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The Effect of Profitability and Free Cash Flow on Capital Structure Moderated by Firm Size (Studyon Food and Beverage Sub-Sector Companies on the IDXin 2011-2018)

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Abstract

This study aims to analyze the effect of profitability and free cash flow on capital structure with firm size as a moderating variable. The population in this study is the food and beverage sub-sector company on the IDX in 2011-2018. The sample used was 9 companies, which were selected based on the purposive sampling method. The data analysis technique used is multiple linear regression analysis and residual test.The results showed that the profitability variable had no effect on capital structure. While the free cash flow variable has a positive and significant effect on capital structure. In the moderation test with the residual test approach, firm size does not moderate the relationship between profitability and free cash flow on the capital structure.

Keywords: Capital structure; Profitability; Free cash flow;And firm size.

1. Introduction

In the industrial 4.0, the ministry of industry is committed to building the manufacturing industry by accelerating the implementation of industry 4.0. This was done through the "Making Indonesia 4.0" initiative which has the potential to transform the industry to be more efficient and globally competitive. The food and beverage sector is one of the mainstays of the five other sectors in implementing the Industry 4.0 program, this is because the food and beverage sector is one of the manufacturing sectors that has growth potential by utilizing the potential of the domestic market. In addition, the food and beverage sector also provides the largest contribution to national economic growth.

Based on data from the Ministry of Industry, a phenomenon occurred in 2018 in which the food and beverage sector became one of the sectors that experienced a slowdown. Even so, the food and beverage sector is still the sector that contributed the most in 2018. However, even though the food and beverage sector has bright prospects, the challenges in the industrial era 4.0 will cause a lot of competition between companies, one of which is in the sector food and beverage. The competition that occurs will encourage companies to increase profits, increase efficiency in financial management and prepare the right capital structure.

Capital structure is related to company funding, therefore companies must make the right funding decisions, because capital structure is an important issue for the company, good or bad capital structure will have a direct effect on the company's financial condition. The use of debt in the capital structure is like two sides of a coin. On the one hand, according to Modigliani and Miller (1963) debt can increase company value, but on the other hand debt can also increase the risk of bankruptcy for the company, because interest expense are fixed costs that must be paid by the company.

PT. Sariwangi Agricultural Estate Agency (Sariwangi AEA) and Indorub Sumber Wadung Plantation Airlines are examples of companies in the consumer goods sector that failed to manage their capital structure, so that in 2018 they were declared bankrupt by the Central Jakarta District Court. Sariwangi was sued by Bank ICBC Indonesia for never paying its debt obligations, while Indorub was more than one year late in paying no debt. The debt that ensnared PT. Sariwangi and Indorub show that the company's capital structure is bad because it can't pay its debt obligations to creditors. Judging from this experience, companies must be able to determine the right capital structure for their operational needs. Therefore,companies must consider the factors that affect the capital structure, where there are differences in what factors affect the capital structure. There are many factors that influence, but in this study the factors to be discussed are profitability and free cash flow.

Quite a few studies have been conducted on the effect of profitability on capital structure in the capital market. Most of these studies show a significant influence and a two-way causality, including research conducted by Mardiyati *et al.* (2018), Cristie and Fuad (2015). However, several studies have shown a negative effect of

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profitability on capital structure, including the results of research by Rizky *et al.* (2016), Yudhiarti and Mahfud (2016), Naibaho *et al.* (2015), Sholehuddin *et al.* (2017), Suherman. *et al.* (2019).

Another variable that affects the capital structure is free cash flow. Free cash flow relates to the company's debt policy, where debt is a component of the company's capital structure. The company will use an external source of funds in the form of debt to optimize its capital structure.

Research conducted in the capital market on the effect of free cash flow on capital structure has been done quite a lot. Most of the results of these studies indicate a significant influence, including research conducted by Rahman and Triani (2014), Kurniawan and Yuyetta (2015), Melina and Ariesta (2019). Several other studies have shown the negative effect of free cash flow on capital structure, including Widjaya and Darmawan (2018),Zurriah and Sembiring (2018).

There are several studies conducted using moderating variable firm size, where the results obtained are still mixed. Research conducted by Mirza (2015), Wahyudin and Salsabila (2019) shows that firm size can be a moderating variable, but other studies show the opposite results, namely firm size cannot be a moderating variable, including research conducted by Zulvia and Linda (2019), Suherman. *et al.* (2019).

The findings of these previous studies still show mixed and inconsistent results between one study and another on variables that affect capital structure. So, further research is still needed on the same topic.

Based on the above background, this study aims to prove the effect of profitability and free cash flow on the company's capital structure, as well as to examine whether firm size can be a moderating variable for the effect of profitability and free cash flow on the company's capital structure.

2. Literature Review

2.1. Pecking Order Theory

Pecking order theory stated that companies are more likely to choose funding that comes from internal companies rather than from external companies. If a company needs outside funding, managers tend to choose the safest securities, such as debt (Sudana, 2011).

2.2. Trade Off Theory

*Trade off theory*This implies that managers will think in terms of the trade-off between tax savings and the cost of financial difficulties in determining the capital structure. Companies with a high level of profitability will try to reduce their taxes by increasing their debt ratio, so that the additional debt will reduce taxes. But in reality, rarely do financial managers think that way.

2.3. Signaling Theory

Signaling theory is a theory that explains an action taken by company management, which action provides guidance to investors on how management views the company's prospects. Signaling theory was developed to take into account the fact that company managers generally have more and faster information than outside investors.

2.4. Agency Theory

Messier *et al.* (2006), explain that the agency relationship results in two problems, namely the occurrence of asymmetric information, where management generally has more information about the actual financial position and operating position of the entity from the owner, the occurrence of conflicts of interest due to different objectives, where management does not always act in accordance with the interests of the owner. Agency conflicts can be reduced by a supervisory mechanism that can align these related interests, however, the existence of a mechanism will create agency costs.

2.5. Capital Structure

Capital structure is an important issue in a company, because the company's financial condition is reflected in its capital structure. According to Sudana (2015). "The capital structure (capital structure) is related to the long-term spending of a company as measured by the ratio of long-term debt to own capital". According to Cristie and Fuad (2015). "Capital structure is the financing of equity and debt in a company which is often calculated based on the relative size of various funding sources." The capital structure is a balance or comparison between foreign capital which is defined as debt both long and short term and equity divided into retained earnings or it could also be with company ownership (Sulindawati, 2017).

Based on the understanding of the capital structure above, it can be concluded that the capital structure is the company's long-term funding decision to finance the company's operations that come from long-term debt and own capital.

2.6. Profitability

Maximum profit or profit is the most important target or goal for every company. The profitability ratio, also known as the profitability ratio, is a ratio used to measure the level of profit the company receives (Kasmir, 2010). The profitability ratio is a ratio that measures the effectiveness of management as a whole which is indicated by the size of the level of profits obtained in relation to sales and investment (Fahmi, 2014). Profitability is the company's ability to earn profits in relation to sales, total assets, or own capital (Sartono, 2012). Profitability is generally used to

measure a company's ability to use its assets, whether it is effective and efficient. The higher the profitability of the company,

Based on the descriptions above, it can be concluded that profitability is the company's ability to generate company profits.

2.7. Free Cash Flow

Every part of the company requires cash flow which is used to finance all company activities. Therefore cash is an important factor for a company, because without cash the company will not be able to carry out its operational activities. Gitman (2006) in Rahman and Triani (2014) defines free cash flow as cash flow available to investors (creditors and owners) after the company fulfills its operational needs and covers funds for investment in both net fixed assets and net current assets.

Free cash flow is the cash flow available to investors after tax payment and investment needs (Damodaran, 2001 in Rahman and Triani (2014). Ross et al. (2000) in Kurniawan and Yuyetta (2015) define free cash flow as company cash that is not required for working capital or investment in assets that can be distributed to creditors or shareholders. Free cash flow is an important determinant in determining firm value, so company managers are more focused on efforts to increase free cash flow (Sawir, 2004).

Based on the above understanding, it can be concluded that free cash flow is the company's excess cash which can be distributed to investors in the form of dividends or used to increase the company's investment in the form of retained earnings.

2.8. Firm Size

Umam *et al.* (2016) define firm size as the amount of production capacity owned by the company and the provision of services the company can provide to customers. Brigham E. F. and Joel (2011), define firm size as the average total net sales for the year concerned over several years. Wahyudin and Salsabila (2019), define firm size as a factor that can influence debt policy because companies with large assets are more trusted by creditors. Armelia and Ruzikna (2016) in Suherman. *et al.* (2019) defines that firm size is the size of the company's capacity as assessed by the amount of the total asset value of a company.

Based on the description above, it can be concluded that firm size is a comparison that can be used to measure or determine the size of a company, which can be measured using total assets or total sales.

2.9. Effect of Profitability on Capital Structure

According to the pecking order theory, increasing the company's profitability will increase retained earnings which can be used to fund company investments. Thus, the higher the level of profitability of a company, the less funding will be made with debt. Vice versa, the lower the level of the company's profitability, the more debt the company has, this is because the company uses funding sources that come from debt.

The level of profitability can indicate the level of the company's ability to fund its own operational activities. Companies that have very high returns on their investment will cause a decrease in the capital structure because the use of debt is relatively small (Brigham *et al.*, 2006).

Based on the theory above, profitability tends to have a negative impact on the capital structure, where an increase in profitability will cause a decrease in the use of debt in the capital structure.The description above is in line with the results of research conducted by Cristie and Fuad (2015), M'ng *et al.* (2017), Sakinah and Anggono (2014), Eventsvci (2015), Kurniawan and Yuyetta (2015), Risman *et al.* (2020). The results of his research show that there is a negative and significant influence between profitability on capital structure.

Based on the theoretical descriptions and the results of the above research, hypothesis 1 (H.1.) Can be formulated as follows:

H.1.: Profitability has a negative effect on capital structure.

2.10. The Effect of Free Cash Flow on Capital Structure

Free cash flow owned by the company can be a source of agency conflict, where shareholders expect the cash to be distributed as dividends, but on the other hand, company managers want the cash to be retained as an internal stock of funds to finance company investment (Jensen, 1986). The conflicts that occur give rise to agency costs, which can be reduced by the use of debt (Wu, 2004).

Companies that have high free cash flow will monitor the behavior of managers in investing by increasing debt, so that managers will not waste the company's free cash for unprofitable investments. Companies that have high free cash flow and high debt levels will reduce agency costs. On the other hand, companies with a low level of free cash flow will also have a low level of debt, because they do not have to rely on debt as a mechanism to reduce agency costs.

The description above is in line with the results of research conducted by Melina and Ariesta (2019), Rahman and Triani (2014), Kristina *et al.* (2019). The results of his research show that there is a positive and significant effect of free cash flow on capital structure.

Based on the theoretical descriptions and the results of the above research, hypothesis 2 (H.2.) Can be formulated as follows:

H.2.: *Free cash flow* has a positive effect on capital structure.

2.11. Effect of Profitability on Capital Structure with Moderation of Firm Size

The size of the company indicates how high the level of risk the company has. Companies with a large size certainly have a higher level of risk when compared to small companies that have a low level of risk. Large companies tend to have large total assets. The bigger the size of a company, the greater the profitability that the company will get.

According to Cristie and Fuad (2015), companies with large sizes tend to have large total assets, so that the profitability generated by the company is also getting bigger. Large companies usually have a high level of sales and also generate large profits (Nuswandari, 2013). Large companies have a high profitability value, which is used as retained earnings, where retained earnings are used as a source of funding for the company.

Several other research results also show that firm size can moderate the effect of profitability on capital structure. The results of these studies include research conducted by Mirza (2015), Wahyudin and Salsabila (2019).

Based on the description and research results above, the third hypothesis (H.3.) Can be formulated as follows:

H.3.: Firm size moderates the relationship between profitability and capital structure.

2.12. The Effect of Free Cash Flow on Capital Structure with Moderation of Firm Size

Companies that are classified as large companies have a higher free cash flow when compared to small companies. This is because large companies have positive cash flow so that they have good prospects for a long period of time, have better stability, and are more able to generate profits than small companies.

In addition, companies with a large size certainly have high free cash flow, where the dividends that must be distributed to shareholders are also large. If the company manager decides not to distribute all free cash flow, then free cash flow can be used as a source of internal company funding in the form of retained earnings, or it can also be used free cash flow to pay off company debts. Therefore, the size of a company affects the free cash flow owned by the company.

The description above is in line with research conducted by Jayati and Cahyonowati (2014). The results of his research indicate that firm size moderates the effect of free cash flow on capital structure.

Based on the descriptions and research results above, the fourth hypothesis (H.4) can be formulated as follows:

H.4 .: Firm size moderates the relationship between *free cash flow* and capital structure.

3. Research Methods

3.1. Time and Place of Research

When this research was conducted from October 2019 to completion in the food and beverage sub-sector companies listed on the IDX. This study used data in the form of financial statements in the food and beverage sub-sector for the period 2011-2018. The data required for this study were obtained through the websitewww.idx.co.id.

3.2. Research Design

This study uses a quantitative approach which is carried out by the meaning of each variable and also the relationship between variables based on quantitative measurements. This study seeks to provide a causal explanation or relationship between variables. This is done through direct hypothesis testing of the independent variables on the dependent variable, as well as hypotheses involving the influence of the moderating variable.

3.3. Population and Sample Research

The population of this study is the food and beverage sub-sector companies listed on the IDX in 2011-2018. The sample of this study was selected through the purposive sampling method, which is based on the consideration of criteria or conditions that must be met, including being actively traded during the 2011-2018 period, recording consecutive profits during the 2011-2018 period, as well as completeness of data and tolerance for outliers. Based on the sample selection selection, the number of samples in this study was 9 companies.

3.4. Definition and Operations of Variables

Capital structure is measured using the proxy Debt to Equity Ratio (DER). The use of the DER proxy refers to previous research conducted by Guna and Sampurno (2018), Kurniawan and Yuyetta (2015), Zulvia and Linda (2019), Sakinah and Anggono (2014).

$$DER = \frac{Total\ Debt}{Total\ Equity}$$

Profitability is measured using the proxy Return on Assets (ROA). ROA is used as a proxy for profitability because ROA shows the effectiveness of the company in generating profits by utilizing the assets it owns. In addition, the use of the ROA proxy also refers to previous studies including M'ng *et al.* (2017). Zulvia and Linda (2019), Cristie and Fuad (2015).

$$ROA = \frac{EAT}{Total\ Asset}$$

Free cash flow obtained based on the results of the calculation of the company's operating cash flow minus capital expenditures which can be calculated by reducing the current period net fixed assets with the previous period's net fixed assets (Syamsuddin, 2007) and net working capital which is calculated by reducing current assets with current debt. Free cash flow is calculated using the formula proposed by Ross and Stephen (1999).

$$FCF = \frac{AKO - PM - MKB}{Total\ Asset}$$

Firm size as a moderating variableis proxied by the natural logarithm of total assets. The use of total assets as a proxy for firm size is based on the consideration that the company's total assets are relatively more stable than total sales and market capitalization. In addition, the use of total assets also refers to the proxy used in research (Guna and Sampurno, 2018), Mirza (2015), Said (2013), Wahyudin and Salsabila (2019).

$$SIZE = \mathbf{Ln}\ (\mathbf{Total\ Asset})$$

3.5. Data Analysis Method

The data analysis technique used in this research is multiple linear regression analysis and residual test. Multiple linear regression analysis was performed with the aim of testing more than one independent variable on one dependent variable, while the residual test was used to test the effect of the moderating variable. The steps taken are as follows:

Descriptive statistics are used to describe the data of each variable in the form of images, frequency distributions and graphs, so that the descriptions can be seen in the correlation between variables from the trend of the graphs presented. According to Ghozali (2016) descriptive statistics need to be done to see the overall picture of the samples that have been collected and meet the requirements to be used as research samples.

The classical regression assumption test is carried out to determine the relationship between the research variables used in the regression model, and to ensure that the data used are normally distributed. The classical regression assumption tests carried out in this study were the normality test, heteroscedasticity test and multicollinearity test. The autocorrelation test was not carried out in this study because this study used panel data. According to Nachrowi and Hardius (2006), the autocorrelation test on panel data is not necessary.

Hypothesis testing in this study was carried out in two ways, namely multiple linear regression test and residual test. Multiple linear regression test was conducted to test the direct effect of the independent variable on the dependent variable in this study. The multiple linear regression model used is as follows:

Model I Regression Equation

$$\mathbf{Y = \alpha + \beta 1\ X1 + \beta 2\ X2 + e}$$

The moderating variable was tested using the residual test. Moderation testing with the interaction test and the absolute value difference test has a tendency for high multicollinearity between the independent variables, it will violate the classical assumptions in the Ordinary Least Square (OLS) regression. Therefore, to overcome this multicollinearity, another method called the residual test was developed (Ghozali, 2016). The residual test model used is:

Model II Regression Equation (Hypothesis 3):

$$\mathbf{M = \alpha + \beta 1X1 + e}$$

$$\mathbf{|\ e\ | = \alpha + \beta 1Y}$$

Model III Regression Equation (Hypothesis 4):

$$\mathbf{M = \alpha + \beta 2X2 + e}$$

$$\mathbf{|\ e\ | = \alpha + \beta 2Y}$$

Information:

Y = Capital Structure
α = Constant
β1, β2 = Regression Coefficient
X1 = Profitability
X2 = Free Cash Flow
e = Error

4. Results and Discussion

4.1. Descriptive Statistics

Table-1. Descriptive Statistics Test Results

	N	Minimum	Maximum	Mean	Std. Dev
DER	72	0.1635	3,0286	0.977018	0.5100514
ROA	72	0.0090	1,2622	0.136143	0.1821633
FCF	72	-2.1634	0.7303	-0.129990	0.3711313
SIZE	72	12,1618	18,3854	15,097631	1,6866603

Source: SPSS software data processing results, 2020.

Based on Table 1., it is known that the results of descriptive statistics from 9 food and beverage companies on the IDX for 8 years of observation show that the capital structure variable has a minimum value of 0.1635 and a maximum value of 3.0286. The average (mean) value of the capital structure variable is equal to0.977020 and the standard deviation is 0.510046. Profitability hasminimum value of 0,0090 while the value the maximum is1,2622. The average (mean) value of the profitability variable is equal to0.136143 and the standard deviation is 0.182160. *Free cash flow* has a minimum value of -2.1634 whereas the maximum value is 0.7303. The average value (mean) is

equal to-0.129993 and the standard deviation is 0.371131. Firm size has a minimum value of12,1618 whereas the maximum value is18,3854. The average value (mean) is equal to15.09763 and the standard deviation is 1.686661.

4.2. Classical Regression Assumption Test

4.2.1. Normality Test

Table-2. Normality Test Results One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		72
Normal Parametersa, b	Mean	, 0000000
	Std. Deviation	, 42419898
Most Extreme Difference	Absolute	, 097
	Positive	, 097
	Negative	-, 052
Statistical Test		0.97
Asymp. Sig. (2-tailed)		, 090c, d

Source: SPSS software data processing results, 2020.

Based on the results of the normality test in Table 2. the Asymp value is obtained. Sig. (2-tailed) is 0.900. Due to the Asymp value. Sig. (2-tailed) is greater than the significance level (0.05), so the normality assumption is fulfilled. So it can be concluded that the data used in this study are normally distributed.

4.3. Heteroscedasticity Test

Identification of the presence or absence of a heteroscedasticity problem was carried out by using the Glejser test. The Glejser test was chosen because it can better guarantee the accuracy of the results compared to the graph plot test which causes bias. The Glejser test is carried out by regressing the independent variables against the absolute residual of the dependent variable (Ghozali, 2016).

Table-3. Heteroscedasticity Test Results

Model		**t**	**Sig.**	**Information**
1	(Constant)	, 884	, 380	
	ROA	1,453	, 151	Heteroscedasticity does not occur
	FCF	, 171	, 865	Heteroscedasticity does not occur
	SIZE	, 118	, 906	Heteroscedasticity does not occur

Source: SPSS software data processing results, 2020.

Based on the results of the heteroscedasticity test in Table 3. it can be seen that the probability value or Sig. From the variable profitability, free cash flow, and firm size are not significant at the 5 percent confidence level, thus it can be concluded that there is no heteroscedasticity problem in the regression model data.

4.4. Multicollinearity Test

Symptoms of multicollinearity in multiple linear regression can be seen from the correlation value between the independent variables. Variables that express multicollinearity in this study can be seen from a tolerance value greater than 0.1 or a Variance Inflation Factor (VIF) value that is less than 5.

Table-4. Multicollinearity Test Results

Model		**Tolerance**	**VIF**	**Information**
1	ROA	, 974	1,027	There is no multicollinearity
	FCF	, 990	1,010	There is no multicollinearity
	SIZE	, 980	1,020	There is no multicollinearity

Source: SPSS software data processing results, 2020.

The multicollinearity test results in Table 4 above, do not show any correlation between the independent variables which can be seen from the tolerance value> 0.1 and the VIF value <5.Therefore, it can be concluded that there is no correlation between the independent variables, or in other words. otherwise, the data is free from multicollinearity problems.

4.5. Hypothesis Test

Table-5. Results of Multiple Linear Regression Analysis

Model		T test			Adj. R^2	F test	
		B	t count	Sig.		F count	Sig.
1	(Constant)	1,028	15,700	, 000	, 301	14,848	, 000b
	ROA	, 342	1,209	, 231			
	FCF	, 750	5,399	, 000			

Source: SPSS software data processing results, 2020.

Table-6. Residual Test Results

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
	ROA	-, 194	, 229	-, 848	, 399
	FCF	-, 225	, 226	-, 996	, 332

Source: SPSS software data processing results, 2020.

4.6. Result of the Coefficient of Determination

The coefficient of determination (R^2) in Table 5 is 0.301. This value shows the ability of profitability and free cash flow in influencing the capital structure of 30.1 percent, and the remaining 69.9 percent is influenced by other variables not included in this study.

4.7. F Test Results

Based on Table 5. above, it can be seen that the calculated F value is 14.848 and the significance value is 0.000 <0.05. This means that the model is suitable to be used to predict the effect of profitability and free cash flow on the capital structure. So it can be concluded that the variables of profitability and free cash flow together (simultaneously) affect the capital structure.

4.8. Statistical Test Results t

Based on the data in Table 5 and Table 6, the t statistical test results obtained for each variable are as follows:

1. The coefficient value of the profitability variable in Table 5. is positive at 0.342. This shows that the higher the profitability, the higher the company's capital structure. This positive relationship has a significance value of 0.231> 0.05. Thus, the first hypothesis (H.1.) Is not fulfilled or it is not proven that the higher the profitability, the lower the company's capital structure.
2. The coefficient value of the free cash flow variable in Table 5. is positive at 0.750. This shows that the higher the free cash flow, the higher the company's capital structure. This positive relationship has a significance value of 0.000 <0.05. Thus, the second hypothesis (H.2.) Is fulfilled or it is proven that the higher the free cash flow, the higher the company's capital structure.
3. The value of the moderating variable coefficient of firm size on profitability and capital structure in Table 6. is negative at -0.194. The significance value of the firm size moderating variable is 0.399> 0.05. A variable is said to be moderating if the coefficient is negative and the significance value is below 0.05. Thus, the third hypothesis (H.3.) Is not fulfilled or it is not proven that firm size moderates the relationship between profitability and capital structure.
4. The coefficient value of the moderating variable firm size on free cash flow and capital structure is negative at -0.225. The significance value of the moderating variable of firm size on free cash flow and capital structure is 0.323> 0.05 and the coefficient is negative. A variable is said to be moderating if the coefficient is negative and the significant value is below 0.05. Thus, the fourth hypothesis (H.4.) Is not fulfilled or it is not proven that firm size moderates the relationship between free cash flow and capital structure.

5. Discussion

5.1. Effect of Profitability on Capital Structure

The effect of profitability on capital structure shows positive and insignificant results. The positive coefficient value shows that the higher the profitability, the higher the capital structure. Likewise, on the contrary, the lower the profitability, the capital structure will experience a decline. The results of this study are not in line with the pecking order theory which states that profitability has a significant negative effect on capital structure. This theory views that companies should prioritize internal funds over external funds to meet their operational needs, so the higher the company's profitability value, the smaller the debt the company has.

The results of this study differ from the initial hypothesis which states that profitability has a negative effect on capital structure. Therefore, the first hypothesis (H.1.) Is not proven. The findings of this study are in line with research which states that profitability is positive and insignificant for capital structure, including research by Suherman. *et al.* (2019), Naibaho *et al.* (2015), Rizky *et al.* (2016). This is probably because the profitability of the company is more used to pay dividends or to finance other things than to finance the company's operational activities.

5.2. The Effect of Free Cash Flow on Capital Structure

The effect of free cash flow on capital structure (H.2.) Shows significant results. The positive coefficient of the influence of the free cash flow variable on the capital structure shows that the higher the free cash flow, the higher the company's capital structure. Likewise, on the other hand, the lower the free cash flow, the lower the company's capital structure. In addition, with the higher free cash flow, the manager can use the free cash flow freely, so that to monitor the free cash flow, additional debt is required. Therefore, this research is in line with the trade off theory.

These findings support the results of research conducted by Sanjaya (2014), Wu (2004), Kristina *et al.* (2019), Said (2013), Rahman and Triani (2014). Their research results show a positive and significant effect of free cash flow on the company's capital structure, where an increase in company free cash flow will have an impact on increasing the use of debt to finance company capital. Companies that have high free cash flow tend to have high debt, especially for companies that have low investment opportunities. The high debt is intended to offset the incidence of agency costs from free cash flow.

5.3. Effect of Profitability on Capital Structure with Moderation of Firm size

Firm size as a moderating variable is not proven to be significant in influencing the relationship between profitability and capital structure. The theory that fits in explaining this effect is the pecking order theory, in which the company will choose to use internal funding rather than external funding. Companies that have a stable cash flow will use internal funds to finance the company's operations so that companies no longer need to use debt as a source of funding. So it can be concluded that the increase or decrease in debt policy does not depend on changes in profitability and firm size.

The findings of this study are in line with research conducted by Suherman. *et al.* (2019), which shows that the results of firm size do not significantly moderate the relationship of profitability to capital structure. The results of this study differ from the initial hypothesis which states that the firm size variable moderates the effect of profitability on capital structure.

5.4. The Effect of Free Cash Flow on Capital Structure with Moderation of Firm size

Firm size as a moderating variable is not proven to be significant in influencing the relationship of free cash flow to capital structure. The theory that is suitable in explaining the results of this research is the pecking order theory, in which the company will choose to use internal funding rather than external funding. Companies that have stable cash flow will use internal funds to finance company operations and pay dividends to shareholders, so that the company no longer needs to use the company's external funds to finance its operations. So it can be concluded that the increase or decrease in debt policy does not depend on changes in free cash flow and firm size.

The findings of this study are in line with the results of research which show that firm size does not significantly moderate the relationship of free cash flow to capital structure, including the research of Wahyudin and Salsabila (2019).

6. Conclusion

Based on the results of this study, regarding the effect of profitability and free cash flow on capital structure by moderating firm size in the food and beverage sub-sector companies, several conclusions can be made as follows:

1. Profitability has no effect on the company's capital structure.
2. *Free cash flow* has a positive effect on the company's capital structure.
3. Firm size does not moderate the effect of profitability on capital structure.
4. Firm size does not moderate influence*free cash flow* to the capital structure.

7. Limitations

This research is limited only to companies in the food and beverage sub-sector, so the results of this study can only indicate the condition of the company in the food and beverage sub-sector, and not the company as a whole. In addition, there are only two independent variables used in this study, namely profitability and free cash flow.

8. Suggestion

Based on the research results and conclusions above, some suggestions can be made as follows:

1. For the company, this study shows that of the two independent variables used, the variable that affects the company's capital structure is free cash flow which shows significant results, so that free cash flow can be used as a consideration for companies in making decisions about debt policies, so that the goals of the company. achieved namely increasing the welfare of shareholders.
2. For further research it is suggested the following:

a. The addition of other variables that affect the capital structure is not limited to using only the variables in this study.
b. Expanding the scope of research, can be in the form of adding a longer and newest research period so that it can describe the most updated situation in each sample of companies in the capital market.
c. The use of other variables that can be used as moderating variables besides firm size.

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