

# **Profitability, Liquidity, Advertising Cost and Firm Size Towards Tax Aggressiveness in Indonesia**

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## **Abstract**

The objective of this research is to analyze the influence of profitability, liquidity, advertising cost and firm size towards tax aggressiveness on manufacturing companies. The population of this study is all of the manufacturing companies listed on the Indonesia Stock Exchange (BEI) from 2016 to 2019. The sampling method used in this study is purposive sampling and data analysis methods is done using multiple linear regression analysis. The proxy used to calculate tax aggressiveness is the effective tax rate proxy. The result of multiple linear regression analysis demonstrates that out of the four hypotheses tested, only two hypothesis that showed a significant negative effect which is liquidity and advertising cost to tax aggressiveness, profitability has a significant positive effect on tax aggressiveness while variable of firm size has no effect on partial tax aggressiveness.

## **Keywords**

Profitability, Liquidity, Advertising Cost, Firm Size, Tax Aggressiveness

## **1. Introduction**

Tax is very important in every country including Indonesia because tax is a source of state revenue. A tax is a compulsory financial charge or some other type of levy imposed on a taxpayer (an individual or legal entity) by a governmental organization in order to fund government spending and various public expenditures. In accordance with the contents of the tax law, paying taxes is not only an obligation, but it is also the right of every citizen to participate.

Tax collection can be enforced because it is implemented based on law, namely based on KUP Law Number 16 of 2009, article 1, paragraph 1. As citizens who are bound by rules and laws, whether they like it or not, they have to comply with existing rules, including the obligation to pay taxes. If there are residents who refuse to pay taxes, take action or avoid being taxed, then this can be classified as a violation of the law. The benefits of taxes paid by the community will be returned indirectly to the community by financing all state expenditures such as infrastructure development that can be enjoyed by all Indonesian people.

One of the benchmarks for the development of a country can be seen from the country's infrastructure. Infrastructure development is an asset in an effort to facilitate the flow of the country's economic life as well as efforts to improve

the standard of living of the community at large, which leads to welfare. To be able to realize the provision of public services and public facilities, Indonesia must explore the main source of state revenue, which is none other than tax. Based on the 2018 State Budget published by the Ministry of Finance of the Republic of Indonesia ([www.kemenkeu.go.id](http://www.kemenkeu.go.id)), during the 2013-2018 period, State revenues experienced growth with an average range of 6.1%. The percentage of state tax revenue in 2018 is 85.4% of the total 2018 State Budget revenue of IDR 1,894.7 trillion, which mean the largest contributor in tax is Income Tax. With the increasing number of citizens paying taxes, the more various facilities and infrastructures that the government has built for mutual welfare and also as a provision for the future of the Indonesian nation, so that it can compete abroad.

But in practice, it is not an easy matter to build awareness and volunteerism in paying taxes. The description of the explanation above is not just a sentence, because it can be seen from one of the real cases that shocked the world and emerged recently in 2016, which became the center of public attention, namely the Panama Papers Scandal. The Panama Papers itself is a practice of hiding wealth and avoiding tax payments, which is basically illegal. It is packaged in a secret collection of documents that can be traced from the period 1970s to the end of 2015 which includes matters concerning more than 214,000 foreign companies, including the identities of their shareholders and directors, made by Mossack Fonseca, a Panamanian service provider company whose function is to create a company in another country, manages foreign companies and asset management in the country of Panama, under the guise of a shell company or an inactive company that is used as a "vehicle for financial maneuvering" (Isanty, 2016). Shell companies are actually useful for facilitating business interests, but in this case many companies use this to save funds.

Panama is a tax-free country (tax heaven). This opens up great opportunities for many people to commit crimes such as tax evasion, money laundry, illegal drug trafficking, terrorism, and many other cases. Many people flock to save assets so that their activities are not detected by the tax authorities, and got their identity guaranteed. There are hundreds of Indonesians who were also involved in this case, which of course is detrimental to Indonesia itself. Most of the income earned by taxpayers comes from within the country, so that means that taxes should be paid in the country where the income originates. But the fact is that there are still many people who are not willing and even don't want to contribute their work for the welfare of their country.

In this case, it shows the tax avoidance practices that are still rampant or happening in Indonesia. It appears that there are differences in conflicting interests, between taxpayers and the government. If traced further, companies, especially those that are profit-oriented are one of the largest contributing taxpayers to the state, but many of them still consider taxes as a burden that will reduce net income, so they design and implement management practices to minimize the tax burden as optimal as possible, in order to increase the efficiency of competitiveness, meanwhile the government wants to increase revenue from the tax sector to finance and support the country's development facilities and infrastructure. The problem of interest is what causes companies to try to pay the smallest possible tax which benefits their side, but instead hinders state revenue, one of which is by implementing a Tax Aggressiveness strategy.

The tendency of companies to engage in tax aggressiveness is due to differences in interests between taxpayers and the government. In addition, it can also be influenced by several factors, such as profitability, liquidity, advertising cost, and firm size.

## 1.1 Objectives

This study aimed to investigate the effects of Indonesia-based manufacturing companies engage in tax aggressiveness as their way to pay smallest tax as possible. Four questions were addressed in this research. First, does profitability affect the tax aggressiveness in Indonesia? Second, does liquidity affect the tax aggressiveness in Indonesia? Third, does advertising cost affect the tax aggressiveness in Indonesia? Fourth, does firm size affect the tax aggressiveness in Indonesia?

## 2. Literature Review

### 1.1 Agency Theory

As in the concept of agency theory developed by Jensen and Meckling (1976), it explains that agency relationships as:

“agency relationship as a contract under which one or more person (the principals) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent”.

He stated that agency theory describes shareholders as principals and management as agents. The principal is the party who gives orders, supervises, provides assessment and input on the tasks to be performed by the agent, while the agent called management is the party contracted or mandated by the shareholders to work for the interests of the shareholders. An agency relationship is formed when there is a contract between the principal parties that binds the agent to perform services for the principal's interests. Therefore, management is given partial power to make decisions in the interests of shareholders. Management is obliged to be accountable for all of its work to shareholders.

Every human being is basically concerned with the interests of his respective utility, as well as principals and agents. It does not rule out the possibility for management, which acts as an agent, instead of prioritizing the interests of shareholders, but they choose on focusing on itself to maximize utility. Actions taken such as exploiting assets or manipulating company performance can certainly harm the principal and the company in the long run if they do it continuously. One of the causes of this conflict of interest is the asymmetric information, which is the unequal distribution of information between principals and agents.

It can be seen that cases about conflict of interest also occurs in terms of taxation in Indonesia. In Chapter 1 it has been explained that the government and corporate taxpayers are in conflict with one another. If associated with agency theory, the government, namely the principal, certainly wants an increase in revenue from tax sector to finance and support state development facilities and infrastructure, while the company which is the agent, tries to minimize the tax burden as optimal as possible so it won't reduce revenue too much. This can occur because of the asymmetry information between the two parties. The company knows more about the company's financial condition, prospects and risks, or it can be said that the company's management is superior to other parties. This is what encourages the agent to take separate advantages outside the cooperation agreement with the principal because of the tax management carried out by the agent (Nugraha & Meiranto, 2015).

## 1.2 Tax Aggressiveness

As referring to the notion of tax aggressive used by Frank, Lynch and Rego (2009), an action to reduce taxable income is designed through tax planning, either using a legal method, namely tax avoidance, or illegal way, called tax evasion. For companies, paying tax on income is a transfer of wealth from the company to the government, because according to the company, the tax burden paid is a huge cost for them since it reduces profits. Therefore, companies will tend to do tax aggressive planning schemes to be able to pay taxes as efficiently as possible, thus creating strategies to reduce their taxes. Even so, this certainly reaps contra because it is detrimental to the government and not in accordance with the expectations of the community.

For every thing that is done, of course there are advantages and disadvantages behind it, as well as Tax Aggressiveness. As for the benefits for the perpetrators of tax aggressive actions, are as follows:

1. Profits in the form of tax savings to be paid by the company to the State, so that the amount of cash enjoyed by the owners or shareholders in the company is greater.
2. Benefits for managers (either directly or indirectly) who receive compensation from the owners or shareholders of the company for their tax aggressive actions.

Apart from profits, tax aggressiveness also has a detrimental impact on the company itself. Aggressive tax action can also provide losses in the form of:

1. The company may get sanctions or penalties from the tax authorities.
2. Decreased in company reputation due to audits of tax authorities.
3. Falling in share prices because other shareholders became aware of the manager's tax aggressive actions.
4. Obstruction of the company's sustainability.

This study is using ETR as a variable measuring the aggressiveness of tax.

Based on the description above, the hypotheses proposed in this study are as follows:

- H<sub>1</sub>: Profitability has a significant effect on tax aggressiveness in Indonesia.
- H<sub>2</sub>: Liquidity has a significant effect n tax aggressiveness in Indonesia.
- H<sub>3</sub>: Advertising Cost has a significant effect on tax aggressiveness in Indonesia.
- H<sub>4</sub>: Firm Size has a significant effect on tax aggressiveness in Indonesia.

### 3. Methods

A multiple regression analysis was conducted with tax aggressiveness, proxied by effective tax rate (ETR), serving as a dependent variable while profitability (ROA), liquidity (LIQ), advertising cost (ADV), and Firm Size (SIZE) serving as independent variables.

#### 3.1. Population and Sample

To know clear results regarding the relationship between the variables of profitability, liquidity, advertising cost and firm size whether it has a significant effect or not on the tax aggressiveness variable, the method that are going to be used for research is a quantitative method whose data is processed into statistic form with SPSS 25.

The type of data used is quantitative data, where all data uses the numerical aspect. The data used in this research is secondary data with documentation techniques by collecting data, in the form of financial reports from the official website of IDX or the Indonesia Stock Exchange.

#### 3.2. Data Analysis Method

In analyzing the data on the variables of profitability, liquidity, advertising cost and firm size, the analytical method used is descriptive statistical analysis method, classical assumption test and multiple linear regression test.

The purpose of this analysis is to determine the direction of the relationship between the dependent variable and the independent variable, whether positive or negative, and this analysis can predict the value of the dependent variable if the value of the independent variable increases or decreases.

Descriptive statistics provide an overview of data that can be seen through the mean (average), standard deviation, variance, maximum, minimum, sum, range, kurtosis and skewness (slope of distribution), explained Ghozali (2016). However, in the test that will be carried out in chapter 4, the measurements used in this descriptive statistic are only mean, standard deviation, maximum value, and minimum value.

Classic assumptions test that consist of normality, autocorrelation, multicollinearity and heteroscedasticity test will form a good regression model if the test result is pass the criterias and has no symptoms.

After the classic assumptions test passes, then next step is completing multiple linear regression analysis that consists of of the F test, t test, and coefficient of determination ( $R^2$ ), that was used to test each hypothesis. According to Ghozali (2016), the F test is used to determine whether the independent variables simultaneously have an influence on the dependent variable. T test is used to test the influence of one independent variable partially in explaining the variation in the dependent variable. Lastly, the function of the coefficient of determination ( $R^2$ ) test is to measure how far the model is able to explain variations in the dependent variable.

#### 3.3. Operation of Variables

There are two variables used in this research which are dependent variables and independent variables. Dependent variables are variable being tested or measured in experiment, or affected depend solely on independent variable. While independent variables are variables that controls and is assumed to have a direct effect on the dependent variable. The independent variables and dependent variables will be explained as follows:

- a. Dependent Variable (Y): The dependent variable used was tax aggressiveness. Tax aggressiveness is defined as the practice of manipulating taxable income through tax planning. It was measured using effective tax rate (ETR). ETR was calculated by dividing the companies' total tax burden by income tax profit. ETR is inversely proportional to aggressive tax action. The higher the ETR, the lower the tax aggressiveness, and the lower the ETR, the higher the tax aggressiveness.
- b. Independent Variable (X): The independent variable used was profitability, liquidity, advertising cost and firm size.
  - b.1. Profitability: Profitability was measured using Return On Asset (ROA) ratio, that is, by dividing company's Net Income by Total Assets. It is a ratio that provides how much profit a company is able to generate from its assets.
  - b.2. Liquidity: Liquidity was measured using Current Ratio. Calculated by dividing current assets by current liabilities, to measure a company's liquidity or ability to pay off short-term debts.
  - b.3. Advertising Cost: Advertising Cost is calculated by dividing advertising cost to sales. It measures the effectiveness a company's advertising strategies are.
  - b.4. Firm Size: Firm Size is measured by the log natural of total assets.

#### 4. Data Collection

This study succeeded in collecting 180 manufacturing companies listed on the Indonesia Stock Exchange, however, because the sampling technique used the purposive sampling method, which had special characteristics to suit the intended initial objectives. The criteria for the sample selection are: first, the manufactured companies listed on the IDX from 2016 – 2019 (180 companies); second, incomplete financial reports for certain years in the period of 2016 – 2019 (42 companies); third, Financial Statements that are not in Rupiah (28 companies); fourth, Loss Statements in certain years in the period 2016 – 2019 (36 companies); fifth, companies that do not spend on advertising costs (24 companies); sixth, Companies that must be outlier because of extreme data (20 companies). The remaining companies due to the adjustment of these criteria are 30 companies. In total, the sample over the four-year period consisted of 120 units.

#### 5. Results and Discussion

Based on the analysis methods that have been discussed, the following are the results and discussion of each test:

##### 5.1. Descriptive Statistics Test

Descriptive statistics were used to describe the basic features of the data in a study which are means, minimum values, maximum values, and standard deviations that were yielded from the research variable proxies. The variables used included profitability (ROA), liquidity (LIQ), advertising cost (ADV), and firm size (SIZE) as independent variables, and tax aggressiveness, measured with effective tax rate (ETR), as a dependent variable. ETR, ROA, LIQ, ADV, and SIZE were tested as shown in Table 1.

Table 1. Descriptive Statistic Test Results

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	120	0,0132	0,2273	0,088959	0,0517669
LIQ	120	0,5861	8,6378	2,869714	1,9106471
ADV	120	0,0001	0,1002	0,019022	0,0237993
SIZE	120	26,6374	33,4945	28,934389	1,5564597
ETR	120	0,1081	0,3784	0,247726	0,0439216
Valid N (listwise)	120				

Source: SPSS 25 Data Processing Results

Explanation :

ROA : Profitability

LIQ : Liquidity

ADV : Advertising Cost

SIZE : Firm Size

ETR : Tax Aggressiveness

Based on the results of the descriptive statistics analysis test above in table 1, it can be concluded as follows:

- The descriptive test table shows data totaling 120 samples, where each variable consists of Profitability, Liquidity, Advertising Cost, Firm Size and Tax Aggressiveness.
- Profitability shows that the minimum value obtained is 0.0132 owned by PT. Budi Starch & Sweetener Tbk. The maximum value is owned by PT. Selamat Sempurna Tbk amounted to 0.2273. The resulting average value is 0.088959 with a standard deviation of 0.0517669, where the standard deviation value is smaller than the mean, meaning that the ROA variable is evenly distributed and does not cause bias.
- Liquidity shows a minimum value of 0.5861 obtained by PT. Sariguna Primatirta Tbk. The maximum value of 8.6378 is owned by PT. Delta Djakarta Tbk. The mean value is 2.869714, while the standard deviation is 1.9106471, which indicates that the distribution of data from Liquidity is quite good because it is evenly distributed and shows normal

and unbiased results. Because the standard deviation value is small from the mean, the deviation rate for this variable is low.

- d. Advertising Cost in the table above shows that the mean value is 0.019022, smaller than the standard deviation, 0.0237993, it can be said that the data distribution is not good because the data distribution varies. The resulting standard deviation reflects a very high deviation, so that the output of the data distribution is not normal and the bias is measured in the presence of extreme data. Minimum value of 0.0001 by PT. Garuda Metalindo Tbk, and the maximum value is 0.1002 owned by PT. Merck Tbk.
- e. Firm Size shows a mean value of 28.934389 which is greater than the standard deviation of 1.5564597, it can be concluded that the data distribution from Firm Size is quite good because it is evenly distributed and shows normal and unbiased results. Because the standard deviation value is small, the deviation rate for this variable is low. The minimum value generated is 26.6374 by PT. Buyung Poetra Sembada Tbk and the maximum value obtained by PT. Astra International Tbk amounting to 33.4945.
- f. Tax Aggressiveness shows the minimum value output with a number of 0.1081 obtained by PT. Semen Indonesia (Persero) Tbk. While the maximum value of 0.3784 by PT. Merck Tbk. The table above also shows the mean of tax aggressiveness with a number of 0.247726, on the other hand the resulting standard deviation value is 0.0439216, meaning that the mean is greater than the standard deviation which indicates that this variable has a low deviation rate. The data distribution of this tax aggressiveness is evenly distributed, which shows normal and unbiased results.

### 5.2. Normality Test

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

		Unstandardized Residual
N		120
Normal Parameters <sup>a,b</sup>	Mean	0,0000000
	Std. Deviation	0,04140786
Most Extreme Differences	Absolute	0,076
	Positive	0,076
	Negative	-0,075
Test Statistic		0,076
Asymp. Sig. (2-tailed)		0,084 <sup>c</sup>

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Source: SPSS 25 Data Processing Results

Normality test is a test that aims to determine whether the distribution of data on a variable is normally distributed or not. Table 2 shows the results of One Sample Kolmogorov-Smirnov Test that there are 120 samples with Asymp. Sig 0.084 which is greater than 0.05, meaning that the data is normally distributed, indicating that this normality test passes, and can continue to the next test.

### 5.3. Multicollinearity Test

The multicollinearity test aims to determine whether the regression model tested has a correlation relationship between independent variables. Based on the multicollinearity test that has been tested, it can be seen in the table below that the guidelines for decision making were by looking at the Tolerance and VIF values with the provisions of the tolerance value > 0.1 and the value of Variance Inflation Factors (VIF) < 10 (Ghozali, 2016).

Table 3. Multicollinearity Test Result. Coefficients<sup>a</sup>

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	ROA	0,777	1,286

	LIQ	0,698	1,432
	ADV	0,896	1,117
	SIZE	0,864	1,157

Dependent Variable: ETR

Source: SPSS 25 Data Processing Results

The results of the multicollinearity test in table 3 show that there is no multicollinearity symptom between the independent variables which is profitability, liquidity, advertising cost and firm size in the regression model made in the study, because the tolerance value is greater than 0.1 and the VIF value is smaller than 10.

#### 5.4. Autocorrelation Test

The purpose of autocorrelation test itself was to test whether in the linear regression model there was a correlation between a residual in period  $t$  and a residual in period  $t - 1$ , using Durbin Watson Test. As stated by Ghozali (2016), in order for the DW value to be free from correlation, the DW value must be between  $-2$  to  $2$  which means there is no autocorrelation.

Table 4. Autocorrelation Test Result . Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,333 <sup>a</sup>	0,111	0,080	0,0421218	1,510

a. Predictors: (Constant), SIZE, ROA, ADV, LIQ

b. Dependent Variable: ETR

Source: SPSS 25 Data Processing Results

From table 4, the result of Durbin Watson test is 1.510. Judging from the outcome Durbin Watson's value is  $-2 < 1,510 < 2$ , which is between  $-2$  to  $2$ , indicates that the test that had been done shows no correlation symptoms, so it is suitable to use in research.

#### 5.5. Heteroscedasticity Test

The heteroscedasticity test has a function to test whether there is an unequal variation from the residual value of one observation to another in a regression model. The following is the processing results of the Heteroscedasticity test using the Glejser test.

Table 5. Heteroscedasticity Test Result. Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0,040	0,051		0,786	0,434
	ROA	-0,067	0,054	-0,127	-1,241	0,217
	LIQ	-0,003	0,002	-0,179	-1,659	0,100
	ADV	0,093	0,109	0,081	0,850	0,397
	SIZE	9,187E-5	0,002	0,005	0,054	0,957

Dependent Variable: RES2

Source: SPSS 25 Data Processing Results

It is said that a good test result is if the significance is greater than 0.05. The conclusion from the processing results in table 5 that can be drawn is that the four independent variables tested did not have heteroscedasticity symptoms because the value obtained was above the 0.05 range, then this test passes and is feasible to proceed to the next test.

### 5.6. Multiple Regression Analysis Results

The multiple linear regression analysis proposed by Sugiyono (2017) is a regression that has one dependent variable and two or more independent variables. The function itself is to predict the value of a variable.

Table 6. Multiple Linear Regression Test Results. Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant)	0,266	0,080		3,344	0,001
	ROA	-0,167	0,085	-0,197	-1,979	0,050
	LIQ	0,006	0,002	0,265	2,522	0,013
	ADV	0,343	0,171	0,186	2,001	0,048
	SIZE	-0,001	0,003	-0,034	-0,357	0,722

Dependent Variable: ETR

Source: SPSS 25 Data Processing Results

Based on the table above, the regression equation below was formulated:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

$$Y = 0.266 - 0.167 \text{ ROA} + 0.006 \text{ LIQ} + 0.343 \text{ ADV} - 0.001 \text{ SIZE} + \varepsilon$$

Explanation:

Y : Tax Aggressiveness

a : Constanta

$\beta$  : The regression coefficient of each independent variable

$X_1$  : Profitability

$X_2$  : Liquidity

$X_3$  : Advertising Cost

$X_4$  : Firm Size

$\varepsilon$  : Error

The multiple linear regression coefficients in table 6 sdenote the following:

1. If all independent variables (profitability, liquidity, advertising cost, and firm size) have a value of zero (0), then the value of the dependent variable (tax aggressiveness) is 0.266 or if the four independent variables are absent, then tax aggressiveness has a value of 0.266.
2. If the regression coefficient of profitability ( $X_1$ ) is (-0.167) is negative to the tax aggressiveness variable, it can be explained that every 1% increase experienced by profitability, then the tax aggressiveness variable will decrease by 0.167.
3. If the regression coefficient of liquidity ( $X_2$ ) is 0.006 positive for the tax aggressiveness variable, it can be explained that for every 1% increase experienced by liquidity, the tax aggressiveness variable will increase by 0.006.
4. If the regression coefficient of advertising cost ( $X_3$ ) of 0.343 is positive for the tax aggressiveness variable, it can be explained that if the advertising cost increases by 1%, the tax aggressiveness variable will increase by 0.343.
5. If the regression coefficient of firm size ( $X_4$ ) is (-0.001) is negative to the tax aggressiveness variable, it can be explained that if the company size increases by 1%, the tax aggressiveness variable will decrease by 0.001.

### 5.7. Coefficient of Determination Test

Table 7. Coefficient of Determination ( $R^2$ ) Test Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,333 <sup>a</sup>	0,111	0,080	0,0421218

a. Predictors: (Constant), SIZE, ROA, ADV, LIQ

b. Dependent Variable: ETR  
Source: SPSS 25 Data Processing Results

The function of Coefficient of Determination Test is to represents the proportion of the variance for a dependent variable that's explained by an independent variable or variables in a regression model. (Ghozali, 2016). The coefficient of determination test results can be seen in table 7 which is shown above, by looking at the Adjusted R<sup>2</sup> column. Based on the test results, the coefficient of determination through adjusted R<sup>2</sup> is 0.080 or 8%, meaning that the dependent variable, which is tax aggressiveness in manufacturing companies, can be influenced and explained by independent variables (profitability, liquidity, advertising cost, and firm size) by 8% and the remaining 92% influenced by other factors outside the model tested.

### 5.8. Simultaneous Effect Test (F Test)

The F statistical test is used to determine whether the independent variables produce an simultaneous effect on the dependent variable (Ghozali, 2016).

Table 8. Results of F Test ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	0,026	4	0,006	3,597	0,008 <sup>b</sup>
	Residual	0,204	115	0,002		
	Total	0,230	119			

Dependent Variable: ETR  
Predictors: (Constant), SIZE, ROA, ADV, LIQ  
Source: SPSS 25 Data Processing Results

In Table 8, all independent variables together have a significant effect on the dependent variable, marked by a significance value that is smaller than 0.05 or F-count greater than F-table. The F-count value in table 8 is 3.597 with a significance level of 0.008. Significance value of  $0.008 < 0.05$  and F-count  $3.597 > 2.45$  F-table, meaning that the variables of profitability, liquidity, advertising cost, and firm size had a simultaneous, significant effect on tax aggressiveness variable.

### 5.9. Individual Parameter Effect Test (t test)

5.10. Based on the information obtained in Ghozali (2016: 97), t statistics test is used to test the effect of one independent variable individually in explaining the variation on a dependent variable. Just like F-test, to have a partial and significant effect on dependent variable, significance value must be smaller than 0.05 or t-count greater than t-table.

Table 9. Results of t Test Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0,266	0,080		3,344	0,001
	ROA	-0,167	0,085	-0,197	-1,979	0,050
	LIQ	0,006	0,002	0,265	2,522	0,013
	ADV	0,343	0,171	0,186	2,001	0,048
	SIZE	-0,001	0,003	-0,034	-0,357	0,722

a. Dependent Variable: ETR  
Source: SPSS 25 Data Processing Results

In table 9, the t test above, the explanation can be described as follows:

- a. The effect of Profitability on Tax Aggressiveness  
Hypothesis testing that carried out on ROA, showed the t-count of -1.979, and the t-table of -1.98081. The significance value is 0.05. The test results show that the significance is  $0.05 \leq 0.05$ , which means that H1 was accepted, where the ROA variable has a positive and significant effect on the Tax Aggressiveness variable.
- b. The effect of Liquidity on Tax Aggressiveness  
Hypothesis testing carried out on Liquidity, showed the results of t-count of 2.522, and t-table of 1.98081, where the t-count value is greater. The significance value is 0.013. The results showed that the significance of  $0.013 < 0.05$ , which means that H2 was accepted where the Liquidity variable has a negative and significant effect on the Tax Aggressiveness variable.
- c. The effect of Advertising Cost on Tax Aggressiveness  
Hypothesis testing carried out on Advertising Cost, showed the results of the t-count of 2,001, and the t-table is 1,98081, where the t-count is greater. The significance value is 0.048. The results showed that the significance of  $0.048 < 0.05$ , which means that H3 was accepted, where the Advertising Cost variable has a negative and significant effect on the Tax Aggressiveness variable.
- d. The effect of Firm Size on Tax Aggressiveness  
Hypothesis testing conducted on Firm Size, showed the results of the t-count of -0.357, and the t-table of -1.98081, where the t-count is smaller. The significance value is 0.722. The results showed that the significance of  $0.722 > 0.05$ , which means that H4 was rejected, where this variable has an insignificant effect on the Tax Aggressiveness variable.

## 5.10. Research Discussion

### 5.10.1. Analysis of the Effect of Profitability on Tax Aggressiveness

Based on the results of testing the first hypothesis, it can be shown that H1 has a significance value of 0.050 less than ( $\leq$ ) the specified significance level of 0.05. so that H1 is accepted, which means that profitability partially has a positive and significant effect on tax aggressiveness.

The results of this study are in line with the research of Luke and Zulaikha (2016). The higher the profitability, the better and more efficient a company is in managing its assets to generate high profits; therefore, it will lead to a large tax burden. The company will show aggressiveness in taxation through earnings management along with this large profitability. Meanwhile, companies that have a low level of profitability will tend to comply with regulations for paying taxes, because the taxes paid are lower. In contrast to the research tested by Fatmawati and Solikin (2017) and Setyowati, Kartika and Riana (2018) where they emphasize that the profitability variable has no effect on tax aggressiveness.

### 5.10.2. Analysis of the Effect of Liquidity on Tax Aggressiveness

Based on the test results of the second hypothesis, it can be shown that H2 has a significance value of  $0.013 < 0.050$ , and the t-count is greater than the t-table with a ratio of  $2.522 > 1.98081$  so that H2 is accepted, meaning that liquidity partially has a negative and significant effect on tax aggressiveness.

The results of this study are in line with the research of Sugitha and Supadmi (2016) and Ann and Manurung (2019) who also stated similar things. Companies that have a good cash turnover are certainly able to pay their finances, including paying taxes, so they are not reluctant to bear these payments. On the other hand, companies that are illiquid or those with low liquidity describe the company as having difficulty or even being unable to cover its corporate obligations, one of which is the tax burden, that is why companies tend to be disobedient, which makes the company want to reap profits in various ways, including tax aggressiveness. However, this study is inversely proportional to research Gemilang (2017), and Fatmawati and Solikin (2017) which emphasize that liquidity does not have a significant effect on tax aggressiveness.

### 5.10.3. Analysis of the Effect of Advertising Cost on Tax Aggressiveness

Based on the test results of the third hypothesis, it can be shown that H3 has a significance value of  $0.048 < 0.050$  and the obtained t-count is 2.001 which is greater than the t-table of 1.98081, so that H3 is accepted, meaning that advertising cost partially has a negative and significant effect on tax aggressiveness.

This is in accordance with research conducted by Fatmawati and Solikin (2017). The higher the advertising cost of

the company, the higher the ETR, which means that the level of tax aggressiveness is low. The more intense the advertisement placed by a company, it means the company indirectly building a corporate identity, and slowly improving the image, quality and reputation of the company, the lower the tendency to do bad things such as aggressive tax avoidance. This is because the reputation that has been built and the trust that has been held by the community can just be lost just because of careless decision making. On the other side, not many people know companies that rarely pay for advertising, this causes the emergence of a high level of tax aggressiveness.

#### **5.10.4. Analysis of the Effect of Firm Size on Tax Aggressiveness**

Based on the test results of the fourth hypothesis, it can be explained that H4 has a significance value of  $0.722 > 0.050$ , besides that the t-table value of 1.98081 is greater than t-count -0.357, which means that the hypothesis test is rejected. The conclusion from the hypothesis test shows that firm size partially does not have a significant effect on tax aggressiveness.

This test is commensurate with the explanation that tax aggressiveness does not consider the size of the company, but it depends on the behavior of the company itself, where they want to collect as much profit but do not want to fulfill their tax obligations. A simple example is a small company that chooses to keep its profits, responsible for paying what they are already liable for. As for large companies, they tend to take advantage of gray space or gray area which is detrimental to the country. This test is supported by previous research, named Setyowati, Kartika and Riana (2018). However, it is inversely proportional to the research conducted by Fatmawati and Solikin (2017) which states that the company has a positive effect on ETR, where the greater the size of the company is represented by asset value, the more likely the company is to engage in tax aggressiveness

## **6. Conclusion**

This study aims to see the relationship between the variables of profitability, liquidity, advertising cost and firm size on tax aggressiveness in Indonesia. Research that took samples of manufacturing companies with a period of 4 years, which is from 2016 - 2019 on the Indonesia Stock Exchange website based on purposive sampling, which was processed using SPSS 25. The sample used after undergoing a selection process, was 120 companies. Based on the results of data analysis, it can be concluded as follows:

1. The first hypothesis ( $H_1$ ) states that profitability has a significant effect on tax aggressiveness. The results of hypothesis testing conducted showed a significance value of  $0.05 \leq 0.05$  and t-count -1.979 and 1.98081 t-table, which means that  $H_1$  is accepted, where the profitability variable has a positive effect on tax aggressiveness. This shows that company with high profitability will lead to a large tax burden. The company will show aggressiveness in taxation through earnings management along with this large profitability. Meanwhile, companies that have a low level of profitability will tend to comply with regulations for paying taxes, because the taxes paid are lower.
2. The second hypothesis ( $H_2$ ) confirms that liquidity has a significant effect on tax aggressiveness. The results of hypothesis testing conducted showed a significance value of  $0.013 < 0.05$  and t-count 2.522 > 1.98081 t-table, which means  $H_2$  is accepted, where the liquidity variable has a negative effect on tax aggressiveness. Companies that have a high liquidity don't have any problems with payment including paying taxes, so the chances to do tax aggressiveness is lower. On the other hand, companies with low liquidity describe the company is having difficulty to cover its corporate obligations, one of which is the tax burden, that is why companies tend to be disobedient, and the chances to do tax aggressiveness is higher.
3. The third hypothesis ( $H_3$ ) states that advertising cost has an effect on tax aggressiveness. The results of hypothesis testing conducted showed a significance value of  $0.048 > 0.05$  and t-count 2.001 > 1.98081 t-table, which means that  $H_3$  is accepted, where the advertising cost variable has a negative effect on tax aggressiveness. The more intense the advertisement placed by a company, it means the company indirectly building a corporate identity, and slowly improving the image, quality and reputation of the company to gain a trust from the community, that is why the tendency to do aggressive tax avoidance is also lower. On the other side, not many people know companies that rarely pay for advertising, this causes the emergence of a high level of tax aggressiveness.

The results of hypothesis ( $H_4$ ) formulates that firm size has a significant effect on tax aggressiveness. The results of hypothesis testing conducted showed a significance value of  $0.722 > 0.05$  and t-count -0.357 < 1.98081 t-table, which means that  $H_4$  is rejected, where the firm size variable does not have a significant effect on tax aggressiveness. This shows that tax aggressiveness does not consider the size of the company, but it depends on the behavior of the company itself, where they want to collect as much profit but do not want to fulfill their tax obligations.

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