THE EFFECT OF TAX AVOIDANCE, COMPANY SIZE, ASSET STRUCTURE AND PROFITABILITY ON COMPANY VALUE IN MANUFACTURING COMPANIES ON THE IDX 2014-2018

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Abstrak *This study aims to determine the effect of tax avoidance, company size, asset structure and profitability on firm value in manufacturing companies on the Stock Exchange in 2014-2018.*

In this study the design used is causal research. The population is all manufacturing companies listed on the Indonesia Stock Exchange. This study researchers only took 35, while the data used are financial statement data in the form of a balance sheet and income statement in the period 2014-2018.

Based on the results and discussion, there is a significant positive effect of tax avoidance on firm value, there is a significant positive effect on firm size on firm value, there is a significant positive effect on asset structure on firm value and there is a significant negative effect on profitability on firm value in manufacturing companies on the Indonesia Stock Exchange in 2014-2018

Kata kunci : Tax avoidance, company size, asset structure, profitability, company value.

Abstract: Penelitian ini bertujuan untuk mengetahui pengaruh penghindaran pajak, ukuran perusahaan, struktur aset dan *profitabilitas* terhadap nilai perusahaan pada perusahaan manufaktur di BEI tahun 2014-2018.

Dalam penelitian ini desain yang digunakan adalah penelitian kausal. Populasi adalah seluruh perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia. Penelitian ini peneliti hanya mengambil 35, sedangkan data yang digunakan adalah data laporan keuangan berupa neraca dan laporan laba rugi pada periode tahun 2014-2018.

Berdasarkan hasil dan pembahasan menunjukkan terdapat pengaruh positif yang signifikan penghindaran pajak terhadap nilai perusahaan, terdapat pengaruh positif yang signifikan ukuran perusahaan terhadap nilai perusahaan, terdapat pengaruh positif yang signifikan struktur aset terhadap nilai perusahaan serta terdapat pengaruh negatif yang signifikan *profitabilitas* terhadap nilai perusahaan pada perusahaan manufaktur di BEI tahun 2014-2018.
Kata kunci : Penghindaran pajak, ukuran perusahaan, struktur aset, profitabilitas, nilai perusahaan.

I. PRELIMINARY

The Central Bureau of Statistics revealed that manufacturing companies are currently experiencing very rapid development and growth and are causing the economy to accelerate

due to the increasing fulfillment of people's needs. The increased need for this product has led to the growth of the manufacturing industry listed on the IDX.Manufacturing companies are companies that sell their products starting from the production process, namely from purchasing raw materials, processing raw materials to becoming finished goods. Manufacturing industrial companies are further divided into three sectors, each of which contributes to economic growth in Indonesia. The three sectors are the goods and consumption industry, various industries, and basic and chemical industries. Manufacturing companies are the pillars of the national economy amidst global economic uncertainty because this sector makes a significant contribution to Indonesia's economic growth (www.bps.go.id, accessed January, 2020)

Apart from tax avoidance, another factor that can affect firm value is firm size. Company size describes the size of a company which is indicated by total assets, total sales, average total sales and average total assets (Riyanto, 2012: 299). So the size of the company is the size or size of the assets owned by a company. A large company generally reflects the success of the company in the development of its business, and this usually attracts more investors to the company. This condition will affect the company value which is getting higher.

From the background description of the problem above, the authors conducted research on "The Effect of Tax Avoidance, Company Size, Asset Structure and Profitability on Firm Value in Manufacturing Companies on the IDX 2014-2018"

1.1. Formulation of the problem

Based on the background that has been stated above, the main problems of this study are:

1. Is there a positive effect of tax avoidance on firm value in manufacturing companies on the IDX in 2014-2018?
2. Is there a positive influence company size on firm value in manufacturing companies on the IDX in 2014-2018?
3. Is there a positive effect of asset structure on firm value in manufacturing companies on the IDX in 2014-2018?
4. Is there a negative effect of profitability on firm value in manufacturing companies on the IDX in 2014-2018?

1.2. Research purposes

The objectives of this study are:

1. To prove empirically the effect of tax avoidance on firm value in manufacturing companies on the IDX in 2014-2018.
2. To prove empirically the effect of firm size on firm value in manufacturing companies on the IDX in 2014-2018.
3. To prove empirically the effect of asset structure on firm value in manufacturing companies on the IDX in 2014-2018.
4. To prove empirically the effect of profitability on firm value in manufacturing companies on the IDX in 2014-2018

II. LITERATURE REVIEW
2.1. Tax evasion

According to Mardiasmo (2013: 1), taxes are: "Public contributions to the State treasury based on the Law (which can be enforced) without receiving reciprocal services (counter-performance) which can be directly demonstrated and used to pay for general expenses". Meanwhile, according to the official Siti (2013: 1), taxes are: "People's contributions to the state treasury based on law (which can be enforced) without getting reciprocal services that can be shown directly and used to pay for general expenses".

2.2.   Company size
According to Riyanto (2012: 299): "Company size (Firm Size) describes the size of a company which is shown in total assets, total sales, average sales and total assets." According to Werner R. Murhadi (2013) Firm Size is measured by transforming the total assets owned by the company into a natural logarithm. Company size is proxied by using Log Natural Total Asset in order to reduce excess data fluctuation. By using natural logs, the number of assets with a value of hundreds of billions or even trillions will be simplified, without changing the proportion of the actual total assets

2.3.   Asset structure
According to Syamsuddin (2011: 9), asset structure is the determination of how much the allocation of funds for each asset component, both in current assets and fixed assets. According to Riyanto (2012: 19), the asset structure consists of current assets and fixed assets. Current assets are assets that are depleted in one turn in the production process, and the turnover process is short-lived (generally less than one year). Meanwhile, fixed assets are long-lasting assets that gradually run out of production processes.

2.4.   *Profitability*
According to Kasmir (2013: 114), the profitability ratio is a ratio that shows the amount of profit a company receives in a certain period. According to Azhari and Nuryatno (2015: 200), profitability is also a marker of the success of a company in generating profits. Putra and Ramantha (2015) where companies experiencing operational losses have asked their auditors to schedule auditing later than usual, this means that profitability affects the timeliness of financial reporting. The auditing time is longer than it should be.

2.5.   The value of the company
A company is known as the separation between owners and managers, in this case shareholders and company management. The company's management activities relate to financial analysis and planning, investment decisions, and investment financing decisions taken to achieve shareholder goals. Shareholders expect a return on the money invested. Therefore, management works as a representative of the shareholders, meaning that they try to increase the value of the shareholders. So that the main goal of management is to maximize shareholder wealth. This of course can be done by increasing the value of the company, in this case, the company's stock price

2.6.   Relationship between Research Variables and Hypothesis Development
2.6.1.   The effect of tax avoidance on firm value
Tax avoidance is an effort made by management to reduce the company's tax burden. This is in line with research conducted by Kurnia, Pratomo, Fachrizal (2018) and Ilmiani and Ragil Sutrisno (2014), that tax avoidance has a positive effect on firm value in companies that have good corporate governance. However, this is inversely proportional to the findings of Kusuma Juliani (2018) that tax avoidance reduces firm value but the effect can be minimized in companies with good transparency.

According to Simartama (2014) long-term tax avoidance activities do not add value to the company. When the company is able to minimize spending for tax purposes, it means that the company will incur less expenses. Expenses are deductions in getting company profits. The smaller the burden incurred by the company, the greater the profit earned by the company. Investor interest will be higher in the shares of companies that get big profits. The higher the investor's interest in a stock, the share price will increase because the number of shares circulating in society is limited. Tax avoidance is proxied by the cash effective

tax rate (Cash ETR). In making decisions, the benefits to be received by the company should be greater than the costs incurred.

The results of previous research conducted by Kurnia, Pratomo, and Fachrizal, (2018) and Assidi *et.all*, (2016) shows an influence tax avoidance of firm value. The hypotheses used in this study are:

Ha1   Tax avoidance has a positive effect on firm value

2.6.2.   The effect of company size on firm value

A large company size can reflect if the company has a high commitment to continue to improve its performance, so that the market will be willing to pay more to get its shares because it believes it will get profitable returns from the company (Riyanto, 2012). Soliha and Taswan in Nurhayati (2013) stated that large companies can easily access the capital market, so they have the flexibility and ability to get funds. With this convenience, investors are captured as a positive signal and good prospects so that the size of the company can have a positive influence on company value. The results of previous studies indicate that company size has a positive effect on firm value.

The results of previous research conducted by Nohong, (2016), Kurnia, Pratomo, and Fachrizal, (2018) and Pratama and Wiksuana, (2016)indicates an influence firm size against firm value. The hypotheses used in this study are:

Ha2   Firm size has a positive effect on firm value

2.6.3.   Effect of asset structure on firm value

Asset structure describes the amount of assets that the company can guarantee when the company makes loans to creditors. Asset structure is the proportion of fixed assets owned by a company (Mawikere and Rate, 2015). The composition of fixed assets determines the value of a particular company. Most companies with financial stability have a high investment value in terms of fixed assets. When these assets are used optimally by competent staff, this will increase the company's return and ultimately affect the growth of company value (Nyamasege et.al, 2014). The research is strengthened by the research of Setiadharma S and Machali (2017), which proves that asset structure has a positive effect on firm value. This means that if the asset structure increases, the company value will also increase.

The results of previous research conducted by Hermuningsih, (2013) and Perwira and Wiksuana, (2017) indicates an influence asset structure to firm value. The hypotheses used in this study are:

Ha3   Asset structure has a positive effect on firm value

2.6.4.   Effect of profitability on firm value

*Profitability*is the net result of a series of policies and decisions. Profitability ratios show the combined effect of liquidity, asset management and debt on operating results (Brigham and Houston, 2012: 146). According to Mardiyati, Ahmad, Putri (2012), profitability has a significant positive effect on firm value. This means that the higher the profit value obtained, the higher the firm value. Because high profits will give an indication of the company's good prospects so that it can trigger investors to participate in increasing demand for shares. The increasing demand for shares will cause the company value to increase.

The results of previous research conducted by Hermuningsih, (2013), Perwira and Wiksuana, (2017), Pratama and Wiksuana, (2016), Kodongo et.all, (2014) and Mule et.all, (2015) indicates an influence *profitability*to company value. The hypotheses used in this study are:

Ha4   *Profitability* has a negative effect on firm value

2.7. Research Conceptual Framework

Tax avoidance (Tax *avoidance)*mis a company way to avoid taxation but only by utilizing loopholes in an existing taxation regulation. So that according to Dyreng et al. (2008), tax avoidance is a phenomenon that occurs in a certain regulated situation that causes a reduction in the tax burden. Tax avoidance actions taken by the company can increase the value of the company, because the profits obtained by the company will be even greater. Thus, according to Prasetyo (2013), company value is a certain condition that reflects the level of public trust in the company, the higher the value of the company the more prosperous the owner.

Firm size is one of the variables considered in determining firm value. The size of the company is a reflection of the total assets owned by the company. The bigger the size of the company, the bigger the assets owned by the company and the more funds needed by the company to maintain its operational activities (Riyanto, 2012). Company size is considered capable of influencing company value. The size of the company can be seen from the total assets owned by a company. A large company size reflects that the company is experiencing good development and growth, thus increasing the value of a company.

Fixed assets are considered to have productive capacity in a manufacturing company that is used to generate sales and profits. So, companies with large fixed assets will generate large profits. Big profits indicate that the company's financial performance is good with high profitability. And then in the end this increase will also increase the value of the company. Nyamasege et.al (2014) stated that the composition of fixed assets determines the value of a particular company. Most companies with stable finances have a high investment value in terms of fixed assets. Management determines the most appropriate asset composition for the company, including in the consideration of determining the amount of fixed assets that should be owned by the company so that it can be used to improve company performance.

In doing how optimal the profit obtained by the company in its business can use the profitability ratio, where the profitability ratio according to Asnawi and Wijaya (2015: 26), is the ability that the company can achieve in a certain period. So it can be said to see how the return on investment for the future can be through profitability ratio analysis. Therefore, profitability can be used as an indicator that whether the tax avoidance actions taken by the company can actually get the optimal profit in order to increase the value of the company.

Based on the description above, to clarify the framework, these five variables can be described in a simple paradigm with four independent variables and one dependent variable, as follows:
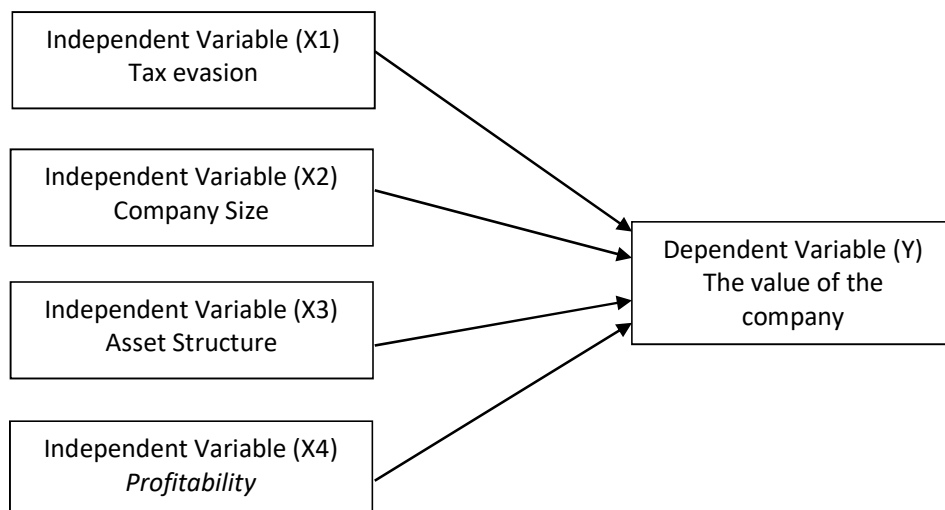
Figure 2.1. Research Conceptual Framework

III.   RESEARCH METHOD

3.1. Research Strategy

Sugiyono (2012: 18) states that quantitative research in looking at the relationship between variables and the object under study is more causal, so that in his research there are independent (free) and dependent (dependent) variables. By using the research strategy, it will be known that the significant influence between the variables studied, namely the effect of tax avoidance, firm size, asset structure and profitability on firm value. The data of this study were taken from manufacturing companies listed on the Indonesia Stock Exchange in the form of balance data, income statements and changes in equity reports presented in the 2014-2018 financial statements.

3.2.   Population and Sample Research

Sugiyono (2017: 144) suggests population is a generalization area consisting of objects or subjects that have certain quantities and characteristics that are determined by researchers to be studied and then draw conclusions. The population used in this study are manufacturing companies listed on the Indonesia Stock Exchange in 2014-2018, where approximately 147 manufacturing companies go public on the Indonesia Stock Exchange.

Sugiyono (2017: 145), "The sample is part of the number and characteristics possessed by the population". The sample taken by the researcher was 35 manufacturing companies listed on the IDX using financial statement data in the form of balance sheets and income statements for the years 2014-2018. The sampling method used is purposive sampling method, which is a sampling method based on certain traits or characteristics that are considered to have a close relationship with known population characteristics.

3.3.   Data Analysis Methods

3.3.1. Data processing methods

The data processing plan is to use a computer, namely the Eviews 10.0 program. This is done in the hope that there will not be a large error rate

3.3.2. Method of presenting data

After the data is processed, the results or outputs from the operations of multiplication, addition, division, rooting, assignment, and subtraction are obtained. The results of data processing will be presented in tabular form, so that they can be read easily and can be quickly understood.

3.3.3. Statistical data method

The data analysis method used in this research is panel data regression analysis (pooled data). In this study, the data analysis model used is a statistical analysis model which data processing using the Eviews 10.0 program. Gujarati (2013: 213) states that panel data is a combination of periodic data (time series) and individual data (cross section).

3.3.3.1. Panel Data Regression Analysis

Modeling using panel data regression techniques can be done using three alternative approaches to processing methods. These approaches are the Common effect (Pooled Least Square) method, the Fixed effect (FE) method, and the Random effect (RE) method as follows (Gujarati, 2013):

1. *Pooled Least Square* **(PLS) / Common effect Model (CEM)**

     This method combines time-series and cross-section data then regressed in the OLS method. However, this method is said to be unrealistic because in its use the same intercept value is often obtained, so that it is not efficient to use in every estimation model, therefore a data panel is made to make it easier to interpret.

2. *Fixed effect Model (FEM)*

Fixed effect method is a method with different intercept for each subject (cross section), but the slop of each subject does not change over time. The Eviews 10 program by itself recommends the use of the FEM model, but to be more certain, the authors test again using the Likelihood Ratio test showing a significant Chi square probability value of 0.0000, which means that testing with the FEM model is the best.

This method assumes that there are differences between individual variables (cross-section) and these differences can be seen through differences in the intercept. Gujarati (2013), this method is more efficient to use in panel data if the number of time periods is greater than the number of individual variables. The advantage of this method is that it can distinguish individual effects and time effects and this method does not need to use the assumption that the error component is not correlated with the independent variable.

3. *Random effect Model (REM)*

This method the specific effects of individual variables are part of the error-term. This model assumes that the error-term will always exist and may be correlated across time series and cross-sections. This method is better used for panel data if the number of individuals is greater than the number of time periods.

To test the three models, three tests were used, namely:

1. **Chow Test**

The Chow test is used to select the best approach between the Pooled Least Square (PLS) and Fixed Effects Model (FEM) approaches, with the following formula (Gujarati, 2013). The hypothesis in the chow test is:

H0: Common effect Model

H1: Fixed effect model

The basis for rejection of the above hypothesis is to compare the value of the Prob Cross-section F with alpha.

If the Cross-section Prob F> 0.05: Accept H0

If Cross-section Prob F <0.05: Reject H0

2. **Hausman Test**

The Hausman test is a statistical test to select the best model data between the Fixed Effects Model (FEM) and the Random Effects Model (REM), so the Hausman test is used to select the best approach with the following formula (Gujarati, 2013). The hypothesis in the Hausman test is:

H_0 : Random effect (REM)

H_1 : Fixed effect (FEM)

With the hypothesis testing criteria:

If Prob Cross-section Random> 0.05: Accept H0

If Prob Cross-section Random <0.05: Reject H0

3. **Lagrange Multiplier (LM) test**

Lagrange Multiplier (LM) is a test to determine whether the random effect model is better than the Common effect (OLS) model which is most appropriate to use. This random effect significance test was developed by Breusch Pagan. The Food Breusch method for the random effect significance test is based on the residual value of the OLS method. The hypothesis used is:

H0: Common effect Model

H1: Random effect model

The basis for rejection of the above hypothesis is to compare the random cross-section prob value with alpha.

If Prob Cross-section Random> 0.05: Accept H0

If Prob Cross-section Random <0.05: Reject H0

3.3.3.2. Hypothesis Testing Model
This test consists of several analysis of hypothesis testing, namely:

1. **Multiple Linear Regression Analysis**

   Multiple linear regression analysis is an analysis of the linear effect between two or more independent variables and one dependent variable. The data that has been collected will be processed using Eviews 10 Software. To determine the effect of the independent variables on the dependent variable, multiple linear regression models are used with the following equation:

   $$PBV_{i,t} = \beta_0 + \beta_1 CETR_{i,t} + \beta_2 Ukper_{i,t} + \beta_3 FAR_{i,t} + \beta_4 ROA_{i,t} + \varepsilon$$

   Information :

   β_0 = Constant

   $PBV_{i,t}$ = Value of firm i in year t

   $\beta_1 CETR_{i,t}$ = Tax avoidance of company i in year t

   $\beta_2 Ukper_{i,t}$ = Size of company i in year t

   $\beta_3 FAR_{i,t}$ = Asset structure of company i in year t

   $\beta_4 ROA_{i,t}$ = Profitability of company i in year t

   $\beta_1 - \beta_4$ = Dependent Variable Regression Coefficient

   ε = *Error*

2. **Testing Analysis t**

   Testing is done using the t distribution as a statistical test (Gujarati, 2013). The t test is carried out to test whether separately the independent variable is able to explain the dependent variable well. This test was carried out at a level of $\alpha = 5\%$. The criteria for testing the hypothesis with the t test where Prob <0.05 means significant and Prob> 0.05 means not significant

3. **Analysis of the Coefficient of Determination (Adjusted R2)**

   3.4. The coefficient of determination measures how much the influence of the independent variable contributes to the dependent variable (Gujarati, 2013). This study uses adjusted R2 because the dependent variable used in the research model is more than one. The coefficient of determination is zero and one. The coefficient of determination is between zero and one. The small value of R2 means that the ability of the independent variable to explain the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict variations in the dependent variable.

IV. RESULTS AND DISCUSSION

4.1. Description of Research Object
The sample in this study was 35 manufacturing companies on the IDX from 2014 to 2018 where information about the company's financial statements was taken based on its completeness and compliance with the criteria set in this study, so that the total data used was 35 companies x 5 years = 175 data. The focus of this research is to analyze the effect of tax avoidance, firm size, asset structure, and profitability on firm value.

4.2. Data Description
This analysis is used to provide an overview or description of a data, where the data obtained comes from the results of descriptive analysis, which shows the average (mean), highest (maximum) value, lowest (minimum) value and standard deviation of each variable under study. both the independent variable and the dependent variable, namely: Tax avoidance is the first variable (X1), Firm size is the second variable (X2), Asset structure is the third variable (X3), Profitability is the fourth variable (X4), and firm value is the fifth variable (Y), as described in paired data in the attachment.

Descriptive statistics of each of the variables studied are as follows:

Table 4.1 Descriptive Analysis of the Variable Statistics Under Study

	PBV	CETR	Ukper	FAR	ROA
Mean	5.382743	0.275457	15.16666	0.407537	10.77114
Median	2.210000	0.254000	14,76400	0.344000	7,820000
Maximum	82.44000	2,773000	19.65 800	4,672000	52.67000
Minimum	0.000000	0.020000	11.90 500	0.044000	0.100000
Std. Dev.	11.10390	0.206532	1,790770	0.398956	9,720896
Observations	175	175	175	175	175

Source www.idx.co.id Data is processed with E views

Based on the calculation results, it can be seen that the tax avoidance variable (X1) shows a minimum value of 0.020, this is because the increase in profit is greater than the tax payment and the maximum value is 2.773 this is because the decrease in profit is greater than the decrease in tax payments. The average value of tax avoidance is 0.275457. Meanwhile, the standard deviation of 0.206532 is smaller than the mean value. Based on the calculation results, it can be seen that the company size variable (X2) with a minimum value of 11.905 and a maximum value of 19.658. The average company size value is 15.16666 because it has the highest total assets among all the companies sampled. Meanwhile, the standard deviation of 1.790770 is smaller than the mean value.

The descriptive statistical results of the asset structure (X3) show a minimum value of 0.044 and a maximum value of 4.672. The average value of the asset structure is 0.407537 with a standard deviation of 0.398956 smaller than the mean value. Based on the calculation results, the variables can be seen*profitability* (X4)with a minimum value of 0.1 and a maximum value of 52.67. Average value*profitability*amounting to 10.77114. Meanwhile, the standard deviation of 9.720896 is smaller than the mean value. It can be seen from the attachment that PT Multi Bintang Indonesia in 2017 has a higher rate of return on assets compared to other companies with a percentage of acquisition of 52.67%. This high rate of return on assets indicates that the company PTMulti Bintang Indonesia Tbkgenerate an average profit of 52.67% from every rupiah invested in asset capital. PT Asahimas Flat GlassTbk, in 2018 on the other hand, had the lowest return on assets of 0.10%. This company tends to have a return on assets below 5%. This shows that the company is only able to generate 0.10% of each capital asset of the company. However, this company experienced an increase in return on assets every year from 2014 to 2018. Based on the calculation results, it can be seen that the firm value variable (Y) shows a minimum value of 0 and a maximum value of 82.44. The average value of the company is 5.382743. Meanwhile, the standard deviation of 11.10390 is smaller than the mean value..

4.3. Statistic analysis
4.3.1. Panel Data Analysis
The data used in this study uses panel data (Eviews Ver. 10). In the panel data model, there are three kinds of approaches that can be used, namely the ordinary / pooled least square approach, the fixed effect approach, and the random effect approach. To get the best estimation model, the panel data testing method was chosen for all sample data with several stages.

First, testing is done to determine the model that will be used in the results of the research analysis.

1. *Chow test*

The chow-test is used to determine which model will be selected in the panel data regression model estimation, whether the common effect or fixed effect model. This test is performed using the F or chi-square statistical test with the following hypotheses:

H0: Common effect model is better than fixed effect

H1: Fixed effect model is better than common effect

If the calculated F value (F-test) and chi-square test are smaller than $\alpha = 0.05$ (5%), then H0 is rejected and H1 is accepted. This shows that the fixed effects model is better than the common effect model in estimating the panel data regression method. Conversely, if H0 is accepted and H1 is rejected, it means that the common effect model is better than the fixed effect model in estimating the panel data regression method.

Table. 4.2 Chow Test Results

Redundant Fixed Effects Tests
Pool: POOL01
Fixed effects cross-section test

Effects Test	Statistics	df	Prob.
Cross-section F	11.796050	(34,136)	0.0000
Chi-square cross-section	240.356470	34	0.0000

Source: The results of data processing with Eviews version 10.0, (2020).

Based on the calculation results shown in table 4.2, it is concluded that from the chow-test test, it can be seen that the probability value of the F test and chi-square test is smaller than $\alpha = 0.05$ (5%), namely 0.000, so that H1 is accepted and H0 is rejected, which means that the fixed effect panel data model is better used in estimating the panel data regression method than the common effect model.

2. **Hausman Test**

Choosing which panel data regression method is used between the fixed effect model or the random effect model for estimation, the Hausman test is carried out. The hypothesis in the Hausman test is as follows:

H0: The random effect model is better than the fixed effect
H1: The fixed effect model is better than the random effect

If the Chi-Square Hausman test probability value is smaller than $\alpha = 0.05$ (5%), then H0 is rejected and H1 is accepted.This means that the estimation of the panel data regression method is better to use a fixed effect model than a random effect model. On the other hand, if the Chi-Square Hausman test probability value is greater than 0.05 (5%), then H0 is accepted and H1 is rejected, which means that the random effects model is better than the fixed effects model. effect) in estimating panel data regression.

Table. 4.3 Hausman Test

Correlated Random Effects - Hausman Test
Pool: POOL01
Cross-section random effects test

Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.
Random cross-section	57.154259	4	0.0000

Source: The results of data processing with Eviews version 10.0, (2020).

Based on the calculation results of the Hausman test shown in table 4.2, it is concluded that the Chi-Square probability value is 0.0000 <from $\alpha = 0.05$ (5%), so the panel data regression method used in the study to estimate the effect is the fixed effect.

3. **Lagrange Multiplier test (LM-test)**

Determining which model to use in the panel data regression method, whether the common effect model or the random effect model is through the Breusch-Pagan Lagrange Multiplier (LM-test) test. The hypothesis in this test is as follows:

H0: The common effect model is better than the random effect

H1: The random effect model is better than the common effect.

If the LM test> chi-squares with Alpha = α = 0.05 and df = 3, then H0 is rejected and H1 is accepted.

Based on the Chow-test model test, it shows that the Fixed Effect Model is selected. On the other hand, the results of the Hausman model test show that the selected Fixed Effect Model, the Lagrange Multiplier model test does not need to be done anymore.

4. Model Conclusion

Table 4.4 Conclusion Panel Data Regression Model Testing

No.	Method	Testing	Result
1	*Chow-Test*	*Common Effect* vs Fixed Effect	*Fixed Effect*
2	*Hausman Test*	*Fixed Effect vs Random Effect*	*Fixed Effect*
3	*Lagrange Multiplier-BP*	*Common Effect* vs Random Effect	-

Source: The results of data processing with Eviews version 10.0, (2020).

Based on the paired test results using the Chow test, Hausmant test and the LM Breusch-Pagan (BP) test, for the three panel data regression methods above, it can be concluded that the Fixed Effect model in the panel data regression method is used further to estimate and analyze the sample. in research.

4.3.2. Multiple linear regression analysis

Multiple linear regression analysis is intended to test the extent and direction of the influence of the independent variables on the dependent variable. The independent variable in this study is tax avoidance, firm size, asset structure, and profitability, while the dependent variable is firm value using the Fixed Effect Model.

Table 4.5 Multiple Linear Regression Equation Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	19,92072	25.08365	0.794171	0.4285
CETR	0.075126	1.633854	2.045981	0.0000
UKPER	0.981746	1.620911	2.605676	0.0000
FAR	0.435456	1.268555	2.343269	0.0319
ROA	-0.047220	0.087965	-2.536802	0.0000

Source: Data processed with E views

Based on the results above, the multiple linear regression equation can be as follows:

PBVi, t = β0 + β1CETRi, t + β2Ukperi, t + β3FARi, t + β4ROAi, t + ε
PBVi, t = 19.92072 + 0.075126 CETRi, t + 0.981746 Ukperi, t + 0.435456 FARi, t - 0.047220 ROAi, t + ε

Information :
Y   = Company value
X1 = Tax avoidance
X2 = Company size
X3 = Asset structure
X4 = *Profitability*

α = Constant

e = Error, error rate

Based on the multiple linear regression equation, it can be analyzed the effect of each independent variable on the dependent variable, namely:

1. Constant Value α 19.92072 states that if the value of tax avoidance (X1), company size (X2), asset structure (X3) and profitability (X4) is kostan (0) then the value of the company is 19.92072
2. The regression coefficient value X1 is 0.075126, which means that for every change of 1 value of tax avoidance, the company value will increase by 0.075126
3. The regression coefficient value X2 is 0.981746, which means that for every change of 1 value, the size of the company, the company value will increase by 0.981746
4. The regression coefficient value X3 is 0.435456, which means that every 1 change in the value of the asset structure, the company value will increase by 0.435456
5. The regression coefficient value X4 is -0.047220, which means that every 1 change in the value of profitability, the company value will decrease 0.047220

4.3.3. Hypothesis testing

Hypothesis testing, the researcher will restate in table 4.6 about the results of the regression analysis of the Fixed Effect Model which has stated that the model is more appropriate for this study.

Table 4.7. Hypothesis testing

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	19,92072	25.08365	0.794171	0.4285
CETR	0.075126	1.633854	2.045981	0.0000
UKPER	0.981746	1.620911	2.605676	0.0000
FAR	0.435456	1.268555	2.343269	0.0319
ROA	-0.047220	0.087965	-2.536802	0.0000

R-squared	0.907558	Mean dependent var	5.382743
Adjusted R-squared	0.881729	SD dependent var	11.10390
SE of regression	3.818693	Akaike info criterion	5.711277
Sum squared resid	1983,209	Schwarz criterion	6.416572
Log likelihood	-460,7367	Hannan-Quinn criter.	5.997365
F-statistic	35.13679	Durbin-Watson stat	3.586534
Prob (F-statistic)	0.000000		

Source: Data processed with E views

Based on the three-test model, the three-test model shows that the Fixed Effect Model is chosen. The following will describe the results of hypothesis testing, namely:

1) Testing t

a. First Hypothesis (H1)

The results can be seen from table 4.6 that the probability significance value is 0.0000 <0.05. Then these results indicate H1 is accepted, meaning tax avoidance (X1) has a significant positive effect on firm value (Y). Then the hypothesis H1 is proven.

b. Second Hypothesis (H2)

The results can be seen from table 4.6 that the probability significance value is 0.0000 <0.05. Then these results state that H2 is accepted, meaning firm size (X2)

l has a significant positive effect on firm value (Y). Then the H2 hypothesis is proven.

c. Third Hypothesis (H3)

The results can be seen from table 4.6 that the probability significance value is 0.0319 <0.05. Then these results state that H3 is accepted, meaning that the asset structure (X3) has a significant positive effect on firm value (Y). Then the hypothesis H3 is proven.

d. Fourth Hypothesis (H4)

The results can be seen from table 4.6 that the probability significance value is 0.0000 <0.05. Then these results indicate that H4 is accepted, meaning that profitability (X4) has a significant negative effect on firm value (Y). Then the hypothesis H4 is proven.

2) Coefficient of Determination (R²)

Based on table 4.6, it states that the Adjusted R-square value is 0.881729, meaning that the coefficient of determination of this study is equal to 0.881729 This suggests that the independent variable is able to explain the dependent variable only at 88.17%. The remaining 11.83% is influenced by other independent variables which were not examined in this study.

4.4. Research Findings

4.4.1. There is a significant positive effect of tax avoidance on firm value

The results of the analysis state that the probability significance value of tax avoidance (X1) is 0.000 <0.05. This suggests that the tax avoidance variable has a significant positive effect on firm value.Tax avoidance that is proxied by the presence of debt indicates that the higher the ratio, the more efficient the use of corporate tax avoidance is so as to increase firm value. *Tax Avoidance* can have a good impact on the company because the company is said to be doing tax avoidance if the value of Tax Avoidance is below 0.25 or 25%, where if the company does Tax Avoidance, the tax burden will be reduced which causes an increase in company profits, with an increase in company profits, the dividends that are will be accepted by investors will be high too, if investor interest is high then the stock price will also rise which causes an increase in company value. These results are in accordance with the results of previous research conducted by Kurnia, Pratomo, and Fachrizal, (2018) and Assidi *et.all*, (2016) showed a significant influence between tax avoidance of firm value.

4.4.2. There is a significant positive effect company size on firm value

The result of the analysis states that the probability significance value of company size (X2) is 0.0000> 0.05. This indicates that the firm size variable has a significant positive effect on firm value.This is according to research Rudangga and Sudiarta (2016), in their research results stated that large companies can easily access the capital market, so that they have the flexibility and ability to get funds. Company size is a reflection of the size of the company indicated by the total asset value of the company. Based on this, the larger the size of the company, there is a tendency for investors to pay attention to the company. The response given by investors is because large companies have more stable conditions so that they attract investors to own shares of the company. The increase in demand for company shares will spur an increase in share prices in the capital market so that the company's "value" will also increase.This result is in accordance with the results of previous research conducted by Nohong, (2016), Kurnia, Pratomo, and Fachrizal, (2018) and Pratama and Wiksuana, (2016) indicates a significant effect between firm size against firm value.

4.4.3. There is a significant positive effect of asset structure on firm value

The results of the analysis state that the probability significance value of the asset structure (X3) is 0.0319 <0.05. This suggests that the asset structure variable has an effectsignificant positive to company value. The results of this study indicate that the composition of fixed assets determines the value of a particular company. Most companies with financial stability have a high investment value in terms of fixed assets. When these fixed assets are optimally utilized by competent staff, this will increase the company's return and ultimately affect the growth of company value.This study is consistent with previous research, which proves that asset structure has a positive effect on firm value. This figure shows that the asset structure has a significant effect on firm value. The company's fixed assets change, while the company value changes almost every day so that assets affect changes in company value.This result is in accordance with the results of previous research conducted by Hermuningsih, (2013) and Perwira and Wiksuana, (2017) showing a significant influence between asset structure on firm value.

4.4.4. There is a significant negative effect of profitability on firm value

The results of the analysis state that the probability significance value of profitability (X4) is 0.0000 <0.05. This indicates that the profitability variable has a negative effectsignificant to company value. ThingThis shows that profitability is directly proportional to firm value. If the profitability has increased, the company value will also increase, and vice versa. So the third hypothesis proposed by the researcher is accepted. This is consistent with the theory that high profitability reflects the company's ability to generate high returns for shareholders. With a high profitability ratio owned by the company, it will attract investors to invest in the company. The high interest of investors to invest in companies with high profitability will increase share prices so that it will increase company value.This is in accordance with previous research conducted by Officers and Wiksuana (2018) and Wijaya and Sedana (2015) which states that profitability has a positive effect on firm value where basically profitability shows the company's ability to obtain from net income from net sales and can also measure the ability of company management to carry out its operational activities to minimize company expenses and maximize company profits. This is what can increase the value of the company so that investors are also more interested in investing in the company. But not supportiveresearch IGB Angga Pratama and IGB Wiksuana(2018) which states there is no influence. These results are in accordance with the results of previous studies conducted by Hermuningsih, (2013), Perwira and Wiksuana, (2017), Pratama and Wiksuana, (2016), Kodongo et.all, (2014) and Mule et.all, (2015)indicates a significant effect between profitability to firm value.

V. CONCLUSIONS AND SUGGESTIONS
5.1. Conclusion
Based on the results of research and discussion, it can be concluded as follows:
1. There is a significant positive effect of tax avoidance on firm value in manufacturing companies on the IDX in 2014-2018.
2. There is a significant positive effect company size on firm value in manufacturing companies on the IDX in 2014-2018.
3. There is a significant positive effect of asset structure on firm value in manufacturing companies on the IDX in 2014-2018.
4. There is a significant negative effect of profitability on firm value in manufacturing companies on the IDX in 2014-2018.

5.2. Suggestion
Based on the results of the conclusions described above, the researcher provides the following suggestions:

1. The company is also expected to continue to strive to make optimal investment policies so as to increase company value.
2. For further researchers, they should be able to carry out similar research by adding variables that are expected to affect firm value so that various alternative ways of making policies to increase firm value can be obtained.
3. Further research can develop this research by increasing the number of observations, for example by making all manufacturing companies listed on the IDX the target population
4. Future studies should use SPSS or Pls analysis tools in each study, especially related to the title of this study

5.3. Limitations and Further Research Development

The limitations of this study are:

1. This study only took a sample of 35 manufacturing companies, it would be better if the sample taken includes all companies, so that the research results can be generalized in a broader scope.
2. This study only examines the effect of tax avoidance, firm size, asset structure and profitability on firm value. There are still other factors that can affect firm value, for example macro and micro variables.
1. The limitations that exist in this study should be further refined for future researchers, for example by expanding the sample more, so that the results of subsequent studies can be generalized, besides that further research is expected to consider other variables that can affect firm value.

REFERENCE LIST

Abdillah and Suryana, 2013. Financial Accounting, Bandung: Ghaila Indonesia

Assidi *et.all*, 2016. Tax optimization and the firm's value: Evidence from the Tunisian context available online atwww.sciencedirect.comBorsa_Istanbul ReviewBorsa_Istanbul Review 16-3 (2016) 177e184http: //www.elsevier.com/journals/borsa-istanbul-review/2214-8450

Azhari and Nuryatno, 2015. Audit Opinion Moderating the Effect of Profitability, Company Size, Institutional Ownership, and the Audit Committee on Timeliness. Scientific Journal of Accounting and Business, [Sl], v. 14, n. 1, p. 19-33, jan. 2019. ISSN 2303-1018.

Baridwan, Zaki. 2012 Intermediate Accounting, 8th Edition: BPFE, Yogyakarta.

BRigham and Houston, 2012. Fundamentals of Management. Translation Finance. Edition 10. Jakarta: Four Salemba

Brigham and Houston, 2013. Fundamentals of Financial Management, 14th Edition. Mason: South-Western Cengange Learning

Djarwanto, 2013. Principles of Financial Statement Analysis, BPFE: Yogyakarta

Fahmi, Irham. 2013, Financial Performance Analysis. Bandung: ALFABETA

Fatharani, 2012 The Influence of Ownership Characteristics, Tax Reform, and Political Relations on Tax Aggressive Actions in companies listed on the IDX in 2007-2010. Faculty of Economics, Accounting Study Program, Depok

Gitman, 2016. Principles of Managerial Finance. Thirteenth edition. Prentice Hall

Hanlon and Heitzman, 2013. A Review of Tax Research. Journal of Accounting and Economics, Vol. 50, 127-178.

Hermuningsih, 2013. The Effect of Profitability, Growth Opportunity, Capital Structure on Firm Value in Public Companies in Indonesia. Bulletin of Monetary Economics and Banking, October 2013. JEL Classification: C51, G32, L25

Hirt and Block, 2013. Foundations of Financial Management. 11th Edition. New York: McGraw-Hill Irwin

Horne and Wachowicz, 2012 Principles. Financial Management (13th Edition). Jakarta: Four Salemba.

Kasmir, 2013. Financial Statement Analysis. Issue 1. 6th edition. Jakarta: Rajawali Press

Kodongo et.all, 2014 Capital structure, profitability and firm value: panel evidence of listed firms in Kenya. April 2014. Online at http://mpra.ub.uni-muenchen.de/57116/. MPRA Paper No. 57116, posted 6. July 2014 05:40 UTC

Kurnia, Pratomo, and Fachrizal, 2018 Analysis of the Effect of Tax Avoidance, Leverage (Der) and Firm Size on Firm Value (Study of Real Estate and Property Companies Listed on the Indonesia Stock Exchange in 2013-2015) Accounthink: Journal of Accounting and Finance Published by University of Singaperbangsa Karawang Vol. 3 No. 01 2018

Mamduh, 2016 Financial Statement Analysis. Edition. Fifth. Yogyakarta: UPP STIM YKPN.

Mardiasmo, 2013 Revised Edition of Taxation 2011. Yogyakarta: Publisher Andi

Mule et.all, 2015 Corporate Size, Profitability And Market Value: An Econometric Panel Analysis Of Listed Firms In Kenya European Scientific Journal May 2015 edition vol.11, No.13 ISSN: 1857 - 7881 (Print) e - ISSN 1857- 7431

Mulyani, 2014.The Influence of Company Characteristics, Political Connections and Tax Reforms on Tax Avoidance. Student Journal of Taxation, Vol. 2 (1), pp. 1-9

Nohong, 2016 Innovation, Growth, Size and Value of Pharmaceutical Companies in Indonesia Journal of Finance and Banking, Vol. 20, No.2 May 2016, p. 176–185 Accredited SK. No. 040 / P / 2014 http://jurkubank.wordpress.com

Nurlela and Ishaluddin, 2012 The Effect of Corporate Social Responsibility on Company Value with Percentage of Management Ownership as a Moderating Variable (Empirical Study of Companies Listed on the Jakarta Stock Exchange). Accounting National Symposium XI. 23-24 July. Pontianak

PeStatement of Financial Accounting Standards, PSAK 1 of 2018

Perwira dan Wiksuana, 2017 The Effect of Profitability and Asset Growth on Dividend Policy and Company Value. E-Journal of Management of Udayana University, Vol. 7, No. 7, 2018: 3767-3796 ISSN: 2302-8912

Pohan, 2014. Indonesian Taxation. Jakarta: Mitra Wacana Media.

Pratama and Wiksuana, 2016 The Effect of Company Size and Leverage on Firm Value with Profitability as a Mediation Variable. E-Journal of Management of Udayana University, Vol. 5, No. 2, 2016: 1338-1367 ISSN: 2302-8912

Putra and Ramantha, 2015 The Influence of Profitability, Company Age, Institutional Ownership, Independent Commissioners, and the Audit Committee on the Timeliness of Annual Financial Report Publications. Udayana University Accounting E-Journal Vol. 10 No. 1. Pg. 199-213 ISSN: 2302-8556

Rahayu, Siti Kurnia 2013 Indonesian Taxation. Yogyakarta: Graha Pustaka

Riyanto, Bambang, 2012, Basics of Corporate Expenditure. Fourth Edition. BPFE. Yogyakarta

Santoso, 2013 Mastering Multivariate Statistics. Jakarta: PT Elex Media Komputindo

Sartono, Agus, 2012, Financial Management Theory and Application. Edition4. BPFE. Yogyakarta

Sawir, Agnes., 2013 Financial Performance Analysis and Financial Planning. Company, Gramedia Pustaka Utama, Jakarta.

Simamora, Henry, 2016 *Management Accounting.*Third edition. Star Gate Publisher. Riau

Siti Official, 2013. Taxation Theory and Cases. Edition 8. Jakarta: Four Salemba

Suandy, Early, 2011, Tax Law, 6th Edition. Yogyakarta: Salemba Empat Publisher.

Subramanyam, 2017 Financial Statement Analysis. Jakarta: Four Salemba.

Syamsuddin, 2011 Corporate Financial Management. Jakarta: Rajawali Press.

Warren, Reeve and Fess, 2012 Introduction to Accounting. Translate Farahmita, Amanugrahani, Taufik Hedrawan. Jakarta: Four Salemba.

Wild, 2012 Analysis of financial statements (Yanivi S. Bachtiar and S. Nurwahyu har stages, translators) Jakarta: Salemba Empat.

Wirawati, 2012*The Influence of Capital Structure and Profitability on Firm Value with Managerial Ownership as a Moderator.* E-Journal of Accounting at Udayana University Vol. 15.3. June (2016): 1796-1825 ISSN: 2302-8556

Setiadharma S and Machali. 2016. The Effect of Asset Structure and Firm Size on Firm Value with Capital Structure as Intervening Variable. Journal of Business & Financial Affairs Research Article J Bus Fin Aff, an open access journal ISSN: 2167-0234 Open Access