

**THE EFFECT OF DEFERRED TAX AND TAX BOOK DIFFERENCE
ON RETURN ON ASSETS IN FOOD AND BEVERAGE COMPANIES
LISTED ON THE INDONESIA STOCK EXCHANGE****Henny Zurika Lubis^{1*}, Kihanjar Ali²,**^{1,2} University of Muhammadiyah North Sumatra

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***Email:** hennyzurika@umsu.ac.id**ABSTRACT**

This study aims to determine and test the effect of deferred tax and tax book differences on return on assets in manufacturing companies listed on the IDX. The type of research is quantitative associative research, the population in this study is manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange (IDX) which totals 26 companies with an observation year of 5 years, so the number of samples in this study is 70 samples determined by *the purposive sampling* method. Secondary data sources were obtained from data published on the IDX. Data analysis techniques with descriptive statistics, classical assumption tests, and hypothesis tests using SPSS software. Based on the test results, it is known that there is a negative and significant effect of deferred tax on return on assets, then the tax book difference has a positive and significant effect on return on assets. Simultaneously, deferred taxes and tax book differences affect returns on assets.

INTRODUCTION

Return on asset (ROA) is a ratio that shows the company's ability to generate profits from the assets used. *Return on Assets* (ROA) is an analysis used to measure a company's effectiveness in generating profits by utilizing its assets (Alun & Sakti, 2007). The company always strives so that this ratio can always be improved. This is because the higher the ROA, the more effective the company is in utilizing its assets to generate net profit after tax, with the increasing ROA, the company's performance in terms of profitability is better (Alun & Sakti, 2007). Profit is also a determinant of the amount of tax that must be paid by the company. Taxes for the state are one of the revenues used for the benefit of the state, while for companies, taxes are a burden that reduces the company's profits. In business practice, entrepreneurs generally identify tax payments as a burden so they will try to minimize it to optimize profits. To increase efficiency and competitiveness, managers are obliged to reduce costs as optimally as possible. Similarly, the obligation to pay taxes, because tax costs will reduce profit after tax (*After Tax Profit*), return rate (*rate of return*), and cash flow (*Cash Flows*) (Apriliyani et al., 2019). According to Pohan (2010), tax planning is a tool of tax management which is a series of accounting and financial strategies of the company so that

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the taxes paid by the company are efficient in a way that does not violate tax regulations. *Book tax differences* as a proxy *Accrual Discretionary* It is the difference between accounting profit and fiscal profit which is only a temporary difference, and is shown by the deferred tax expense (benefit) account. Variable *book-tax differences* It is a moderation variable that represents a sub-sample of companies with a large positive difference and a large negative difference between accounting profit and fiscal profit. (Rianto & Murtiani, 2019) *Tax-to-book differences* are a comparison between the taxable income ratio (*taxable income*) to accounting profit (*book income*). Companies that have accounting profits (*book income*) which is greater than fiscal profits (*taxable income*) The tendency to manage profits in companies will be high to avoid paying large taxes. The magnitude of the difference between accounting profit and tax profit (accounting profit > tax profit) which can be seen in the greater the amount of deferred tax with positive value in the company shows that the management is more likely to take profit management actions. This action results in accounting profit (*book income*) which is reported to be of poor quality, so the company's performance is feared to decline in the future. However, the smaller the difference between accounting profit and tax profit (accounting profit < tax profit) which can be seen from the greater the amount of negative deferred tax on the company, the lower the company's ability to earn profits resulting in a greater chance of the company defaulting due to its inability to pay long-term obligations in the future (Rahayu et al., 2017).

According to (Purba, 2010) revealed that the recognition of deferred tax can have an impact on a reduction in net profit or a reduction in net loss. Recognition of deferred tax that can affect the company's net profit, then deferred tax can also affect the company's profitability. Furthermore, according to (Mirandia, 2016) Deferred taxes are the result of a temporary difference in good *taxable temporary differences* And *Deductible Temporary Differences*. Where the temporary difference occurs as a result of the difference between the basis for the imposition of tax-DPP of an asset or obligation and the recorded value, which will result in an increase or decrease in fiscal profit in the coming period. Jensen & Meckling (1976) explained agency theory is a theory that reviews the relationship between the principal and the agent. The principal delegates authority to the agent to manage the company. As a manager, the management has more information about the company's current and future business prospects than shareholders. Therefore, in decision-making, shareholders rely heavily on the information published by management. However, naturally, management has different interests from shareholders. Eisenhardt (1989) explained that there are three human traits in the theory of agency, namely: (1) a selfish person (self-interest); (2) individuals who have limited thinking power regarding the perception of the future (bounded rationality); (3) individuals who avoid risk (risk averse). From this trait, management will prioritize its interests first. This is what encourages management as an agent to use its knowledge to use accounting figures to fulfill its wishes, including publishing information that is not by the facts in the company.

RESEARCH METHODS

The type of research conducted is quantitative associative research. According to (Umar, 2003), associative research is research that aims to find out the relationship between two or more variables, and the data used is data in the form of numbers. The population in this study is 26 manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange (IDX) with an observation year from 2017-2021. The sample from this study was determined by the *purposive sampling method*, which is sample selection based on certain criteria and systematics.

The criteria for companies sampled in this study are:

- Food and beverage sub-sector companies that *go public* and are listed on the Indonesia Stock Exchange for the 2017-2021 period.
- Food and beverage sub-sector companies that are consecutively listed on the Indonesia Stock Exchange for the 2017-2021 period.
- Companies in the food and beverage sub-sector that earned profits in the 2017-2021 period.

Based on the criteria for selecting research samples that have been set above, a research sample of 14 manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange was obtained, with a total of 70 observation units for 5 (five) years of observation in this study. The classical assumption test is a stage that must be carried out before the hypothesis test. This needs to be done to determine the possibility of normality, linearity, multicollinearity, autocorrelation, and heteroscedasticity. To find out whether there is a significant influence of independent variables on dependent variables, a multiple linear regression model is used, which is formulated as follows:

$$Y = a + b_1 X_1 + b_2 X_2$$

Information:

Y = Return on Assets

a = Regression equation constant

b_1, b_2 = Koefisien Regression

X_1 = Deferred Tax

X_2 = Tax Book Differences

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RESULTS

A. Descriptive Statistical Analysis

The data that has been collected in the study is processed and analyzed using statistical tools, namely descriptive statistics. Descriptive statistical analysis is used to describe the variables contained in the research.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Deferred Tax	70	-,20	,02	-,0276	,03967
Tax Book Difference	70	-7,12	3938,82	106,0693	621,04560
ROA	70	,00	,53	,1067	,09183
Valid N (listwise)	70				

Based on the table above, it is known that the Deferred Tax variable with a sample number of 70 had a minimum value of -0.02 and a maximum value of 0.2 with an average value of -0.0276 with a standard deviation of 0.03967. Next for the variable *Tax Book Difference*, It is known that with the number of samples 70 has a minimum value of -7.12 and a maximum value of 3938.82 with an average value of 106.0693 with a standard deviation value of 621.04560. Likewise, the ROA variable with a sample number of 70 has a minimum value of .00 and a maximum value of 0.53 with an average value of -0.1067 with a standard deviation of 0.09183.

2. Classical Assumption Test

a. Normality Test

The normality test aims to test the data whether the distribution of research data has been distributed normally or not. By using the Kolmogorov-Smirnov test with the test criteria If *Asymp.Sig. (2-tailed)* > 0.05 then the data is normally distributed, otherwise if *Asymp.Sig. (2-tailed)* < 0.05 then the data is not distributed normally.

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Table 2.
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		70
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	,04422263
Most Extreme Differences	Absolute	,100
	Positive	,100
	Negative	-,069
Test Statistic		,100
Asymp. Sig. (2-tailed)		,081 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

In the table above, the Asymp value is known. SIG 0.81 is greater than 0.05 ($\alpha = 5\%$, significant level), then the residual data is normally distributed. So that this research data can be continued.

b. Multicollinearity Test

Multicollinearity testing is carried out by looking at VIF and tolerance value, namely if the Tolerance value > 0.100 and the VIF value < 10.00 , indicating no symptoms of multicollinearity. The following are the results of the multicollinearity test below:

Table 3. Coefficients^a

Type		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,056	,007		8,047	,000		
	Deferred Tax	-1,733	,192	-,748	-9,006	,000	,501	1,995
	Tax Book Difference	2,506E-5	,000	,169	2,039	,045	,501	1,995

a. Dependent Variable: ROA

From Table 4.8. showed that the tolerance value of the 2 variables was less than 1, and the VIF value was less than 10 so that it could be concluded that the research data did not contain symptoms of multicollinearity so that the data could be continued to be tested in stages Next.

c. Autocorrelation Test

The autocorrelation test aims to test whether in a linear regression model, there is a correlation between the perturbation error in the t-period and t-1 (previously) through the Durbin-Watson method. The following is an autocorrelation test table:

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Table 4. Model Summary^b

Type	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,876a	,768	,761	,04488	1,128

a. Predictors: (Constant), Tax Book Difference, Deferred Tax

b. Dependent Variable: ROA

From the results in Table 4.10 above, it is known that the Durbin-Watson value obtained is 1,128 which means that it is included in the criterion of point 2, so it can be concluded that the regression model has no autocorrelation so that the research data can be continued to the next stage.

d. Heteroscedasticity Test

The heteroscedasticity test aims to test whether there is an unevenness in the variance from the residual of one observation to another in the regression model. A good regression model is that heteroscedasticity does not occur.

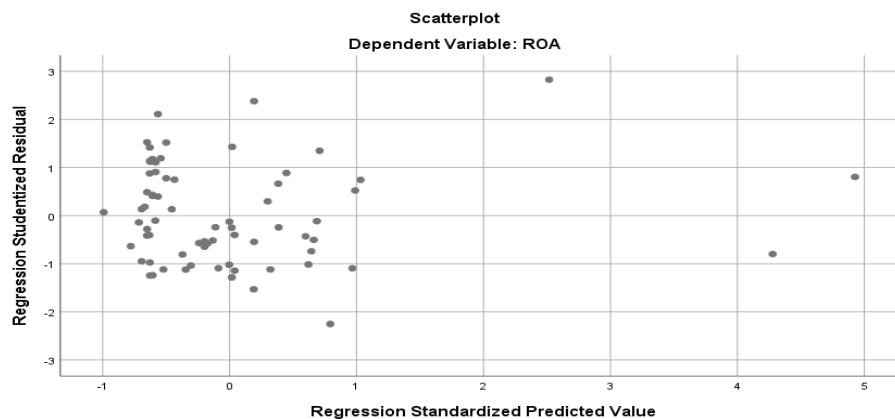


Figure 1. Scatterplot

From the Scatterplot chart, it can be seen that if there is no clear pattern, and the dots spread above and below the number 0 on the Y axis, then it indicates that there is no heteroscedasticity. It can be concluded that there is no heteroscedasticity in the regression model so the regression model is suitable to be used to see the influence of independent variables on dependent variables.

3. Test Hypothesis

1. Multiple Linear Regression Analysis

In addition to using descriptive statistical analysis, inferential statistical analysis is also used to test the hypothesis proposed in this study.

Table 5. Multiple Linear Regression Test Results

Type	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	,056	,007		8,047	,000
Deferred Tax	-1,733	,192	-,748	-9,006	,000
Tax Book Difference	2,506E-5	,000	,169	2,039	,045

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + e$$

$$Y = 0.056 - 1.733 X_1 + 2.506E-5 X_2 + e$$

From the multiple linear regression equation above, it can be explained as follows:

1. The value of the constant (a) has a positive value of 0.056. A positive sign means that it shows a unidirectional influence between independent variables and dependent variables. This shows that if all independent variables including Deferred Tax (X1), and *Tax Book Difference* (X2), are valued at 0 percent or have not changed, then the ROA value is 0.056.
2. The regression coefficient value for the Deferred Tax variable (X1) is -1.733. This value shows a negative influence (opposite direction) between the Deferred Tax variable and ROA. This means that if the Deferred Tax variable increases by 1%, then on the contrary, the ROA variable will decrease by -1,733. Assuming that the other variables remain constant.
3. The regression coefficient value for the *Tax Book Difference* (X2) variable has a positive value of 2.506. This shows that if the *Tax Book Difference* increases by 1%, then the ROA will increase by 2,506 assuming other independent variables are considered constant. A positive sign means that it shows a unidirectional influence between independent variables and dependent variables.

2. Coefficient of Determination (R-Square)

The purpose of the determination coefficient is to find out the sum of the percentage of independent variables in influencing the dependent variables, the value of this determination coefficient can be seen in Table 4.13 below:

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Table 6. Coefisien Determination (R-Aquare)

Type	R	R Square	Adjusted R Square
1	,876a	,768	,761

Source : Data processed by SPSS

Based on the SPSS output table above, it is known that the value of the determination coefficient or R Square is 0.768 or equal to 76.8%. This figure means that the Deferred Tax variable (X1) and the *Tax Book Difference* variable (X2) have a very strong effect on the ROA (Y) variable of 76.8%. While the rest ($100\% - 76.8\% = 23.2\%$) is influenced by other variables outside this regression equation or variables that are not studied.

3. Simultaneous Test (F)

The F test in the Regression model is carried out to find out whether all independent variables (simultaneously/together) affect the bound variables. That is, to find out **whether they have a significant effect or not**. Simultaneous tests (Test F) are used to test and determine the influence of variable X on variable Y simultaneously. The test was carried out using a significance level of 0.05 ($\alpha=5\%$). Decision-making with the following criteria:

1. If $F_{\text{calculates}} < F_{\text{table}}$ at $\alpha = 5\%$, then H_0 is accepted.
2. If $F_{\text{calculates}} > F_{\text{table}}$ at $\alpha = 5\%$, then H_0 is rejected.

Table 7. Test F

ANOVAa

Type		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	,447	2	,223	110,946	,000B
	Residual	,135	67	,002		
	Total	,582	69			

a. Dependent Variable: ROA

b. Predictors: (Constant), Tax Book Difference, Deferred Tax

Source: data processed by SPSS

Based on the SPSS output table above, it is known that the F value is calculated at $110.946 > F_{\text{table}}$ is 1.99601, and the Sig. value is $0.000 < 0.05$, so by the basis of decision-making in the F test, it can be concluded that the hypothesis is accepted or in other words, the Deferred Tax (X1) and *Tax Book Difference* (X2) simultaneously affect the *Return on Asset* (Y).

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4. Partial Test (T-Test)

Partial testing is carried out to test whether or not individual independent variables have a significant influence on the bound variables. The criteria for decision-making with a significance level of 0.05 (5%) are as follows:

1. If $t\text{-count} < t\text{-table}$ at $\alpha = 5\%$, then H_0 is accepted.
2. If $t\text{-count} > t\text{-table}$ on $\alpha = 5\%$, then H_0 is rejected.

Table 8. Test T

Type		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,056	,007		8,047	,000
	Deferred Tax	-1,733	,192	-,748	-9,006	,000
	Tax Book Difference	2,506E-5	,000	,169	2,039	,045

Source; SPSS Data Processing

1. Effect of Deferred Tax on ROA

Based on Table 4.11. Above obtained t calculation for variable X1, namely deferred tax of -9.006 with $\alpha = 0.05$ and $dk = n-k$ ($70-2= 68$), obtained t table 1,670. In this case, $t_{\text{count}} -9,006 < t_{\text{table}} 1.670$. with a significance value of $0.000 < 0.05$ so that the hypothesis is accepted, meaning Deferred Tax has a negative effect against ROA.

2. Effect of *Tax Book Difference* on ROA

obtained t calculation for variable X2 i.e. *Tax Book Difference* of 2,039 with $\alpha = 0.05$ and $dk = n-k$ ($70-2= 68$), obtained t table 1,670. In this case, $t_{\text{count}} -2,039 > t_{\text{table}} 1.670$. with a significance value of $0.045 < 0.05$ so the hypothesis is rejected, meaning *Tax Book Difference* is not Influential against ROA.

CONCLUSION

1. Deferred Tax has a negative and significant effect on *Return on Asset* (ROA) in food sub-sector companies listed on the IDX.
2. *Tax Book Difference* has no effect on *Return on Asset* (ROA) in food sub-sector companies listed on the IDX.
3. Deferred Tax and *Tax Book Differences* simultaneously affect the *Return on Asset* (ROA) of food sub-sector companies listed on the IDX.

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