The Effect Of Capital *Intensity, Sales Growth, Leverage* On Tax Avoidance And Profitability As Moderators

Farid Addy Sumantri[1]
farid_addy@yahoo.com

Agus Kusnawan[2]
kusnawanagus71@gmail.com

Rr. Dian Anggraeni[3]
dian.anggraeni@buddhidharma.ac.ic

[1] [2] [3] **Universitas Buddhi Dharma**

Abstract

The purpose of this study was to examine the effect of capital intensity, sales growth, leverage on tax avoidance and profitability as a moderator. *Tax Avoidance* in this study was measured using the cash effective *tax rate (CETR)* approach and leverage was measured using *the debt to equity ratio* (DER). Profitability as a moderating variable is measured using return on assets (ROA).

The research sample uses food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange. The research method used is a purposive sampling approach. The number of companies used in this study were 11 companies with a research period span of five years, so the number of samples used in this study was 55 samples. The model in this study uses multiple linear regression.

The results of the study prove that the variables of capital intensity and sales growth have an effect on tax avoidance. On the other hand, leverage proxies with DER has no effect on tax avoidance. The results of this study can also prove that profitability is proxied by return on assets to moderate the effect of leverage on tax avoidance. On the other hand, profitability as proxied by return on assets cannot moderate the effect of capital intensity and sales growth on tax avoidance.

Keyword: Tax avoidance, Capital Intensity, Sales Growth, Leverage and Profitability.

Background of the problem
The Government of Indonesia carries out development through a series of investments that can only be implemented with the support of large enough funds. Sources of funds for the implementation of the development come from various sources from the government and the private sector, both domestically and abroad. One of the main sources used by the government for such development comes from tax revenues.

The importance of the role of taxes in the success of the national development process, where the benefits can be felt by every citizen. As a citizen as well as a taxpayer is responsible for knowing all tax provisions, as well as carrying out tax obligations. With the implementation of new tax regulations in Indonesia in 1983, there was a change in the tax collection system from an official assessment system to a self-assessment system. Under the provisions of this new system, tax payers are given the right and obligation to calculate, pay, and self-report the amount of their tax obligations. This regulation can be implemented properly if all taxpayers comply with and implement all the provisions of the existing tax laws.

The largest source of state revenue in the State Revenue and Expenditure Budget (APBN) comes from taxes (Diantari and Agung, 2016). Realization of government revenue receipts according to BPS data for the 2016-2020 period as shown in the figure below.

Table 1
Realization of State Revenue for 2016-2020
(Trillion Rupiah)

Source of Receipt	2016	2017	2018	2019	2020
Domestic Admission	.547,0	1.733,0	1.893,0	1.955,0	1.698,0
Tax revenue	1.285,0	1.473,0	1.618,0	1.546,0	1.406,0
Non-Tax Revenue	262,0	260,2	275,4	408,0	294,0
Grant	8,9	3,1	1,2	48,9	5,0
Amount	**3.102,9**	**3.469,3**	**3.787,6**	**3.957,9**	**3.403,0**

Source: Central Bureau of Statistics 2020

Based on Table 1 above, it is known that large state revenues come from tax revenues, when compared to non-tax revenues and grants. If viewed from the tax ratio of state revenues, it seems that it is still quite low, which is around 11%, the ratio of tax revenues should be between 13-14% (Jannah 2017). Because of this, the government through the Directorate General of Taxes (DGT) is trying to increase tax revenues that are used to finance the development process (Astriningtyas *et al.,* 2017). In an effort to increase tax revenues, the government carried out reforms by revising the law in the field of taxation (Hakim, 2016). Revision of tax regulations by the government aims to minimize weaknesses / loopholes that can be used by taxpayers to minimize the amount of tax owed (Rahmawati *et al.,* 2017).

This will be different, when viewed from the point of view of the taxpayer. Taxpayers will try to reduce the payment of their tax burden to the state.

Taxpayers' actions to reduce the payment of the tax burden to the state by avoiding tax. Tax avoidance is a tax avoidance strategy and technique that is carried out by taxpayers legally and safely for taxpayers because it does not conflict with tax provisions. Usually, tax avoidance is carried out by companies by utilizing exceptions and discounts in accordance with tax provisions, as well as deferring taxes that have not been regulated in the applicable tax provisions. Based on information obtained from tribunsnews.com, tax evasion in Indonesia is ranked 11th with an estimated value of 6.48 billion US dollars of corporate taxes not paid to the government.

Tax avoidance is an action taken by taxpayers by means and techniques of exploiting the weaknesses (grey areas) in tax regulations. On the other hand, tax evasion is tax evasion or smuggling carried out by taxpayers by hiding the actual conditions. Tax avoidance actions taken by taxpayers will result in reduced state revenues.

Several phenomena of tax avoidance that occur in the world and in Indonesia are mostly carried out by companies. One of them is tax evasion by IKEA, where IKEA is accused of tax evasion reaching a value of 1 billion euros or the equivalent of 1.1 billion US dollars in a period of 6 years, from 2009 to 2014. The action taken by IKEA by transferring funds from its outlets throughout Europe to its subsidiary in the Netherlands with the assumption that the company will be free from taxation at 3 STEI Indonesia Linhtenstein or Luxembourg. It is alleged that the tax evasion action carried out by IKEA has lost its tax revenues of 35 million euros or 39 million US dollars, 24 million euros or 26 million US dollars in France, and 11.6 billion euros or 13 million US dollars in the UK. In addition, it is estimated that several other countries such as Sweden, Spain and Belgium are predicted to lose tax revenues in the range of 7.5 million euros to 10 million euros (8.5 million US dollars to 11.2 million US dollars). (Kompas.com, 2016).

Meanwhile, the tax avoidance case that occurred in Indonesia involved PT Bentoel Internasional Investama. According to a report from the Tax Justice Network Institute on Wednesday, 8 May 2019, British American Tobacco (BAT) avoided tax through PT Bentoel Internasional Investama by increasing its debt from 2013 to 2015 with an affiliated company in the Netherlands, namely Rothmans Far East BV for financing return bank debt, pay for machinery and equipment. The interest expense paid by PT Bentoel will reduce taxable income in Indonesia, so that less tax is paid as a result, the country could suffer a loss of US$14 million per year. (*kontan.co.id, 2019*).

Several factors that can influence the company's management to avoid tax (tax avoidance) are 1) capital intensity. Capital intensity reflects the investment made by the company in the form of fixed assets. Other things that can influence management to avoid tax are 2) *sales growth.* The increase in the number of sales from time to time obtained by the company tends to increase profits. With the greater the profit earned by the company, the company's management tends to do tax avoidance. Other factors are 3) *laverage*. Companies can take advantage of third party debt to fund company activities. The higher level of debt owned by the company, the higher interest expense. The amount of interest expense can reduce the profit earned by the company which in turn can reduce the company's tax

burden. In addition, 4) the ROA ratio can influence the management to do tax avoidance.

The ROA ratio can be used to measure net profit on the use of company assets. The higher ratio, the better the productivity of assets used by the company to obtain net profits. If the company's profitability is higher, the taxes paid will be higher, so that the tax avoidance actions taken by the company will be higher. The results of research conducted by Elisa (2017) prove that return on assets has an effect on tax avoidance. On the other hand, the results of research conducted by Ismi (2016) shows that return on assets has no effect on tax avoidance.

Research on the factors that influence tax avoidance has been done by many previous researchers, but the results of these studies still show inconsistent results and different conclusions. This research is felt to be quite important to do because the government's tax revenue target has not been met and there are still inconsistent research results. Based on the things that have been explained, the researchers feel that this research is still important to do again on the factors that can affect tax avoidance.

Agency Theory

The agency relationship perspective is the basis for understanding the relationship between managers and shareholders. According to Anthony and Govindarajan (2012), *Agency theory* is a contract that occurs between the owner and management. The main principle of this theory states that management must create a good working relationship with the owner who has given authority. *Agency theory* based on three assumptions, namely: 1) *human assumptions*, 2) *organizational assumptions,* dan *3) information assumptions.*

Magnify the explanation above, then the assumptions of human nature can be grouped into 3 (Hanggraeni (2015, 67):

a. Human nature that prioritizes self-interest;
b. Human nature has limited rationality, and
c. Human nature that chooses to avoid risk.

Watts and Zimmerman (1990) in positive accounting put forward a hypothesis consisting of:

1. *Bonus Plan Hypothesis*

    This hypothesis explains if the company plans to provide bonuses, which is a form of material incentives. With the company's plan to distribute bonuses, managers will tend to use accounting methods that are in the standard to enlarge the size of the numbers in the financial statements.

2. *Debt Convenant Hypothesis*

    If the company has a debt agreement with a third party, the agreement contains requirements that the company must fulfill during the agreement period. If the company is experiencing financial difficulties and to avoid the terms of the agreement in the contract, the manager will try to choose an accounting method that can increase profits.

3. *Political Cost Hypothesis*

Companies tend to decrease profits when dealing with political costs. This is done to minimize the political costs they have to bear. Political costs that will be avoided by the company include all company costs related to regulations issued by the government, government subsidies, tax rates, labor demands and so on.

Tax Avoidance

Tax avoidance is a form of efficiency action taken by taxpayers to reduce the tax burden without violating applicable tax regulations. (Pohan, 2018, Santoso and Rahayu, 2013, Suandy, 2015)

The measurement of tax avoidance in this study uses the CETR. This measurement is used because it better illustrates the existence of tax evasion actions carried out by the father's obligation. This is because CETR is not affected by changes in estimates such as tax protection. If the CETR percentage is higher or closer to the corporate income tax rate, which is 25%. This indicates the lower the level of tax evasion by the company, on the contrary if the percentage of CETR is lower, this indicates the higher the level of tax evasion by the company.

Capital Intensity;

Capital intensity is used to see how much efficiency the company uses in using assets to generate sales. The amount of use of fixed assets by the company in operations can reduce the payment of the company's tax burden. This is due to depreciation costs arising from the use of these fixed assets. The cost of depreciation of fixed assets can be used by the company's management to minimize the company's tax burden.

Sales Growth

Sales growth describes the extent to which the company has made efforts to increase sales compared to the total sales as a whole. *Sales growth* affects the company's ability to earn profits and maintain profits to finance the company's investment in the future. *Sales growth* can be used as an indicator for a company's competitiveness in the industry, (Hatami *et al.,*2016).

Sales growth is used in this study, because it can predict how much profit will be obtained compared to the amount of sales growth obtained by the company. If the sales growth ratio obtained is greater, it can be indicated that there is quite good sales growth. conversely, if the sales growth ratio tends to be smaller, this indicates a decline in sales by the company.

Leverage

Leverage is often associated with debt. Briefly, it can be explained that leverage is the use of third party debt funds or loans that are used to increase returns or profits in a business or investment. The use of funds originating from third party debt may result in interest costs. The interest expense can be used as a deduction for income for the company, which in turn can save the company's tax burden.

According to Kasmir (2016,155) to measure the leverage ratio is as follows:
1. *Debt to total asset ratio.*

    It is a debt ratio used to measure the comparison between total debt and total assets, in other words, how much of the company's assets are financed by debt.
2. *Debt to equity ratio*

    the ratio used to assess debt to equity. This ratio is calculated by comparing all debt with all equity. *The debt to equity* ratio for each company is not the same, this depends on the characteristics of the business and the diversity of its cash flows. Companies with stable cash flows usually have higher ratios.

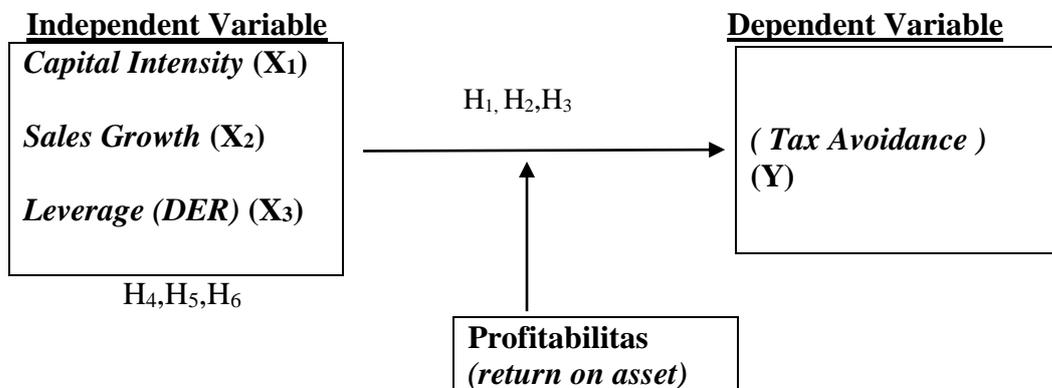### *Return On Asset* (**ROA**)

Return on assets is an indicator measuring the success of using company assets to generate profits from the use of assets. The higher the return on assets ratio, this reflects the higher the company's effectiveness in using its assets to generate profits. According Erisa, (2017) return on assets is used to measure the company's ability to use its total assets to generate profits after adjusting for the costs used to finance these assets.

Framework

The measurement of tax avoidance used in this study uses CETR as the dependent variable. While the independent variables used in this study consisted of capital intensity ratio, sales growth, and leverage which were proxied by the debt to total asset ratio, while the moderating variable of profitability was proxy by return on assets.

Based on the explanation above, the framework of thinking in the research can be described below:

Table 2
Theoretical Framework

Independent Variable

| *Capital Intensity* (X_1) |
| *Sales Growth* (X_2) |
| *Leverage (DER)* (X_3) |

H_4, H_5, H_6

H_1, H_2, H_3

Dependent Variable

(*Tax Avoidance*) (**Y**)

Profitabilitas
(*return on asset*)

Variabel Moderating
Hypothesis Formulation
         The hypothesis to be tested in this study is capital intensity, sales growth and leverage on tax avoidance. In addition, this study will also examine whether profitability as measured by returns on assets can moderate the influence of capital intensity, sales growth, and leverage on tax avoidance.
         The following will describe the formulation of this research as follows:
1. Effect of Capital Intensity on Tax Avoidance.
         The greater the intensity of a company's fixed assets will reduce tax avoidance actions, conversely the smaller the intensity of fixed assets will increase the company's management actions to tax avoidance.
         Fixed assets of the company have different useful lives. Every fixed asset owned by the company will experience depreciation. This fixed asset depreciation cost can be used by companies to avoid tax so that the company's CETR is low. Based on the description above, the hypothesis of this research can be formulated as follows:
    H_1: *Capital intensity* **has an effect on** *Tax Avoidance*.
2. Effect of Sales Growth on Tax Avoidance
         The increase in the sales growth ratio allows the company to further increase its operational capacity. Increasing operational capacity will have an impact on increasing sales and increasing company profits. The impact of the increase in profit will affect the amount of tax paid by the company, so that it will increase the tendency of the company management to avoid tax. Based on the description above, the hypothesis of this research can be formulated as follows:
    H_2: *Sales growth* **has an effect on** *tax avoidance*
 3. The Effect of Leverage on Tax Avoidance.
    The higher interest costs arising from the company's debt will have an effect on decreasing the company's tax burden. The bigger the debt, the smaller the taxable profit because the tax incentives on debt interest are getting bigger, (Permata dan Nurlela, 2018). The results of research conducted by Wulansari (2017) proves that *leverage* has a negative effect on *tax avoidance.* Based on this explanation, the hypothesis of this research can be formulated as follows:
    H_3: *Leverage* **has a significant effect on** *tax avoidance*
 4. Profitability moderates the effect of capital intensity, sales growth, leverage on tax avoidance?
         The return on assets ratio is used to measure the amount of net profit obtained from the use of company assets. The higher the value of the return on assets ratio, the more effective the management of a company's assets to generate profits. According to Dewinta & Setiawan (2016) ROA is a measure of net profit obtained from how much the company uses assets. The higher profits will increase the company's tax burden, this will increase the tendency of the company's management to do tax avoidance. Based on this description, the alternative hypothesis is formulated as follows:
    H_4:Profitability can moderate the effect of capital intensity on tax avoidance?

H$_5$:Profitability can moderate the effect of sales growth on tax avoidance?

H$_6$: Profitability can moderate the effect of leverage on tax avoidance?

Types of research

The type of research used in this study is quantitative research that emphasizes theory testing through measuring research variables using numbers and analyzing data with statistical procedures. This type of research is used, because it is quite effective for measuring the relationship between variables, as well as for finding facts and testing emerging theories (Pandoyo 2018, 111).

Object of research

The object of research used in this study uses the financial statements of manufacturing companies in the food and beverage sub-sector that are registered and successively submit complete financial reports on the Indonesia Stock Exchange for the 2017-2020 period.

Data Types and Sources

The type of data used in this research is quantitative data. Sources of data used as research samples are financial data that has been processed and published by companies on the Indonesia Stock Exchange (IDX). The data used in this study was obtained from the official website of the Indonesia Stock Exchange, namely www.idx.co.id.

Population and Sample

1. Population

The population in this study is the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2020 period.

2. Sample

This research uses purposive sampling. The sample selection used purposive sampling, because not all samples used had criteria in accordance with those determined by the researcher. The selected sample is determined based on certain criteria that have been determined by the researcher to get a representative sample.

Data collection technique

Data collection was carried out in two stages, the first stage was through library research, by reading research journals and books related to the problem being studied.

The second stage is in the form of collecting financial data for food and beverage sub-sector manufacturing companies that have been audited by KAP for the 2016-2020 period. The financial report data was obtained from the website www.idx.co.id.

Operationalization of Research Variables

In this study, three types of variables were used, namely the dependent variable, the independent variable and the moderating variable (MO). The following will describe each variable as follows:

1. Dependent Variable

The dependent variable used in this study is tax avoidance as measured using the cash effective tax rate (CETR). CETR is good for describing tax avoidance activities carried out by companies, with CETR being able to see the taxes actually paid by companies from the cash flow statement. (Wulansari, 2017). The following measures tax avoidance:

$$\text{CETR} = \frac{\text{Tax Payment}}{\text{Profit before tax}}$$

2. Independent Variabel

The following will describe the independent variables used in this study:

a. *Capital Intensity*

Capital intensity shows how much investment the company makes in fixed assets. Every fixed asset used by the company will experience depreciation, and in the financial statements will be charged as a deduction from income in the calculation of corporate tax. The greater the depreciation expense presented in the financial statements will reduce the level of tax that must be paid by the company. Fixed asset intensity ratio is the ratio of total fixed assets to total company assets (Wijayanti *et al.,* 2017). Measurement of capital intensity can be formulated as follows :

$$Capital\ Intensity = \frac{Total\ Next\ Fixed\ Assets}{Total\ Assets}$$

b. *Sales Growth*

Sales growth describes the activities carried out by the company. This has an important role in working capital management, because the company can predict how much profit will be obtained with the amount of sales growth. According to Fani (2017) sales growth measurement can be formulated as follows:

$$SG = \frac{\text{Net Sales}\ (t0) - \text{Net Sales}\ (t-1)x\ 100\%}{\text{Net Sales}\ (t-1)}$$

c. *Leverage*

The leverage variable in this study was measured using *the debt to equity ratio (DER). Debt to equity ratio* is a ratio used to measure the proportion of debt to equity. The higher DER, the smaller the amount of owner's capital that can be used as debt collateral. *Debt to equity ratio* formulated as follows:

$$DER = \frac{\text{Total Debt}}{\text{Total Capital}}$$

d. Moderation Variabel

Moderating variables are variables that affect the relationship between the independent and dependent variables. The moderating variable used in this study is profitability which is *proxy* with *return on assets*. *Return on assets* is used to measure the company's ability to generate profits by using the total assets of the company. The *return on assets* variable is measured comparing net income with the company's total assets (Hery 2016, 193).

$$ROA = \frac{Net\ Profit}{\text{Total Assets}}$$

Data Analysis Technique

Data analysis techniques in this study consisted of descriptive statistical tests, llasik assumption tests), multiple linear analysis, coefficient of determination test (adjusted R2) and hypothesis testing (partial test). The analytical tool used in this study to test the hypothesis is multiple linear regression with a significance level of = 5%. The tests carried out in this study are as follows:

1. Descriptive Statistics Test

Descriptive statistics can explain the variables contained in the study. In addition, descriptive statistics provide numerical measures that are very important for sample data carried out with SPSS software tools.

2. Classical Assumption Test

Classical assumption test was used in this study to ensure that normality, autocorrelation, multicollinearity and heteroscedasticity were not included in the data used. If all of these conditions are met, it means that the data is quite feasible to be used in this study. (Pandoyo, 2018).

3. Model Test
a. Multiple Linear Regression Analysis

Testing the model in this study using multiple linear regression equations involving the relationship of two or more independent variables. This research model can be formulated as follows:

1) Technical analysis of this research using model 1 is as follows:

$$CETR = \alpha + \beta_1 CI + \beta_2 SG + \beta_3 DER + \varepsilon$$

2) Alternative hypothesis testing aims to test whether the proxied profitability with return on assets can moderate the effect of capital intensity, *sales growth and leverage as proxy by DER on tax avoidance*

with a significance level of = 5%. Technical analysis of this research using model 2 as follows:

$$CETR = \alpha + \beta_1 CI + \beta_2 SG + \beta_3 DER + \beta_4 ROA ++ \beta_5 CI*ROA + \beta_6 SG*ROA + \beta_7 SG *ROA + \varepsilon$$

Dimana :

CETR	: *Cash effective tax rate*
α	: Constant
β_{1-7}	: Regression coefficient for each variable x
CI	: *Capital intensity*
SG	: *Sales growth*
DER	: *Leverage*
ROA	: *Return on asset*

a. Coefficient of Determination Test (*Adjusted* R^2)

The results of the coefficient of determination test are determined by the adjusted R2 value with a value range of zero to one. If the adjusted R2 value is close to one, it means that the independent variable is able to provide all the information needed to predict the dependent variable and vice versa if the Adjusted R2 value is close to zero, it means that the ability of the independent variable to predict the dependent variable is very limited.

4. Hypothesis Testing

The partial hypothesis test (t test) shows how far the influence of one independent variable individually in explaining the variation of the dependent variable (Ghozali 2016, 97).

Analysis of Research Results

1. Descriptive Statistics Test
Descriptive statistical tests are used to provide a general description of the variables used in the study. In this study using three independent variables, namely; capital intensity (CI), sales growth (SG), and leverage (DER), the dependent variable in this study is tax avoidance (CETR). The results of the descriptive statistical test are shown in table 2 below:

Table 3
Descriptive Statistics Test Results

Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
CETR	55	,89	,96	,9396	,00214	,01587
Capital Intensity	55	,87	,99	,9484	,00396	,02936
Sales Growth	55	-,04	,06	,0049	,00166	,01230
DER	55	,90	1,08	,9891	,00459	,03406
Valid N (listwise)	55					

Source : Data processing results SPSS 25

Based on table 2 above, it can be explained that the dependent variable, namely tax avoidance as proxied by CETR has a standard deviation value of 0.01587 with an average value of 0.9396 and a minimum value of 0.89 and a maximum value of 0.96. It can be concluded that most of the sample companies studied tend not to do tax evasion, seen from the range value indicates that the data on the tax avoidance variable has a small or homogeneous data distribution. This result can be seen from the standard deviation value which is smaller than the average value, this indicates that the data can be used in this study.

Capital intensity shows an average value of 0.9484 with a standard deviation value of 0.02936 and a minimum value of 0.87 and a maximum value of 0.99. Judging from these data, most of the sample companies studied have high capital intensity values which can reduce profits and from the results of the range, it shows that the capital intensity data has a small or homogeneous data distribution, the standard deviation value is smaller than the average value. ie 0.02936 < 0.9484. Thus this indicates that the data used is good data and can be used in this study.

Sales growth shows an average value of 0.0049 with a standard deviation value of 0.01230 and a minimum value of -0.04 and a maximum value of 0.06. Based on the results of the analysis above, it can be explained that a small number of sample companies tend to experience a decline in sales growth.

Based on this range, it indicates that the distribution of data for sales growth is not homogeneous. This can be seen from the standard deviation value compared to the average value, which is 0.01230 > 0.0049. Thus the data to be used in this study is not good enough.

Leverage proxied by DER shows an average value of 0.9891, a standard deviation value of 0.03406, a minimum value of 0.90, and a maximum value of 1.08. The average leverage value of 0.9891 indicates that 98.91% of the company's level of capital funding comes from debt. It can be concluded that most of the companies in this study have a fairly high ratio of total debt and capital.

When viewed from the range, it indicates that leverage has a small or homogeneous data distribution. This can be seen from the standard deviation value which is smaller than the average value. This shows that the data used is quite good.

2. Classic Assumption Test Results

Based on the results of tests carried out on the data of this study, it shows that the data are normally distributed, there is no multicollinearity between independent variables in the regression model and there is no heteroscedasticity in the regression model, so the regression model is feasible to use to predict CETR.

3. Model Test Results

Partial and simultaneous testing is carried out using model 1. Based on the results of the tests that have been carried out, it can be presented in table 3 below;

Table 4
Multiple Linear Regression Analysis Test Results
Model 1 : CETR = α + β₁CI + β₂SG + β₃DER + ε

Model	Unstandardized Coefficients	t	Sig	α
1 (Constant)	0,605	0,311	0,000	
Capital Intencity	0,234	3,080	0,003	0,05
Sales Growth	0,172	2,412	0,031	0,05
DER	0,113	0,243	0,080	0,05

Adjusted R^2 = 0,415
F = 13,347
Sig. F = 0,000
Source: Processed data

Based on the table above, it can be arranged multiple linear regression equations as follows:

CETR = 0,605 + 0,234 CI + 0,172 SG+ 0,113 DER + ε

From the table above shows the adjusted R2 value of 0.415 which is close to the zero value. This shows the weak influence of the independent variables (CI, SG and DER) on the dependent variable (CETR). From table 3 above, it is known that the value of F is 0.000 < 0.05, it can be concluded that capital intensity, sales growth and debt to total equity simultaneously affect tax avoidance.

It is known that the value of capital intensity is 0.003 < 0.05 indicating that capital intensity has an effect on tax avoidance, the p value of sales growth is 0.031 < 0.05, this proves that sales growth has an effect on tax avoidance, so the hypothesis proposed in this study namely H1 and H2 are accepted, and proven.

On the other hand, the DER value value is 0.080 > 0.05, indicating that DER has no effect on tax avoidance, so the hypothesis (H3) proposed in this study is rejected and not proven.

The next test is to prove whether profitability as proxy by return on asset can moderate the effect of capital intensity, sales growth and leverage as proxy by DER on tax avoidance. The test results are presented in table 4 below:

Table 5
Moderation Variable Test Results
Model 2 : CETR = β_0 + β_1 CI + β_2 SG + β_3 DER + β_4ROA + β_4 CI*ROA + β_5SG*ROA + β_6 DER*ROA + ε

Model	Unstandardized Coefficients	t	Sig	α
1 (Constant)	-,0397	2,180	0,711	0,05
CI	-0,120	-0,165	0,869	0,05
SG	1,674	1,635	0,018	0,05
DER	1,561	2,161	0,036	0,05
ROA	1,039	-0,877	0,385	0,05
CI*ROA	0,470	-0,556	0,581	0,05
SG*ROA	0,102	0,720	0,475	0,05
DER*ROA	-1,607	-2,065	0,044	0,05
Ajusted R^2	**= 0,556**			
F	**= 10,036**			
Sig. F	**= 0,000**			

Source: Processed data

The results of testing the alternative hypothesis in table 4 above show that return on assets can moderate the effect of leverage as proxy by DER on tax avoidance, so the hypothesis (H6) proposed in this study is accepted and proven.

On the other hand, return on assets cannot moderate the effect of capital intensity and sales growth on tax avoidance, so the hypothesis in this study (H4 and H5) is rejected and not proven.

Discussion of Research Results

The results of this study prove that capital intensity and sales growth have an effect on tax avoidance, on the contrary, leverage which is proxy by DER has no effect on tax avoidance. The results of this study also prove that return on assets can moderate the effect of leverage as proxy by DER on tax avoidance, on the other hand return on assets cannot moderate the effect of capital intensity and sales growth on tax avoidance. The discussion of the results of this study will be explained as follows:

1. **The effect of capital intensity on tax avoidance.**

Based on the test results show that, capital has an effect on tax avoidance. These results are indicated by the value of sig. 0.003 is smaller than the value (α) of 0.05. The greater the profit earned by the company will increase the tax burden, so that it will increase the tendency of tax avoidance by the company's

management. This shows that companies that have high capital intensity tend not to do tax avoidance.

The results of this study are in line with the research of Noviari and Dharma (2017) that capital intensity affects tax avoidance (tax avoidance). Companies that emphasize capital intensity or tend to choose to invest more in fixed assets will have a lower effective tax rate. The results of this study contradict Nafis and Manik (2018) where the capital intensity variable has no effect on tax avoidance.

1. **Effect of sales growth on tax avoidance**

Based on the test results show that, sales growth has an effect on tax avoidance practices. These results are indicated by the value of sig. 0.031 is smaller than the value (α) 0.05. The results of this study are not in line with the results of Wulansari and Rahmawati's research (2017) that sales growth has no effect on tax avoidance.

It can be concluded that sales growth directly results in an increase in profit, besides that there are other factors that can influence it, if there is a decrease in cost of goods or the amount of operating expenses that can lead to an increase in profit. From these conditions, it can be seen that if sales growth increases, a decrease in cost of goods and operating expenses causes an increase in profit, so that tax avoidance actions that will be carried out by management will increase.

2. **Effect of leverage on tax avoidance**

Leverage proxies with DER shows the value of sig. 0.080 is greater than the value (α) of 0.05, this indicates that leverage has no effect on tax avoidance. The results of this study support the research of Erisa and Kimsen (2018) that leverage has no effect on tax avoidance.

This is because debt that results in interest expense can be deducted from tax profit, while the government issued a new regulation that regulates the ratio of the amount of debt and capital as regulated in Minister of Finance Regulation No. 169/PMK.010/2015 which has been stipulated and promulgated on September 9, 2015 and released on the Ministry of Finance website.

The amount of the ratio between debt and capital as referred to in Article 1 paragraph (1) is set at a maximum of 4: 1. With this regulation, a company that has a DER ratio of more than 4:1, part of the interest expense cannot be deducted as a deduction expense. Taxable income.

3. **Profitability can moderate the effect of capital intensity on tax avoidance**

The test results prove that proxied profitability with return on assets cannot moderate the effect of capital intensity on tax avoidance. The amount of assets used by the company will increase the depreciation expense which in turn will reduce the company's net profit. However, the decrease in profits obtained by the company did not affect the management's actions to do tax avoidance.

4. **Profitability can moderate the effect of sales growth on tax avoidance**

The test results prove that proxied profitability with return on assets cannot moderate the effect of sales growth on tax avoidance. *Return on assets*

is an indicator to show how much net profit is obtained by using company assets. The higher the value of the return on assets ratio, the higher the company's profits, this shows the better management of company assets by the management. However, the results of this study do not prove that the better management of a company's assets does not affect the actions of the company's management to take tax avoidance actions.

5. Profitability can moderate the effect of leverage on tax avoidance

The test results prove that proxied profitability by return on assets can moderate the effect of leverage proxied by DER on tax avoidance.

The amount of use of company debt, will increase the interest expense. The interest expense is a deduction from the profit earned by the company. The decrease in profit earned by the company will reduce the company's tax burden. The results of this study prove that the lower the ratio of return on assets can reduce the actions of the company's management to take tax evasion.

Conclusion

The purpose of this study is to obtain empirical evidence of the effect of capital intensity, sales growth, and leverage on tax avoidance. In addition, this study is also to prove whether profitability as a proxy with return on assets can moderate the effect of capital intensity, sales growth, and leverage on tax avoidance. From the results of the analysis and discussion described above, it can be concluded as follows:

1. *Capital intensity (CI)* has an effect on tax avoidance with a value of sig. 0.003 is smaller than the value (α) of 0.05.
2. *Sales growth (SG)* has an effect on tax avoidance with a value of sig. 0.031 is smaller than the value (α) of 0.05.
3. *Leverage* has no effect on tax avoidance with a sig value. 0.080 is greater than the value (α) of 0.05.
4. *Profitability* cannot moderate the effect of CI on tax avoidance with sig. 0.581 is greater than the value (α) of 0.05.
5. *Profitability* cannot moderate the effect of sales growth on tax avoidance with a sig value. 0.475 is greater than the value (α) of 0.05.
6. *Profitability* can moderate the effect of DER on tax avoidance with a value of sig. 0.044 is smaller than the value (α) of 0.05.

Research Limitations

This study has several limitations. The following are the limitations faced in this study:

1. The selected companies are the population and the sample is only from food and beverage producer companies, so the results of this study cannot be generalized to all types of companies.
2. The research period is limited to only 5 years (2016-2020) so the consistency of this research may need to be retested.
3. The independent variables used are limited to only 4 variables and only use 11 company data for 5 years.
4. In this study the measurement of tax avoidance using CETR).

Suggestion

Some suggestions that can be given based on the discussion and conclusions of this study are as follows:

1. For Academics

The results of this study are expected to provide more input for management who have a high total capital intensity, because companies that emphasize capital intensity have a tendency to avoid tax. This is evidenced where the results of this study where capital intensity affects tax avoidance.

2. For Further Researchers

Based on the limitations stated above, the following are suggestions for further research:

a. Further research is suggested to add a wider sample and extend the research period so that the research results can be generalized.

b. It is recommended to add other independent variables to detect the existence of tax avoidance actions by companies such as audit quality, institutional ownership, compensation for fiscal losses and independent commissioners.

c. Measurement of tax avoidance for further research is recommended to use applications other than CETR (cash effective tax rate), namely ETR (effective tax rate).

3. For Regulators

From the results of this study, it can be used as a reference for the Government to supervise taxpayers who carry out tax avoidance actions. In addition, the government can revise tax regulations to be firm and clear so as to minimize gaps that can be used to carry out tax avoidance practices by taxpayers.

4. For Practitioners

Based on the results of this study, it is recommended for company management, especially those related to taxation elements that allow tax avoidance practices so that they can be a reference in making decisions that do not violate the applicable tax provisions.

DAFTAR PUSTAKA

Anthony dan Govindarajan, *Management Control System.* Jakarta: Salemba Empat, 2012

Darma, N.B.S., & Noviari, Naniek. Pengaruh Corporate Social Responsibility dan Capital Intensity Terhadap Tax Avoidance. *E-Jurnal Akuntansi Universitas Udayana.* Bali, 2017

Dewinta, I.A.R., & Setiawan, P.E. Pengaruh Ukuran Perusahaan, Umur Perusahaan, Profitabilitas, Leverage, dan Pertumbuhan Penjualan Terhadap Tax Avoidance. *E-Jurnal Akuntansi Universitas Udayana*. Bali, 2016

Erisa, Yuni.,Kimsen.,& Eksandy, Arry. Pengaruh Return On Assets, Komite Audit dan Leverage Terhadap Penghindaran Pajak (Tax Avoidance).*Competitive Jurnal Akuntansi dan Keuangan Universitas Muhammadiyah*. Tangerang, 2018

Fahmi, Irham. *Pengantar Manajemen Keuangan Teori dan Soal Jawab.* Bandung: Alfabeta, 2013

Ghozali, Imam. *Aplikasi Analisis Multivariete dengan Program IBM SPSS 23. Edisi 8. Cetakan ke VIII.* Semarang: Badan Penerbit Universitas Diponegoro, 2016

Hanggraeni, D. *Manajemen Resiko Perusahaan dan Good Corporate Governance*. Jakarta: Salemba, 2015

Hermanto, Bambang dan Agung Mulyo. *Analisa Laporan Keuangan. Cetakan ke IV.* Jakarta: Lentera Ilmu Cendekia, 2015

Ismi, Fadil.,Linda, Pengaruh Thin Capitalization, Return On Asset, dan Corporate Governance Terhadap Tax Avoidance Pada Perusahaan Jakarta Islami Index (JII). *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi (JIMEKA).* Vol 1, No.2. Fakultas Ekonomi dan Bisnis. Universitas Syiah Kuala, Banda Aceh, 2016

Kasmir. *Analisis Laporan Keuangan*. Jakarta: Raja Grafindo Persada, 2016

Laporan Keuangan Perusahaan. *www.idx.co.id.* Diakses pada 10 Januari 2019

Pandoyo & Sofyan.,Moh. *Metodologi Penelitian Keuangan dan Bisnis.* Cetakan Pertama. Bogor: In Media, 2018

Pohan, Chairil Anwar. *Manajemen Perpajakan Strategi Perencanaan Pajak dan Bisnis.* (Edisi Revisi). Jakarta: PT. Gramedia Pustaka Utama, 2014

Resmi, Siti. *Perpajakan Studi dan Kasus.* Edisi 10 Buku 1. Yogyakarta: Salemba Empat, 2017

Suandy Erly. *Hukum Pajak*. Edisi 6. Yogyakarta: Penerbit Salemba Empat, 2014

Subramanyam, K.R. *Financial Statement Analysis. Eleventh Edition.* Singapore: Mc Graw Hill, 2014

Sugiyono. *Memahami Penelitian Kualitatif.* Bandung: Alfabeta, 2012

Sujarweni, V.W. *Metodologi Penelitian Bisnis dan Ekonomi.* Yogyakarta: Pustaka Baru Press, 2015

Sumarsan, Thomas. *Perpajakan Indonesia*. Edisi Kelima. Jakarta: Indeks, 2012

Waluyo. *Perpajakan Indonesia.* Edisi 12 Buku 1. Jakarta: Salemba Empat, 2017

Watts, R. L., and Zimmerman, J.L. *Positive Accounting Theory: A Ten Year Perspective*. American Accounting Association. America, 1990

Wulansari.,N., Herlina., & Rahmawati.,D. Pengaruh Kepemilikan Institusional, Proporsi Dewan Komisaris Independen, Komite Audit, Konservatisme Akuntansi, Pertumbuhan Penjualan dan Leverage Terhadap Penghindaran Pajak. *E-Jurnal Akuntansi Universitas Islam Indonesia,* 2017

_____.UU No. 16 Tahun 2009 Pasal 1 Ayat 1

www.pajak.go.id (Diakses tanggal 11 Januari 2021)