

# The Effect Of Tax Avoidance On Firm Value With Tax Expert As Moderating Variables

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## Abstract

The company's goals in this modern era have undergone significant changes. The company's focus has changed from focusing on maximizing profit to increasing firm value. Firm value, which is reflected in the value of the company's shares, can grow along with the increase in company profits. Tax, which is an element of development, is seen by companies as one of the factors that determine the company's value. This is a consideration for companies to behave in tax avoidance or not. This study tries to analyze the relationship between tax avoidance by the entity and its firm value and the extent to which the tax expert influences both of these. This study provides several conclusions, i.e., *tax avoidance* has a negative effect on *firm value*. These results contradict the initial testing hypothesis where *tax avoidance* has a positive impact on *firm value*. The moderating influence, *tax experts*, don't affect the relationship between *tax avoidance* and *firm value*.

**Keywords:** financial accounting; the value of the company; tax evasion; taxation; tax expert  
**JEL:** D13, I31, J22\*

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## 1. INTRODUCTION

Taxes are the main source of state financing revenue to increase economic growth and welfare in Indonesia. Hanlon and Hietzman (2010) define *Tax Avoidance* as a tax reduction that is done explicitly. Meanwhile, Desai and Dharmapala (2010) define *Tax Avoidance* as a corporate planning strategy carried out by management to achieve its goals. In achieving this goal, the company is faced with taxes. The complex tax system makes entities need assistance *Tax Expert* to optimize corporate tax planning according to the organization's needs.

McGuire, Omer, and Wang (2012) examined the effect of *tax expert* services provided by public accounting firms on *tax avoidance*. The results showed that clients who purchase services *tax* from public accounting firms usually have a higher level of *tax avoidance* when the public accounting firm is a *tax expert*. They found that the public accounting firm was able to combine the capabilities of the *Audit Expert* and the *Tax Expert* to carry out *tax*

*strategies* that would provide *benefits* both from a tax perspective and in the presentation of financial statements. This, in turn, will increase the *firm value*; that is, when investors judge that *Tax Avoidance* with *Audit Risk* a low will make *Tax Avoidance* seen as efficient. Moreover, if it is supported by the weak supervision and enforcement of tax laws carried out by a country, it will take the risk of detection small. Huang and Zhang (2019) also state that financial experts are associated with a more aggressive tax avoidance policy. They conjecture that financial sophistication motivates tax experts to approach tax avoidance as an investment.

*Tax Aggressiveness* can be assessed positively or negatively by the Market by Hanlon and Slemrod (2009), which examined market behavior against *Tax Avoidance* by companies. It is considered positive if the *Tax Aggressiveness* that is carried out is considered as *Tax Planning* and efficiency efforts so that the company value will increase. However, if the market views *Tax Aggressiveness* as a measure, *non-compliance* will increase the company's risk and will decrease the company's value. The results of this study indicate that the market studied by Hanlon is a *positive market* that views *Tax Avoidance* as a negative action that will reduce the value of the company in the market. Kirkpatrick, A.K. and Radicic, D. (2020) also state that tax avoidance as a negative action will reduce firm value. In contrast to ni's (2012) research on companies research, Herawati and Ekawati (2016) also show that *Tax Avoidance* using tax planning has a positive effect on the firm value on the Indonesia Stock Exchange. This research shows that the Market in Indonesia is a *negative market* where the *Long Run is Tax Avoidance* will increase the company's value in the long term.

This study will examine the effect of *Tax Avoidance* on *Firm Value* because, based on Chasbiandani's research (2012) and Herawati's research (2016), the Market in Indonesia is *negative*. Meanwhile, based on the research results of Hanlon and Slemrod (2009) and Kirkpatrick, A.K., and Radicic, D. (2020), the market reaction to *Tax Avoidance* is a *positive market* even though the objects studied are different. Therefore, this study will examine the effect of *Tax Avoidance* on *Firm Value* to strengthen the research results of Chasbiandani and Martani (2012) using a sample of manufacturing companies listed on the Indonesia Stock Exchange during 2014-2017. This research will strengthen the results of previous research that the Market in Indonesia is a *Negative Market* that views *Tax Avoidance* as a positive action for efficiency that will increase company value.

In addition, this study will examine the effect of tax avoidance on firm value with tax experts as a moderating variable. This step is taken to determine whether the market prefers *Tax Avoidance* by *Tax Experts* with a definite value as a reflection of market preferences due to the combination of *Tax Expert Audit* and *Taxation* capabilities. Furthermore, the contribution of this research is to strengthen the results of previous research, i.e., the Market in Indonesia, which is a *negative market* and in addition to the literature that *Tax Avoidance* with the help of a *Public Accounting Firm* which is an *Expert Tax Office* is preferred by the Market in Indonesia.

## 2. LITERATURE REVIEW

### *Tax Avoidance*

As a company of *profit-oriented* course, a company tries to minimize the tax burden by exploiting the weaknesses of tax regulations. Hanlon and Hietzman (2010) define *Tax Avoidance* as a series of tax planning activities to explicitly reduce taxes. Meanwhile, Desai and Dharmapala (2010) prescribe *Tax Avoidance* as a corporate planning strategy carried

out by management to achieve company goals. Tang and Firth (2011) define *Tax Avoidance* as an attempt to exploit tax law uncertainty for the company's benefit. Wang (2019) defines tax avoidance as a legitimate use of tax rules to violate tax laws to reduce the corporate tax burden.

Previous research has measured *Tax Avoidance* using various indicators. One of them is the *Effective Tax Rate (ETR)*. ETR is considered capable of measuring the level of Tax Avoidance if a company's ETR is below the average ETR of similar industries. ETR is how much tax liability a company pays compared to pretax income, obtained by dividing tax expense by pretax income.

Besides, research conducted by Frank and Rego (2009) and Kirkpatrick, A.K. and Radicic, D. (2020) use *book-tax differences (BTD)* to measure the level of *tax avoidance* conducted by companies. *Book Tax Differences* is the difference between *income* according to generally accepted accounting standards and *income* according to the tax laws and regulations. The difference will increase the deferred *tax expense* for the company. Hanlon (2005) explains that the amount of BTD is a *red flag signal* that earnings presented in accounting are of lower quality than companies that have low BTD. This is because the Accounting Standards provide a wider discretion than tax regulations so that it provides an opportunity for management to practice *Earning Management*.

#### ***Tax Expert***

*Tax Expert* is a party that has expertise in taxation and provides *tax services* to clients to help fulfill tax obligations. McGuire, Omer, and Wang (2012) show that clients who purchase services *Tax Services* from a public accounting firm usually have a higher level of *tax avoidance* when the public accounting firm is also a *tax expert*. They found that the public accounting firm was able to combine the capabilities of the *Audit Expert* and the *Tax Expert* to provide *benefits* both from a tax perspective and in the presentation of financial statements. Cook and Omer (2010) found that two-thirds of the sample they studied used the tax services of the public accounting firm that audited them. *The tax services* purchased can be in the form of *tax consulting* and *compliance services*; Therefore, the public accounting firm affects the level of *tax avoidance* clients because of the combination of *audit* and *taxation* they provide to clients both in *tax consulting* and *compliance services*. In this study, the variables used to determine *Tax Expert* are simplified by using *dummy variable* 1 when using the *Big Four* and *dummy variable* 0 if not using (other than *Big Four*).

#### ***Firm Value***

*In short, firm value* is the total value of a company in the market as a form of market confidence in the company. *Firm Value* also describes the price if the company is going to *take over*. Wang (2010) explains that *tax avoidance* will affect the *firm value* if the company has a good level of transparency. Hanlon and Slemrod (2009) state that *Tax Aggressiveness* can be assessed positively or negatively by the market. It is considered positive if the *Tax Aggressiveness* that is carried out is considered as *Tax Planning* and a form of efficiency efforts that will increase company value. However, if the market views *Tax Aggressiveness* as an act of *non-compliance*, then *tax avoidance* will increase the risk of the company and will decrease the value of the company. Chasbiandani and Martani (2012) explain that *tax avoidance* (using the variable *Long Run Tax Avoidance*) positively affects firm value. One of the indicators for assessing *firm value* is *Price to Book Value (PBV)*. PBV is a *valuation ratio* that is often used to evaluate the price of a company by comparing the price per share with

the book value per share. By knowing the PBV, investors can find out whether the market prefers the stock with a high PBV and vice versa.

### 3. HYPOTHESIS

Desai and Dharmala (2009) conducted research related to institutional ownership, which affects the relationship between *tax avoidance* and *firm value*. Companies with stronger institutional relationships *tax avoidance* have more influence on *firm value*. This shows that the influence of *shareholders* in *tax avoidance* corporate depends on the ability of *shareholders* to control managers in making decisions related to practices *tax avoidance*. Wang (2010) shows that *tax avoidance* affects *firm value*, especially if the company has a good level of transparency. Hanlon and Slemrod (2009) tested market behavior against *tax avoidance* by companies. The research result states that *Tax Aggressiveness* can be assessed positively or negatively by the market. It is considered positive if the *Tax Aggressiveness* that is carried out is considered as *Tax Planning* and efficiency efforts so that the company value will increase. However, if the market views *Tax Aggressiveness* as a measure, *non-compliance* will increase the company's risk and will decrease the company's value. The results of this study indicate that the market studied by Hanlon is a *positive market* that views *Tax Avoidance* as a negative action, namely *non-compliance*, which will reduce the value of the company in the market. In contrast to Chasbiandani and Martani's (2012) research on companies listed on the Indonesia Stock Exchange where *Long Run Tax Avoidance* positively affects firm value. Herawati and Ekawati (2016) also show that *Tax Avoidance* using tax planning has a positive effect on the firm value on the Indonesia Stock Exchange.

Cook and Omer (2010) found that two-thirds of the studied sample purchased *tax services* from the public accounting firm that audited them. *The tax services* purchased can be in the form of *tax consulting* and *compliance services* so that the public accounting firm affects the level of *tax avoidance* clients. Huang and Zhang (2019) also state that financial experts are associated with a more aggressive tax avoidance policy. They conjecture that financial sophistication motivates tax experts to approach tax avoidance as an investment. Then McGuire, Omer, and Wang (2012) show that clients who purchase services *Tax Services* from a public accounting firm usually have a higher level of *tax avoidance* when the public accounting firm is also a *tax expert*. They found that the public accounting firm was able to combine the capabilities of the *Audit Expert* and the *Tax Expert* to provide *benefits* both from a tax perspective and a financial reporting perspective. Because of the combination of *Audit* and *Taxation* that they provide to clients in *tax consulting* and *compliance services*. This research will test whether *tax avoidance*, which is carried out with the help of *tax experts*, is preferred by the market because *tax avoidance* contains risks, and the market doesn't like risk.

The market does not like risk, so low-risk instruments are preferred over those with high risk. The practice of *tax avoidance* itself has risks because, in *tax avoidance*, there is a risk of *tax aggressiveness* or *tax evasion*, which will lead to sanctions in the future. Therefore, *the market prefers tax avoidance with low risk*, which is reflected in firm value, but not all the markets prefer tax avoidance even with low risk. Research by Hanlon and Slemrod (2009) shows that *tax avoidance* can have a positive or negative effect on *firm value*. The results of research conducted by Hanlon and Slemrod show that *tax avoidance* harms *firm value*.

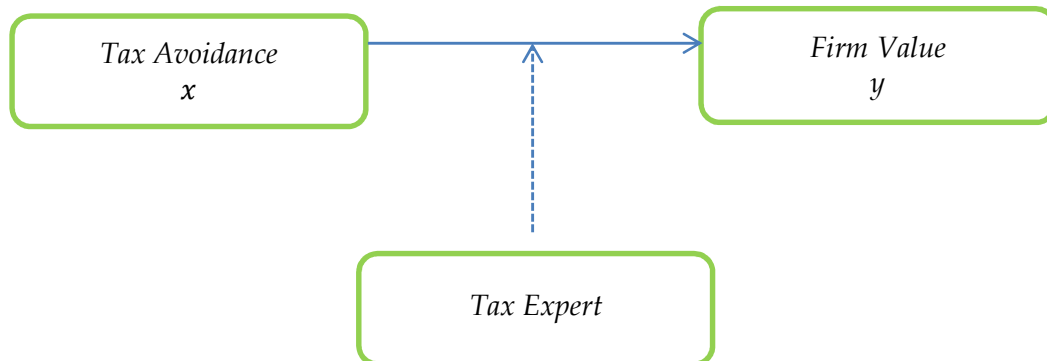
Meanwhile, based on the results of research conducted by Chasbiandani and Martani (2012) on companies listed on the Indonesia Stock Exchange during 2001-2011, tax avoidance (as measured by the *Long Run ETR*) has a positive effect on firm value. This study wants to strengthen the research conducted by Chasbiandani and Martani (2012) that *tax avoidance* in Indonesia positively affects *firm value* by using data during 2010-2016 after the modern DGT. Based on the description above, the first hypothesis of this study is as follows:

**H<sub>1</sub>: Tax avoidance has a positive effect on Firm Value.**

*The market prefers tax avoidance with low risk, namely tax avoidance done well by experts.* Cook and Omer (2010) found that two-thirds of the studied sample purchased *tax services* from the public accounting firm that audited them. McGuire, Omer, and Wang (2012) that a company will have a higher level of *tax avoidance* stated if it is audited by KAP, where the KAP is also a *Tax Expert* because of the practices of *Financial Engineering* that are carried out. *Financial Engineering* that is carried out contains audit risk, and audit risk becomes low if a *Tax Expert* carries it out, and low risk is preferred by the market and is reflected in the company's value. Based on the description above, the second hypothesis of this study is as follows:

**H<sub>2</sub>: Tax Expert will strengthen the positive effect of Tax Avoidance on Firm Value**

Based on the theoretical basis that has been described, the writer can formulate a research model and hypothesis in this study.



**Figure 1.** Research Model  
Source: Author Processed

#### 4. RESEARCH METHODS

##### Data and Samples

The authors used secondary data in compiling this study. Secondary Data is obtained through library research, namely through data searches on the internet and other sources. Secondary data obtained from the internet are in the form of company financial reports and related articles, while other sources include books, official company documents, magazines, bulletin, study results, journals, papers, and others that are relevant to the material researched by the author.

The writer used the purposive sampling method in compiling this research. This method was initially carried out by collecting financial and financial Information of related

companies, in the form of financial reports for 2014 and 2017, by eliminating irrelevant data after obtaining the necessary Data, the author's process, and analyzing the data to test the hypotheses that have been formulated.

The data used in this study is secondary data obtained from the publication of financial reports by the Indonesia Stock Exchange (IDX). The period in this study covers the period 2014 to 2017. The reason for choosing this period is that starting in 2014 it is considered the time to modernize the taxation system at the Directorate General of Taxes. If you take data before 2014, it becomes less comparative. The population in this study is manufacturing companies in Indonesia. The sample selection in this study was carried out using the purposive sampling method, namely selecting samples with certain criteria. These criteria include:

- a. The company is engaged in the manufacturing industry sector. The reason for choosing this company is the large number of samples that can be used and the absence of special regulations such as in the financial industry.
- b. If there is a loss during that year, then this company's cash effective tax rate (CASH ETR) value is equal to 0 (2014 to 2017).
- c. Has complete data required in the study?

**Table 1.** Sample Selection Procedure

<b>Information</b>	<b>Number</b>
Public Manufacturing Companies listed on the Indonesia Stock Exchange in 2017	137
Less: Companies listed after 2014	4
Less: Companies with incomplete financial data	33
Less: Companies whose data is outliers	2
Total Company Sample	98
Years of Research (2014 to 2017)	4
Number of Main Sample Observations	392

The stages of selecting the main sample in this study are described in Table 1. The first stage is data collection of manufacturing public companies listed on the Indonesia Stock Exchange in 2017, which is obtained as many as 137. After issuing newly listed companies between 2015 and 2017, the next step is to remove companies whose financial report data is incomplete or not found from the internet or other sources. The majority of incomplete Data is in 2016. After that, the final process is to exclude companies whose Data is outliers, which is very extreme. Two companies were found whose Data was very extreme, including the PBV data, which was odd and corrupted the data of 2 companies. Therefore, the total number of main sample observations is 392 companies.

**Table 2.** Variable Operational Definition and Measurement

No	Variable	Description
1	<b>Firm Value (FIRM VALUE)</b>	The total value of a company in the market is a form of market confidence in the company. Firm Value also describes the price if the company is going to take over. To test H <sub>1</sub> and H <sub>2</sub> , use the proxy/measure <i>Price to Book Value (PBV)</i> . PBV is a valuation ratio that is often used to assess the price of a company by comparing the price per share with the book value per share. By knowing the PBV, investors can determine whether the market prefers the stock with a high PBV and vice versa. Wang (2010) explains that tax avoidance will affect the firm value if the company has a good level of transparency. Hanlon and Slemrod (2009) state that Tax Aggressiveness can be assessed positively or negatively by the market.
2	<b>Tax Avoidance Rate (CASH ETR)</b>	The variable used to calculate the rate of tax avoidance is the Cash Effective Tax Rate (CASHETR). ETR can be used to measure the level of Tax Avoidance if the ETR of a company is considered too low or below the average of the ETR of similar industries. ETR is how much the company's tax liability is paid compared to the pretax income obtained by dividing the tax burden with pretax income.
3	<b>Tax Avoidance Rate (BTD)</b>	Another variable used to calculate the rate of tax avoidance is to use BTD. Book Tax Differences is the difference between income according to generally accepted accounting standards and income according to the tax laws and regulations. The difference will increase the deferred tax expense for the company. Hanlon (2005) explains that the amount of BTD is a red flag signal that earnings presented in accounting are of lower quality than companies that have low BTD.
4	<b>Tax Expert (TAX EXPERT)</b>	<i>Tax Expert</i> are simplified by using <i>dummy variable</i> 1 when using the <i>Big Four</i> and <i>dummy variable</i> 0 if not using (other than <i>Big Four</i> )
5	<b>Firm Size (SIZE)</b>	The natural logarithm of total assets measures size. This follows the political cost hypothesis by Watts and Zimmerman (1986), that to avoid increasing tax burden, companies tend to avoid too high an increase in profit.
6	<b>Leverage (LEV)</b>	The variable is the level of the company's leverage which is calculated by dividing total liabilities by total assets – calculated using the formula as a control variable in this study. $LEV = \frac{\text{Total Liability}}{\text{Total Assets}}$
7	<b>Return On Assets (ROA)</b>	The variable is the ratio of the company's net income to total assets. It is calculated using a formula as a control variable in this study. $ROA = \frac{\text{Net Profit}}{\text{Total Assets}}$

**Research Model**

The hypothesis in H<sub>1</sub> this study uses the following regression equations 1 and 2:

$$FIRM_{VALUE} = \alpha_0 + \alpha_1 CASHETR_t + \alpha_2 SIZE_t + \alpha_3 LEV_t + \alpha_4 ROA_t + E \dots \dots \dots (1)$$

$$FIRM_{VALUE} = \alpha_0 + \alpha_1 BTD_t + \alpha_2 SIZE_t + \alpha_3 LEV_t + \alpha_4 ROA_t + E \dots \dots (2)$$

Description :

- FIRM\_VALUE** : Company value as measured by *Price to Book Value (PBV)*.
- CASHETR<sub>t</sub>** : The tax avoidance rate is calculated by dividing the amount of tax paid by the profit before tax.
- BTD<sub>t</sub>** : Tax avoidance rate calculated from pre-book tax income minus taxable income.
- SIZE<sub>t</sub>** : The size of the company is measured by the natural logarithm of total assets.
- LEV<sub>t</sub>** : The level of corporate leverage is calculated by dividing total liabilities by total assets.
- ROA<sub>t</sub>** : The ratio of the company's net income to total assets.

The hypothesis H<sub>2</sub> in this study was tested using Model 2 using the following regression equations 3 and 4:

$$FIRM_{VALUE} = \alpha_0 + \alpha_1 CASHETR_t + \alpha_2 TAX\_EXPERT_t + \alpha_3 CASHETR_t TAX\_EXPERT_t + \alpha_4 SIZE_t + \alpha_5 LEV_t + \alpha_6 ROA_t + E \dots \dots \dots (3)$$

$$FIRM_{VALUE} = \alpha_0 + \alpha_1 BTD_t + \alpha_2 TAX\_EXPERT_t + \alpha_3 BTD_t TAX\_EXPERT_t + \alpha_4 SIZE_t + \alpha_5 LEV_t + \alpha_6 ROA_t + E \dots \dots \dots (4)$$

Description :

- FIRM\_VALUE** : Firm Value as measured by *Price to Book Value (PBV)*.
- CASHETR<sub>t</sub>** : Tax avoidance rate calculated by dividing the amount of tax paid by the amount of profit before tax.
- BTD<sub>t</sub>** : Tax avoidance rate calculated by pre-book tax income minus taxable income.
- SIZE<sub>t</sub>** : The size of the company is measured by the natural logarithm of total assets.
- LEV<sub>t</sub>** : The level of corporate leverage is calculated by dividing total liabilities by total assets.
- ROA<sub>t</sub>** : The ratio of the company's net income to total assets

This study uses panel data regression analysis in testing the hypotheses that have been formulated. Initially, the model in this study was estimated using the random effect method. Before choosing a random effect model, this study first determines which method is best used by going through several steps. First, do the Chow test to find out whether the



panel data regression analysis uses the fixed-effect method or PLS. Because the test results of P-Value (Prob> F) <Alpha 0.05, H1 is accepted, which means that the best choice is Fixed Effect. The researcher then conducted the Hausman test, which recommended that the best choice was Fixed Effect rather than Random Effect. However, considering the indication of heteroscedasticity as previously described, this study finally used the GLS or Random Effect method. The detailed Information about variable operational definition and measurement is in Table 2.

**Descriptive Statistics**

Through Table 3, descriptive statistical Data can be analyzed. Panel A shows descriptive statistics of the data of all audited companies (both by Tax Experts and Non-Tax Experts). Meanwhile, Panel B and Panel C show descriptive statistics of the data of companies that are audited after being grouped into two categories: companies audited by Tax Experts and companies audited by Non Tax experts. The table shows that the average PBV and BTD of companies audited by Tax Experts are higher than the average PBV and BTD of companies audited by Non Tax experts. However, the opposite is found in the average CASHETR of companies audited by Tax Expert, lower than the average CASHETR of companies audited by Non-Tax Experts.

Suppose the two groups are compared with company data audited by both Tax Experts and Non-Tax Experts (Panel A). In that case, the average value of PBV, BTD, and CASH ETR is in panel A between the average values of the three variables in the two categories, namely companies, which Tax Experts audit, and companies that Non Tax experts audit. From these essential points, it can be concluded that the level of tax avoidance carried out by the company audited by Tax Experts was higher than the company audited by Non-Tax Experts if it was based on the BTD variable. The opposite is true when using the CASHETR variable benchmark.

*Table 3.* Descriptive Statistic

<b>Panel A. Companies audited by Tax Experts and Non-Tax Experts (n=392)</b>				
<b>Variable</b>	<b>Mean</b>	<b>Maximum</b>	<b>Minimum</b>	<b>Std. Dev</b>
PBV	2.6017	82.4400	-2.2100	7.8144
BTD	0.0033	0.4372	-0.2797	0.0648
CASHETR	0.6775	54.7574	0	3.2375
LNSIZE	28.4896	33.3208	24.4141	1.6524
LEVERAGE	0.5580	5.0732	0.0003	0.5339
ROA	0.0906	2.3432	-4.0596	0.3483
<b>Panel B. Companies audited by Tax Experts (n=183)</b>				
<b>Variable</b>	<b>Mean</b>	<b>Maximum</b>	<b>Minimum</b>	<b>Std. Dev</b>
PBV	4.3178	82.4400	-2.2100	11.1006
BTD	0.0070	0.3846	-0.1705	0.0626
CASHETR	0.5307	13.7481	0.0000	1.5362
LNSIZE	29.3466	33.3208	26.5829	1.4831
LEVERAGE	0.4841	1.4066	0.0691	0.2122
ROA	0.1494	1.5215	-0.7929	0.2915
<b>Panel C. Companies audited by Non-Tax Experts (n=209)</b>				
<b>Variable</b>	<b>Mean</b>	<b>Maximum</b>	<b>Minimum</b>	<b>Std. Dev</b>
PBV	1.0991	11.0500	-0.9000	1.4523
BTD	0.0001	0.4372	-0.2797	0.0665

Panel C. Companies audited by Non-Tax Experts (n=209)				
Variable	Mean	Maximum	Minimum	Std. Dev
CASHETR	0.8061	54.7574	0	4.1956
LNSIZE	27.7392	32.2711	24.4141	1.4128
LEVERAGE	0.6228	5.0732	0.0003	0.6982
ROA	0.0392	2.3432	-4.0596	0.3847

### Regression Assumption Test

The classic assumption test in this study is through four tests, i.e., multicollinearity, homoscedasticity, autocorrelation, and normality. The results of the multicollinearity test are shown in table 4. With the Mean VIF of 1.62 and the value between variables not more than 0.8, there is certainly no multicollinearity problem in the model used for testing the research hypothesis.

This study then tested for normality. The assumption of normality is not fulfilled because it is the natural condition of the Data that is not normally distributed and follows other distribution patterns. However, according to Gujarati (2009), Data has normally distributed if the data sample is more than 100. Furthermore, there are also problems for Autocorrelation and Homocedasticity. This study uses the GLS (Generalized Least Square) or Random Effect method with the consideration that both assumptions are met. The GLS method will estimate panel data where the disturbance variables may be interrelated over time and between individuals. In this model, the difference in intercept can be accommodated by the error terms of each. So it can be concluded that there is no autocorrelation problem or heteroscedasticity for all estimation results.

Table 4. Test Multicollinearity between Variables

Variable (Mean VIF=1.62)	PBV	BTD	CASH ETR	TAX EXPERT	LNSIZE	LEVERAGE	ROA
PBV	1.0000						
BTD	0.0247	1.0000					
CASHETR	-0.0336	-0.0010	1.0000				
TAX EXPERTS	0.0728	0.0777	-0.0436	1.0000			
LNSIZE	0.1217	0.1486	-0.0084	0.3322	1.0000		
LEVERAGE	-0.0016	-0.1224	0.0404	-0.1002	-0.0161	1.0000	
ROA	0.5120	0.2035	-0.0269	0.1007	0.0762	-0.0115	1.0000

### Research Results and Discussion

Hypothesis H<sub>1</sub> in this study states that *tax avoidance* has a positive effect on *firm value*. The results of testing the H<sub>1</sub> hypothesis are presented in Table 5. Table 5 shows that *tax avoidance* is measured using two variables, i.e., BTD and CASH ETR. When *tax avoidance* is measured using the CASHETR variable, the CASH ETR is insignificant. This can be seen from the probability value, which is greater than  $\alpha$  (0.05). These results indicate that when using the CASHETR variable, *tax avoidance* does not affect *firm value*. Thus, it can be

concluded that hypothesis H1 of this study is not proven. This is different from the research results conducted by Chasbiandani (2012), which proved that *tax avoidance* has a positive effect on *firm value* by using the CASHETR variable. These different results may be influenced by the CASHETR variable used, in a study conducted by Chasbiandani (2012) using the LRTA variable, namely CashETR, which is a company with an accumulation of 10 years or the same as the variable used by Dyreng (2008). Dyreng (2008) considers that Annual CashETR is not a good predictor because there is still an element of *earning management* in it; therefore, the accumulation of CashETR over several years more reflects the level of *tax avoidance* undertaken.

Table 5. Test Results Model H<sub>1</sub>

Variable	Dependent Variable: PBV			Variable	Dependent Variable: PBV		
	Coeff	z	Prob		Coeff	z	Prob
BTD	-11.9945	-2.47	0.014	CASHETR	-0.0073	-0.10	0.921
LNSIZE	0.5427	1.64	0.101	LNSIZE	0.4900	1.48	0.140
LEVERAGE	-0.7457	-0.76	0.447	LEVERAGE	-0.5217	-0.53	0.595
ROA	6.1015	7.37	0.000	ROE	5.6351	6.95	0.000
C	-12.9570	0.17	0.171	C	-11.5734	-1.22	0.222
Adjusted R-squared			0.3543	Adjusted R-squared			0.3699
Prob>Chi2			0.0000	Prob>Chi2			0.0000
Hypothesis H1 (Independent Variable: BTD)			Rejected (Significant)	Hypothesis H1 (Independent Variable: CASHETR)			Rejected (Insignificant)

From Table 5, it can also be seen that when *tax avoidance* is measured using BTM, the coefficient of the BTM variable on the independent variable PBV is negative and significant. This shows that a company with a negative BTM means that the greater the taxable income than the pre-book tax, the company has larger the PBV and vice versa. *Taxable income* greater than the pre-book tax income shows that the company is compliant, which means that it has a low tax avoidance. This finding that shows *tax avoidance* has a negative effect on *firm value* contradicts Hypothesis H<sub>1</sub>, which states that *tax avoidance* positively affects *firm value*. The results contradict the H<sub>1</sub> hypothesis are probably due to the variables used as a proxy for *tax avoidance*. Based on Chasbiandani's (2012) research, *tax avoidance* positively affects *firm value*; the variable used in this study is CASH ETR.

Meanwhile, research conducted by Christina (2010) shows that a large negative BTM has a positive effect on corporate bond ratings. A large negative BTM means that the company has a low level of *tax avoidance* and increases the company's bond rating. Based on the two studies, the differences may be caused by the variables used, namely CASHETR and BTM, which have conflicting results. Thus the results of testing Hypothesis H<sub>1</sub> with BTM independent variables contradict Hypothesis H<sub>1</sub>, which was originally set. This is because the basis of the hypothesis H<sub>1</sub> used is a study conducted by Chasbiandani (2012), who uses CASHETR in his research.

Table 6 shows the results of the H<sub>2</sub> hypothesis testing with the BTD INTERACTION and CASHETR INTERACTION variables as the interaction variables of the independent variables BTD and CASHETR on the TAX EXPERT moderating variable. Table 6 shows that the *tax expert* does not moderate the relationship between *tax avoidance* and *firm value*. This can be seen from the BTD INTERACTION and CASHETR INTERACTION variables' probability value greater than  $\alpha$  (0.05), which means insignificant. While the TAX EXPERT variable itself also has a probability value greater than  $\alpha$  (0.05). Thus, it can be concluded that the *tax expert* does not affect the relationship between *tax avoidance* and *firm value* and, at the same time, shows that hypothesis H<sub>2</sub> is not proven.

Table 6. Test Results Model H<sub>2</sub>

Variable	Dependent Variable: PBV			Variable	Dependent Variable: PBV		
	Coeff	z	Prob		Coeff	z	Prob
BTB	-	-2.30	0.021	CASHETR	0.0002	0.00	0.998
TAX EXPERTS	1.8045	1.50	0.133	TAX EXPERTS	2.0823	1.68	0.092
BTB INTERACTION	9.0693	0.95	0.340	CASHETR INTERACTION	-0.1186	-	0.642
LNSIZE	0.2882	0.78	0.437	LNSIZE	0.2149	0.58	0.563
LEVERAGE	-0.6022	-0.61	0.543	LEVERAGE	-0.3194	-	0.747
ROA	6.1386	7.29	0.000	ROE	5.5295	6.81	0.000
C	-6.6471	-0.64	0.520	C	-4.7875	-	0.644
Adjusted R-squared			0.3365	Adjusted R-squared			0.3485
Prob>Chi2			0.0000	Prob>Chi2			0.0000
Hypothesis H2 (Independent Variable: BTB)			Rejected (Significant)	Hypothesis H2 (Independent Variable: CASHETR)			Rejected (Insignificant)

This study examines whether the *tax expert* will strengthen the positive effect of *tax avoidance* with *firm value*. The first step in testing the H<sub>2</sub> hypothesis is proof of the H<sub>1</sub> hypothesis. However, it turns out that hypothesis H<sub>1</sub> is not proven and contradicts hypothesis H<sub>1</sub>. This research then develops another possibility, namely if it is contradictory, the *tax expert* that initially strengthens the positive relationship between *tax avoidance* and *firm value*, then the *tax expert* should weaken the negative relationship between *tax avoidance* and *firm value* because it is contradictory. This can be concluded from the results of testing the H<sub>1</sub> hypothesis that if tax avoidance is high, the firm value will be low, but with the interaction tax expert, the firm value should be below. Thus, it can be concluded based on table 6 that the *tax expert* does not affect the relationship between *tax avoidance* and *firm value*. Different from Huang and Zhang (2019), financial experts are associated with a more aggressive tax avoidance policy. This is because the sample from a study that is conducted by Huang and Zhang (2019) is different; they use data from Standard and Poor (S&P) firms in the United States. Based on that, we can conclude that the Indonesian market is different

from the United States; the Indonesian market does not include tax experts as a significant factor when choosing their instrument.

After testing the hypothesis using the previous research model, to expand the research, sensitivity analysis will be carried out to test whether the research model used has provided complete Information in testing the H2 hypothesis using the method *regression* with panel data. The test will be carried out again using the method *regression* with a *cross-section*. This test follows the form of testing conducted by Tang (2006). Using the method *cross-section* will have several advantages compared to using panel data or time series, such as eliminating bias due to a long period and seeing changes in each variable according to the year. This test will use a *cross-section* period of 4 years to test whether the model *regression* for the H2 hypothesis has provided real Information because the unproven hypothesis is the H2 hypothesis.

Table 7 shows the *cross-section* results, which are not much different from the previous test using panel data. In testing using data *cross-section* for four years, the *tax expert* still does not affect the relationship between *tax avoidance* and *firm value* even though he used *cross-section* for four years.

Table 7. Sensitivity Analysis-Yearly

Variable	2014		2015		2016		2017	
	Coeff	Prob	Coeff	Prob	Coeff	Prob	Coeff	Prob
BTD	-12.3921	0.146	-13.0069	0.161	-27.6551	0.022	-14.5224	0.617
TAX EXPERTS	0.9678	0.317	1.4569	0.221	0.4844	0.703	2.9802	0.217
BTD INTERACTION	8.8754	0.669	0.1004	0.996	18.5900	0.209	-3.9702	0.911
LNSIZE	0.1775	0.533	0.4716	0.893	-0.0786	0.831	0.3505	0.625
LEVERAGE	0.4052	0.632	0.1516	0.868	-0.1659	0.871	0.8684	0.663
ROA	23.4674	0.000	17.9119	0.000	16.2789	0.000	7.3487	0.000
C	-5.3883	0.494	-1.3775	0.888	3.2500	0.751	-9.1674	0.646

Then the four research models will be tested for sensitivity analysis to test whether each of the components that make up the research model has a relationship with *firm value*. Table 8 shows the results of testing the sensitivity analysis of each variable to *firm value*. In Table 8, three variables have a significant effect, namely TAX EXPERT, LNSIZE, and ROA. One of the variables that are considered is TAX EXPERT who has a positive and significant effect. This means that the market prefers companies that use services *tax experts* to those that don't use services *tax experts*.

Tabel 8. Sensitivity Analysis-Variable

variables	Variable Dependent: PBV		
	Coeff	z	Prob
BTD	2.3257	0.38	0.703
CASHETR	-0.0811	-0.66	0.507
TAX EXPERTS	3.2186	4.15	0.000
BTD INTERACTION	4.4306	0.48	0.631
CASHETR INTERACTION	-0.0306	-0.08	0.933

variables	Variable Dependent: PBV		
	Coeff	z	Prob
LNSIZE	0.5656	2.38	0.018
LEVERAGE	-0.0344	-0.05	0.963
ROA	11.4442	11.71	0.000

## 5. CONCLUSION, LIMITATIONS, AND SUGGESTIONS

This study provides several conclusions, i.e., *tax avoidance* has a negative effect on *firm value*. These results contradict the initial testing hypothesis where *tax avoidance* has a positive impact on *firm value*. The moderating influence, i.e., *tax experts*, doesn't affect the relationship between *tax avoidance* and *firm value*.

The limitation of this study is the use of the variable *tax expert*, and it is difficult to ascertain whether the auditing public accounting firm also provides tax services. Taxation services also consist of various types, such as consulting, compliance, and being a representative in court. Therefore, the variable *tax expert* has limitations because it assumes that the Public Accounting Firm also provides consulting services in tax planning strategies. Further research is suggested to expand the research sample, not only from manufacturing companies but also from other sectors. In addition to expanding the number of companies, extending the sample period used, e.g., ten years, is advisable.

Suggestions of this research are that it is important to consider tax avoidance that companies will carry out because the market does not like *tax avoidance*, which is reflected in *firm value*. Tax regulators should be more synergized and cooperate with *tax experts* because it turns out that *tax experts* do not influence *tax avoidance* on *firm value*. Therefore, tax consultants are friends, not opponents of regulators. For further research, the variable *tax avoidance* must be considered because using these variables with different proxies will show different results.

## REFERENCES

- Baltagi, H. Bagi. (2005). *Econometric Analysis of Panel Data*. John Wiley & Sons Canada.  
 DeAngelo, H., & Masulis, R.W. (1980). Optimal capital structure under corporate and personal taxation. *Journal of Financial Economics* 8, 3-29.  
[https://doi.org/10.1016/0304-405X\(80\)90019-7](https://doi.org/10.1016/0304-405X(80)90019-7)

- Christina, Vinna, Yulianti Abbas and Christine Tjen.2010. Pengaruh Book-Tax Differences terhadap Peringkat Obligasi di Indonesia. *Jurnal Akuntansi dan Keuangan Indonesia*, Volume 7 - No. 2. <https://doi.org/10.21002/jaki.2010.09>
- Cook, K., and T. Omer. 2010. The Cost of Independence: Evidence from Firms' Decisions to Dismiss Auditors as Tax-Service Providers. Working paper, The University of Arizona and Texas A&M University. <https://doi.org/10.2308/horizons-18-009>
- Desai, Mihir A, and Dhammika Dharmapala. 2009. Corporate Tax Avoidance and Firm Value. *The Review of Economics and Statistics*, 91(3):537-546. <https://doi.org/10.1162/rest.91.3.537>
- Dyreng, Scott, Michelle Hanlon and Edward Maydew. (2008). Long run corporate tax avoidance. *The Accounting Review*.83 (1). 61 - 82. <https://jstor.org/stable/30243511>
- Dyreng S., Hanlon M., and Maydew, E. 2010. The Effect of Executives on Corporate Tax Avoidance. *The Accounting Review*, 85, 1163-1189. <https://jstor.org/stable/20744155>
- Fangjun Wang, Shuolei Xu, Junqin Sun, Charles P. Cullinan (2019). Corporate Tax Avoidance: A Literature Review and Research Agenda. *Journal of Economic Survey*. <https://doi.org/10.1111/joes.12347>
- Frank, M., Luann Lynch., Sonja Olhott Rego.(2009). Tax Reporting Aggressiveness and its Relation to aggressive financial reporting. *The Accounting Review* 84. pp 467 - 496. <https://jstor.org/stable/27802660>
- Gebhart, Markus Sebastian. 2017. Measuring Corporate Tax Avoidance - An Analysis of Different Measures. *Journal Management Science* 3, pp 43-60. <https://doi.org/10.5282/jums/v2i2pp43-60>
- Guenther, David A and Richard C. Sansing.(2000). Valuation of the firm in the presence of temporary book tax defereces : The role of Deffered tax asset and liability. *The Accounting Review*. 75 (1), 1 - 12. <https://jstor.org/stable/248630>
- Hanlon, Michelle. (2005). The Persistence and pricing of Earnings, Accruals and cash flow when firms have large book tax differences. *The Accounting Review*. 80 (1), 137 - 166. <https://jstor.org/stable/4093164>
- Hanlon, Michelle, Shane Heitzman. (2010). A review of tax research. *Journal of Accounting and Economics*.50 (2010). 127 - 178. <https://doi.org/10.1016/j.jacceco.2010.09.002>
- Hanlon, Michelle and Joel Slemrod. 2009. What Does Tax Aggresiveness Signal? Evidence from Stock Price Reactions to News About Tax Shelter Involvement. *Journal of Public Economics* 93 pp 126-141. <https://doi.org/10.1016/j.jpubeco.2008.09.004>
- Herawati, Hetti & Ekawati, Diah (2016). Pengaruh Perencanaan Pajak terhadap Nilai Perusahaan. *Jurnal Riset Akuntansi dan Keuangan*, 4(1), 873-884. <https://doi.org/10.17509/jrak.v4i1.7708>

- Huang and Zhang (2019). Financial expertise and corporate tax avoidance. *Asia-Pacific Journal of Accounting & Economics*, volume 27 Pp 312-326. <https://doi.org/10.1080/16081625.2019.1566008>
- Jensen and Meckling (1976). Theory of the firm : Managerial behavior, Agency cost and Ownership structure. *Journal of Financial Economics*, 3, 4, 305 - 360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Kirkpatrick, A.K. and Radicic, D. (2020). Tax Planning Activities and Firm Value: A Dynamic Panel Analysis, *Advances in Taxation*, 27, 103-123. <https://doi.org/10.1108/S1058-749720200000027004>
- Lee, Brian B, Alfreda Dobiyanski and Susan Minton. 2015. Theories and Empirical Proxies for Corporate Tax Avoidance. *Journal of Applied Business and Economics* Vol 17(3).
- Martani, Dwi. Debby Fitriasari and Yulianti.(2010). Influence of BTD towards earnings persistence and firm value for the period of 1999 - 2007.The 3rd and 2nd Doctoral Colloquium FE UI. 27 - 28 Oktober 2010
- McGuire, Sean T, Thomas C. Omer and Dechun Wang. 2012. Tax Avoidance : Does Tax-Specific Industry Expertise Make a Difference. *The Accounting Review*, Vol. 87, No. 3, pp. 975-1003. <https://jstor.org/stable/23245637>
- Minnick, Kristina, Tracy Noga.(2010). Do corporate governance characteristics influence tax management? *Journal of corporate finance*. Pp 703 - 718. <https://doi.org/10.1016/j.jcorpfin.2010.08.005>
- Modigliani, F. and Miller, M. H. (1958).The Cost Capital, Corporate Finance and the Theory of Investment.*American Economic Review*, 48, pp. 261-297. <https://jstor.org/stable/1809766>
- Nachrowi, D. Nachrowi. (2006). Pendekatan Populer dan Praktis Ekonometrika Untuk Analisis Ekonomi dan Keuangan. Jakarta: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.
- Ross, A. Stepen., Westerfield, W.Randolp., Jaffe, J., Jordan, & D.Bradford. (2008). *Modern Financial Management*.Eighth edition.United States, Published by McGraw-Hill/Irwin.
- Sari, D.K. (2010).Ownership Characteristics, Corporate Governance, and Tax Aggressiveness.Tesis Pascasarjana FE UI.
- Shelvin, Terry.(1987). Taxes and off balance sheet financing: Research amd development limited partnership. *The Accounting review*.,52, 480 - 509.
- Tang, Tanya, Michael Firth. (2011). Can book tax differences capture earnings management and tax management? Empirical evidence from China.*International Journal of Accounting* 46. Pp 175 - 204. <https://doi.org/10.1016/j.intacc.2011.04.005>



- Wilson, Ryan. (2009). An examination of corporate tax shelter participants. *The accounting review*. volume 84 no. 3. 969 – 999. <https://jstor.org/stable/27784200>
- Wang, Shiing-wu.(1991). The Relation between firm size and Effective tax rates : A test of firms' Political Success. *The accounting review* vol. 66 No.1 158 – 169. <https://jstor.org/stable/247711>
- Wang, Tina. (2010). Tax avoidance, corporate transparency and firm value. University of Texas at Austin.
- Zhang, Liandong, Yuang Li and Jeong Bon Kim. (2011). Corporate tax avoidance and stock price crash risk: Firm level analysis. *Journal of Financial Economics*.Pp 639 – 662. <https://10.1016/j.jfineco.2010.07.007>