a company which can be expressed by total assets. The greater the total assets, the greater the firm size. The greater the assets, the greater the capital invested. With the increasing firm size, the greater the company will get a debt loan to run the company's operations. Debt is an alternative source of corporate funding. Which is the use of debt can benefit the company compared to using retained earnings. So that the larger the firm size, the debt policy of the company will also be higher, this shows that the firm size has a positive effect on corporate debt policy.

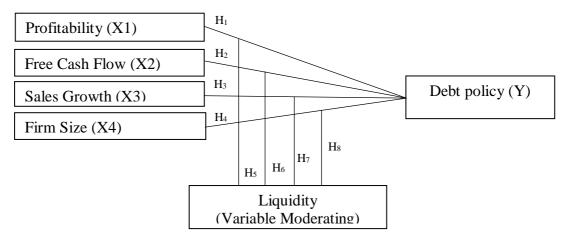
# 2.7. Liquidity

Liquidity shows the ability of a given company to pay short-term liabilities, which is where the payment date does not exceed one year (Sieprinska, 2009). Financial liquidity is one of the important factors determining the existence of any company on the market. The loss of financial liquidity is an introduction to bankruptcy (Sierpinska, 2001). Companies that have better liquidity will be able to pay more debt. For companies that book higher profitability, plus better liquidity, the greater the amount of debt payments.

If the free cash flow experience increases, the company's debt policy also adds value to the company's funding activities and vice versa. By increasing debt, the owner can reduce the manager's control of the company's cash flow so as to reduce agency costs from agency conflicts arising from excessive use of free cash flow. Companies that have a high level of liquidity can be interpreted as the company's ability to meet obligations or debts that must be immediately paid with current assets. So that with high liquidity, the effect of sales growth will be even greater on the company's debt policy. The high level of company liquidity illustrates that the company has good performance so that the tendency of companies to use debt is also getting bigger, because large companies need large funds to support the company's operations and investments.

# 2.8. Conceptual Framework

The conceptual framework in this study is as follows:



# 2.9. Research Hypothesis

- H1: Profitability has a negative effect on the Debt Policy.
- H2: Free cash flow has a negative effect on the Debt Policy.
- H3: Sales Growth has a positive effect on debt policy.
- H4: Firm size has a positive effect on the Debt Policy
- H5: Liquidity is able to moderate the effect of profitability on debt policy
- H6: Liquidity is able to moderate the effect of free cash flow on debt policy
- H7: Liquidity is able to moderate the effect of sales growth
- H8: Liquidity is able to moderate the effect of firm size on debt policy

# 3. RESEARCH METHOD

This type of research is included in quantitative descriptive research. In this study, the population is the main sector companies listed on the Indonesia stock exchange in 2015-2018, amounting to 61 companies. While the samples used in this study were 120 samples (30 times 4 years). The data is processed using the Eviews 9 program while for data analysis methods, researchers use 2 data analysis methods to test hypotheses, including multiple regression analysis which is a pooled data and interaction test. By using the multiple regression analysis method in model 1 and the moderating test in model 2, the following equation is obtained:

1. Multiple regression analysis with panel data, the equation is:

$$Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + e$$

2. Moderating Test, the equation is:

$$aY = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5Z + \beta 6X1.Z + \beta 7X2.Z + \beta 8X3.Z + \beta 9X4.Z + e$$

This method is used to determine the effect of Profitability (X1), Free Cash Flow (X2), Sales Growth (X3) and Firm Size (X4) with Liquidity (Z) as Moderating Variables.

## 4. RESULT AND DISCUSSION

## 4.1 RESULT

# F Test (Simultaneous)

F test results show a significant value of 0,000 smaller than 0.05. The results of this F test show that the independent variables together (simultaneously) have a significant influence on the dependent variable, namely the Debt Policy.

**Test Statistics t (Partial)** 

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-0.949522	1.244629	-0.762895	0.4471
X1	-0.187743	0.055292	-3.395457	0.0009
X2	-0.262534	0.047196	-5.562666	0.0000
X3	-0.034899	0.049792	-0.700890	0.4848
X4	0.299952	0.077379	3.876388	0.0002

Based on the above table, the results of the regression analysis state that Profitability ((X1) partially (individually) has a significant influence on the Debt Policy, as well as Free Cash Flow (X3), and Firm Size (X4), each partially affect significantly the Debt Policy, while the variable Sales Growth (X3) does not have a significant effect on the Debt Policy.

# Test the coefficient of determination

The value of R Square (R2) is 0.361, which means that 0.361 or (36.1%) Independent variable is able to explain the Debt Policy. While the remaining 63.9% is described or explained by other variables not included in this research model.

**Moderating Test Results** 

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1_Z	0.002687	0.031262	0.085942	0.9317
X2_Z	-0.047479	0.036612	-1.296840	0.1974
X3_Z	0.005781	0.053561	0.107928	0.9142
X4_Z	0.015863	0.057013	0.278236	0.7814

Based on the table above, it can be seen that each of the interactions between the moderating variables is liquidity with each independent variable, namely profitability, free cash flow, sales growth and firm size on debt policy. However, based on these results it can be concluded that all moderating variable interactions do not have a significant effect on debt policy because the significance value is greater than 0.05.

## 4.2 DISCUSSION

The results of research on the variable profitability partially have a negative and significant effect on debt policy in the main sector companies listed on the Indonesia Stock Exchange, because companies that have high profitability tend to

use relatively small debt because high retained earnings are sufficient to finance most funding needs. Meanwhile, companies with high rates of return on investment will use relatively small debt because the high rate of return enables companies to finance a large portion of internal funding (Zuhria and Riharjo, 2016). With the retention of large profits, the company will be able to use the profits before deciding to use debt.

The results of the study indicate that free cash flow partially has a negative and significant effect on debt policy in the main sector companies listed on the Indonesia Stock Exchange. Companies with large free cash flow that have high levels of debt. On the other hand, companies with low free cash flow levels will have low debt levels (Made & Putu, 2017). Free cash flow is said to have information content if free cash flow gives a signal to shareholders. It can also be said that free cash flow which has information content shows that free cash flow is able to influence the relationship between dividend payout ratios and capital expenditure with earnings response coefficients. As explained above, it can be seen that the negative free cash flow of the company shows that free cash owned by the company is not available, so the company increases the use of debt for the company's operational activities. This result is in line with research conducted by (Made & Putu, 2017) which states that free cash flow has a significant effect on debt policy.

The results of research on the variable sales growth partially did not have a significant effect on debt policy in the main sector companies listed on the Indonesia Stock Exchange. For companies with high levels of sales and profits, the tendency of these companies to use debt as a source of external funding is greater than companies with lower sales levels. An increase in sales from the previous year shows positive results, and vice versa if there is a decrease in sales from the previous year, then it shows a negative result. Positive sales growth is a signal to creditors to give credit to the company. This situation can expose the company to a choice of choosing an external source of funds between funding from debt or issuing new shares. The higher the company's sales growth, the use of debt levels will also be higher (Siti & Ikhsan, 2016). This shows that the higher the sales growth, the higher the debt policy. So that the results of this study are not in line with research conducted by (Siti & Ikhsan, 2016) which states that sales growth has a significant effect on debt policy. These results are also supported by the results of research conducted by (Nafisa et al, 2016) which states the same thing. This is because not all companies that have a high level of sales choose a loan as a source of funding. The company will choose funding sources with lower borrowing costs and rely more on internal funds. If the sales growth causes the company to need more funds, then it is likely that the company will issue shares that have lower borrowing costs than loans.

The results of the study indicate that firm size partially has a positive and significant effect on debt policy in the main sector companies listed on the Indonesia Stock Exchange. The use of debt can also benefit the company compared to using retained earnings (Bernice, et al, 2015). So that the larger the firm size, the debt policy of the company will also be higher, this shows that firm size has a positive effect on corporate debt policy. The results of this study are in line with

research conducted by (Hendria, 2015), (Bernice, et al, 2015); and (Nafisa, et al, 2016) result that firm size affects debt policy. This is in line with research which states that firm size has a significant positive effect on debt policy (Siti & Ikhsan, 2016).

The results of testing the liquidity in moderating profitability towards debt policies in the main sector companies are rejected. Thus it can be interpreted that liquidity cannot moderate the relationship between profitability and debt policy in the main sector companies listed on the Indonesia Stock Exchange. Thus it can be interpreted that liquidity cannot moderate the relationship between profitability and debt policy in the main sector companies listed on the Indonesia Stock Exchange. This is because the debt policy owned by the main company is still low, this is reinforced by the high profitability value which shows that the main sector companies are in fact still able to use the company's resources internally to finance all company expenses, especially if the company has liquidity the company will have a debt policy that will continue to increase. But with the low value of the debt policy possessed by the main sector. As is known companies that have low profitability, usually will have high debt because the company will need additional funds from external parties to cover the costs incurred by the company, especially if the company also has the ability to pay debts (liquidity), then the company's debt will increasing and piling up. However, it is well known that the phenomenon that occurs in the main sector companies is the opposite, namely low debt policy.

The results of testing the liquidity in moderating free cash flow on debt policies in key sector companies are rejected. Thus it can be interpreted that liquidity cannot moderate the relationship between free cash flow and debt policies in the main sector companies listed on the Indonesia Stock Exchange. This is due to the first, based on the results of descriptive statistics it can be seen that the average level of free cash flow owned by companies in the main sectors of the IDX is 12.83 (in LN / Natural Logarithms) or whose original value is Rp 373.24 billion. This shows that in general the main sector companies listed on the IDX already have good free cash flow to be used to finance all company activities. Secondly, the results of descriptive statistics on liquidity variables indicate that the main sector companies also have a high level of liquidity that is 102.51%. And finally, based on the results of descriptive statistics it is known that the debt policy variable turns out to have a relatively low value. That is an average of 1.02%. This means that the debt policy owned by the main company is still low. With the low value of debt policies owned by the main sectors, this is the reason liquidity cannot strengthen the effect of free cash flow on debt policy.

The results of testing the liquidity in moderating sales growth on debt policies in key sector companies were rejected. Therefore, it can be interpreted that liquidity cannot moderate the relationship between sales growth and debt policies in the main sector companies listed on the Indonesia Stock Exchange. This is due to the first, based on the results of descriptive statistics it can be seen that the average level of sales growth owned by companies in the main sectors of the IDX is -1.64 (in LN / Natural Logarithms) or whose original value is 0.19 or 19%. This shows that the growth rate of sales in the main sectors in general is quite good at 19%. Secondly, the results of descriptive statistics on liquidity variables indicate

that the main sector companies also have a high level of liquidity that is 102.51%. And finally, based on the results of descriptive statistics it is known that the debt policy variable turns out to have a relatively low value. That is an average of 1.02%. This means that the debt policy owned by the main company is still low. With the low value of debt policies owned by the main sectors, this is the reason liquidity cannot weaken the effect of sales growth on debt policy.

The results of testing the liquidity in moderating firm size on the debt policy of the main sector companies are rejected. Thus it can be interpreted that liquidity cannot moderate the relationship between firm size and debt policy in the main sector companies listed on the Indonesia Stock Exchange. This is due to the first, based on the results of descriptive statistics it can be seen that the average level of firm size owned by companies in the main sectors of the IDX is 15.07 (in LN / Natural Logarithms) or whose original value is Rp. 3.506.04 billion this value shows that the average company contained in the main sector are large companies. Secondly, the results of descriptive statistics on liquidity variables indicate that the main sector companies also have a high level of liquidity that is 102.51%. And finally, based on the results of descriptive statistics it is known that the debt policy variable turns out to have a relatively low value. That is an average of 1.02%. This means that the debt policies possessed by the main company is still low. With the low value of debt policies possessed by the main sectors, this is the reason liquidity cannot weaken the effect of firm size on debt policy.

# 5. CONCLUSIONS AND SUGGESTIONS

#### 5.1 Conclusions

Based on the results of research and discussion in the previous chapter, several conclusions can be drawn as follows:

- a. Profitability has a negative and significant effect on debt policy in the main sector companies listed on the Indonesia Stock Exchange.
- b. Free cash flow has a negative and significant effect on debt policy in key sector companies listed on the Indonesia Stock Exchange.
- c. Sales growth does not have a significant effect on debt policy in the main sector companies listed on the Indonesia Stock Exchange.
- d. Firm size has a positive and significant effect on debt policy on the main sector companies listed on the Indonesia Stock Exchange.
- e. Liquidity cannot moderate the effect of profitability on debt policy on major sector companies listed on the Indonesia Stock Exchange.
- f. Liquidity cannot moderate the effect of free cash flow on debt policies in the main sector companies listed on the Indonesia Stock Exchange.
- g. Liquidity cannot moderate the effect of sales growth on debt policy on major sector companies listed on the Indonesia Stock Exchange.
- h. Liquidity cannot moderate the effect of firm size on the debt policy of the main sector companies listed on the Indonesia Stock Exchange.

## 5.2 Suggestions

Based on the conclusions in this research, several suggestions can be made, which are as follows:

- a. For Company Management, the results of the research are expected by management to help increase the value of the company and as a material consideration of commitment to evaluate and improve management performance in the future
- b. Investors from the results of this study are expected to give consideration in assessing the company's performance through debt policy.
- c. Future studies that wish to conduct similar research are expected to replace the moderation variable, because the moderating variable, namely liquidity, cannot moderate the effect of the independent variable on the dependent variable. Some moderation variables that can be examined include the asset structure or managerial ownership.

## **References:**

- Bertha, G. F. (2013). The Effect of Free Cash Flow and Share Ownership Structure on Debt Policy With Investment Opportunity Set As Moderating Variables. (Empirical Study of Manufacturing Companies Listed on the IDX),1 (2).
- Bernice, Y., Yeterina, W. N. and Linda, A. M. (2015). The Impact of Managerial Ownership, Institutional Ownership, and Company Size towards Debt Policy (Study in Property and Real Estate in IDX in 2011-2013). International Conference on Business, Economics and Accounting. Ho Chi Minh City, Vietnam. 8 (8): 978-602.
- Desmintari and Yetty, F. (2016). Effect of Profitability, Liquidity and Structure Asset on the Debt Policy in the Retail Trade Sector listed on the Indonesia Stock Exchange period 2011-2014.. International Journal of Business and Commerce. 5 (6): 117-131.
- Ghozali, (2011). Multivariate analysis application with SPSS Program. Semarang: Diponegoro University Research Bandan
- Hendria, R. (2015). Influence of Insider Ownership, Firm Size, Firm Growth, and Business Risk on the Debt Policy of Public Banking Companies on the Indonesia Stock Exchange 2010-2012. Jom Fekon. National Journal of Business and Accounting. 2 (1). Debt Policy in the Retail Trade Sector listed on the Indonesian Stock Exchange for the period 2011-2014. International Journal of Business and Commerce. 5 (6): 117-131.
- Houston, B. (2010). Fundamentals of Financial Management. Book I: Essentials of Financial Management, Issue 11. Jakarta: Salemba Empat.
- Jaggi, B. And Gul, F. A. (1999). An Analysis of the Join Effects of Investment Opportunity Set, Free Cash Flow and Size on Corporate Debt Policy.
- Junaidi, Muda, I., & Daulay, M., (2019). The Effect Of Operating, Leverage, Sales Growth and Working Capital Flow of Profitability With Firm Size ModeratinG Variables in Manufacturing Companies Listed On The IDX Period 2008-2017. Journal Article. http://www.ijpbaf.org/index.php/ijpbaf/article/view/133/125
- Kasmir, (2012). Financial Statement Analysis. Jakarta: Raja Grafindo.
- Kasmir, D. (2017). Financial Statement Analysis, 10th ed. Jakarta: Rajawali Press.

- K. K. R. Indomesia, "Profile of central government debt (loans and government securities) Edition
- March 2017. "Directorate General of Financing and Risk Management Ministry RI Finance. [On line]. Available: http://www.djppr.kemenkeu.go.id/uploads/files/PukuBooks/BSPUPP% 20 (Govt2-Debt% 20Profile)% 20edition% 20April% 202017.pdf
- Nafisa, A., Atim, D., and Djumahir. (2016). Effect of Managerial Ownership, Institutional Ownership, Company Size, Company Growth, Free Cash Flow and Profitability on the debt policy of manufacturing companies. Postgraduate Student Program of Economy Faculty and Business, University of Brawijaya, Indonesia.
- Putu, M. A. (2008). Debt policy, free cash flow hypothesis, and balancing of agency theory through ownership: Evidence from Indonesia. International Journal of Business and Commerce. 5 (1): 246-263.
- Rambe, H., B. (2005). Analysis of Factors Affecting The Value of Company With Deb Policy As Intervening Variables 9 Study in Manufacturing Companies Listed On BEI. Journal Article. http://www.ijpbaf.org/index.php/ijpbaf/article/view/103/114
- Sierpinska, M., Wedzki D. (2001). Zarzadzanie plynnosciq finansowq prezedsiebiorstwie, wydawnictwo naukowe PWN, Warszawa. International Journal of Business and Commerce. 4 (1): 98-108.
- Sierpinska, M., Jachna, T., (2009). Ocena prezedsiebiorstwa według standardow swiatowych, PWN, Warszawa.
- Zuhria, S. F. & Riharjo, I. B. (2016). The Effect of Profitability, Free Cash Flow, Sales Growth, and Company Size on Debt Policy (Empirical Study of Food and Beverage Companies Registered on the IDX). Journal of Science and Accounting Research in STIESIA Surabaya. 5 (11).