



# The Effect of Pharmaceutical Manufacturing Sector Company Characteristics on Tax Aggressiveness

Tiya Nurfauziah<sup>1\*</sup> and Sari Rusmita<sup>1</sup>

<sup>1</sup>Universitas Tanjungpura, Indonesia.

## **Authors' contributions**

*This work was carried out in collaboration between both authors. Author TN designed the study, managed the literature researches, wrote the protocol and wrote the first draft of the manuscript. Author SR performed statistical analysis, and managed the analyses of the study. Both authors read and approved the final manuscript.*

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## **ABSTRACT**

This research is focused on the Health sector, especially in the Pharmaceutical Manufacturing Company Sub-Sector. Especially where during the Covid-19 pandemic, Pharmaceutical Manufacturing Companies experienced a significant increase in revenue compared to various other sectors and it was rarely proven that companies in the Health sector, one of which was the Pharmaceutical Manufacturing Company Sub-Sector, took tax aggressiveness. This research is quantitative research. The research method used in this research is descriptive analysis method with multiple linear regression analysis, using SPSS software version 25. This research was conducted at health sector companies in the pharmaceutical manufacturing company sub-sector listed on the Indonesia Stock Exchange in 2016-2020. The sample in this study was determined using purposive sampling method with 40 samples from 8 health sector companies in the pharmaceutical manufacturing company sub-sector. The findings of this study are the t test shows that leverage and capital intensity, with a significance value of 0.0001, and 0.008 respectively, have a significant effect on tax aggressiveness. While company size, liquidity and profitability have no effect on tax aggressiveness. The results of the f test show that company size, leverage, capital intensity, liquidity and profitability simultaneously have a significant effect on tax aggressiveness.

\*Corresponding author: E-mail: [tiya.nurfauziah@ekonomi.untan.ac.id](mailto:tiya.nurfauziah@ekonomi.untan.ac.id);

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## 1. INTRODUCTION

Tax revenue is an aspect that is a strength in the Government Efficiency component, where this Tax Revenue also provides impetus for the achievement of increased social security which is also a supporting aspect of the government efficiency component. To date, Indonesia's main revenue comes from the tax sector.

Law of Indonesia number 16 of 2009 in article 1 paragraph 1 concerning the fourth amendment to Law of Indonesia number 6 of 1983 concerning general provisions and tax procedures, explains that tax is a mandatory contribution to the state owed by individuals or entities that are compelling based on the law, with no direct reward and uses for state purposes for the greatest prosperity of the people.

Indonesia is a country that authorize taxpayers, both corporate and individual, to report and calculate taxes owed personally or known as the Self Assessment System Tax collection system. The existence of the Self Assessment System tax system is certainly expected to facilitate and motivate taxpayers to be on time in reporting the tax payable that they must deposit to the state treasury. But of course, in addition to the positive things above, the self assessment system tax system itself also has shortcomings, namely because taxpayers calculate and report tax payable by themselves, these taxpayers tend to calculate and report the tax payable with the smallest possible amount.

Indonesia from year to year always conducts planning related to the tax target that must be realized. The goal is to assess how effective the tax system has been used to date, through year on year comparisons between tax realization and targets from the previous year. Every country is very ambitious about setting tax revenue targets every year, and

setting tax revenue targets is expected to increase every year.

Table 1 shows the target and realization of tax revenue from 2016-2020, it can be concluded that the value of the Tax Revenue Target set by the Ministry of Finance from 2017 to 2019 has always increased, followed by the value of Tax Revenue Realization which resulted in a significant increase and of course this is a positive value.

However, in 2020 the Tax Revenue Target set by the Ministry of Finance has decreased, from the previous year's target of IDR 1.577,6 Trillion decreased to IDR 1.254,05 Trillion or decreased by IDR 323,55 Trillion or 20,5%. In addition to the determination of the declining Tax Revenue Target, the value of Tax Revenue Realization for 2020 also experienced a significant decline. In 2019 the value of Tax revenue realization was IDR 1.332,2 Trillion, but in 2020 it decreased to IDR 1.070 Trillion, or a decrease of IDR 262,2 Trillion or 19,7%.

Of course, there are factors that influence the decline in the determination of the tax revenue target for 2020 by the ministry of finance of the Republic of Indonesia as well as the Tax Revenue Realization Value for 2020. In early December 2019, there was a pandemic that hit all regions of the world until then. In Indonesia itself, the Covid-19 pandemic was first detected on March 2, 2020, where there were two female Indonesian citizens who were confirmed positive for the Covid-19, and finally there was a significant and even drastic increase in positive cases of Covid-19 from month to month which had an impact on all aspects of the Indonesian state, including the economy and tax revenue to date. This Covid-19 pandemic has paralyzed and impacted enormous changes for all the people and government of Indonesia. And paralyzed all fields and had a major impact in the economy, starting from the Tourism sector, Manufacturing and various other industries.

**Table 1. Target and realization of tax revenue 2016-2020 (in trillion rupiah)**

Year	2016	2017	2018	2019	2020
Tax Revenue Target	1.355	1.283,6	1.424	1.577,6	1.254,05
Tax Revenue Realization	1.105,8	1.151,1	1.313,4	1.332,2	1.070
Percentage of Tax Revenue	81,61%	89,68%	92,23%	84,44%	85,23%

*Source: Ministry of Finance of the Republic of Indonesia, 2021*

Decisions related to setting tax revenue targets for 2020 are affected by the Covid-19 Pandemic. The ministry of finance of the Republic of Indonesia cannot set a tax revenue that is too high or too low. The Covid-19 pandemic has an impact on all sectors, which of course also affects tax revenue in Indonesia. The declining realization value of tax revenue in 2020 can illustrate that the value of income earned by taxpayers in various sectors in 2020 has decrease quite drastically, so that the tax payable reported by taxpayers personally in accordance with the self assessment system is low.

Taxes for the company can be said to be a cost that a must be incurred, because the tax itself is coercive and the deposit of this tax to the state treasury can reduce the profit or profit earned by the company. It is not uncommon for many companies to do various ways to minimize the value of taxes that must be deposited into the state treasury, namely by taking action tax aggressiveness, especially supported by the self assessment system which gives taxpayers the freedom to report tax payable personally.

There are several researchers who provide explanations related to tax aggressiveness. Frank et al [1] state that tax aggressiveness is an action that has the aim of minimizing the company's taxable profit through tax planning, either through tax avoidance (legal) or tax evasion (illegal). The more aggressive the company does earnings management, the higher the company's tax aggressiveness.

In addition, tax aggressiveness is an activity or action that has the aim of reducing the company's taxable income both actively and illegally in order to reduce the tax burden so that the company's profit is optimized [2].

The directorate general of taxes (DGT) conducts tax audits on several companies in Indonesia. Several companies have been proven to have committed acts of tax aggressiveness from the mining sector itself, one of them is PT Adaro Energy Tbk. PT Adaro Energy Tbk was proven to have committed tax avoidance through transfer pricing. In addition, in the food and beverage sector it is also proven that PT Indofood is doing tax avoidance.

The health sector itself rarely has a case of a company being proven to commit acts of tax aggressiveness. PT Rajawali Nusantara Indonesia was proven to have committed tax

avoidance in 2014. PT Rajawali Nusantara Indonesia (RNI) is a State-Owned Enterprise engaged in Agroindustry, Medical Devices, Trade and Distribution, it can be said that RNI is not a company that focuses on one sector, but also focuses on several other sector including the Health sector.

Therefore, this study focuses on the Health sector, especially in the Pharmaceutical Manufacturing Company Sub-Sector. Especially where during the Covid-19 pandemic, Pharmaceutical Manufacturing Companies experienced a significant increase in revenue compared to various other sectors and it was rarely proven that companies in the Health sector, one of which was the Pharmaceutical Manufacturing Company Sub-Sector, took tax aggressiveness. In addition, the Pharmaceutical Manufacturing Company Sub-Sector Health Sector is also a sector that is rarely focused on in conducting research on Tax Aggressiveness.

## 2. LITERATURE REVIEW

### 2.1 Agency Theory

Agency theory is a theory that focuses on two individuals, namely the principal and the agent. Agency theory itself was coined by Jensen and Meckling [3]. According to Jensen and Meckling, the relationship between principal and agent is *"We define an agency relationship as a contract under which one or more persons (the principals) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent"*. The principal himself is the party who owns the funds while the agent is the party trusted by the owner of the funds, namely the management. The principal informs and entrusts decisions related to the company to the agent. This principal and agent relationship is more inclined to the occurrence of information asymmetry. Sometimes it is undeniable that conflicts can occur between the principal and the agent, the conflict that occurs is known as the agency problems or agency conflict. Because there are various differences in interests, agency conflicts can occur which will also affect the performance process of a Company. In addition, the agent certainly has more information about the condition of the company than the principal. With this assumption that individuals will prioritize their own interest, the existence of these differences in interest will motivate agents to take deviant actions by manipulating financial statements.

## 2.2 Theory of Planned Behavior

Between interested parties in a company, of course, there are various differences, one of which is in the implementation of actions, namely positive or negative actions. Both of management of a company and the shareholders certainly have different backgrounds, different goals to achieve and various other things that are different. This theory of planned behavior is a theory originated by Icek Ajzen and Martin Fishbein in 1980. The theory of planned behavior is a theory based on the assumption that humans are rational beings who systematically uses information that is possible for themselves. Before taking an action, individuals will consider the implications or intentions of their actions before deciding whether or not to perform the behavior [4].

The theory of planned behavior can provide an explanation of how taxpayers behave, namely a company fulfills obligations related to reporting and paying taxes owed to the state treasury. If the corporate taxpayer, namely the company, has the awareness and motivation to take aggressive action against the reported tax, then the corporate taxpayer will also intend and seriously take this aggressive tax action in order to achieve the planned goals of both management and shareholders.

## 2.3 Tax Aggressiveness

Frank et al [1] explained that corporate tax aggressiveness is the manipulation of taxable income by companies either in a legal way (tax avoidance) or in an illegal way (tax evasion).

### 2.3.1 Tax Avoidance

Tax avoidance is a term used to describe the legal arrangements of a tax payer's affair so as to reduce his tax liability. It's often to pejorative overtones, for example it is used to describe avoidance achieved by artificial arrangements of personal or business affairs to take advantage of loopholes, ambiguities, anomalies or other deficiencies of tax law. Legislation designed to counter avoidance has become more commonplace and often involves highly complex provisions [5].

### 2.3.2 Tax Evasion

Tax evasion is reduction of tax by illegal means. The distinction, however, is not always easy.

Some examples of tax avoidance schemes include locating assets in offshore jurisdictions, delaying repatriation on profits earned in low-tax foreign jurisdiction, ensuring that gains are capital rather than income so that the gains are not subject to tax (or a subject at a lower rate), spreading of income to other tax payers with lower marginal tax rates and taking advantages of tax incentives [5].

Meanwhile, according to Hlaing (2012) in Prameswari [6] tax aggressiveness is a tax planning activity carried out by companies which has the aim of reducing the tax burden paid in that period which will result in decrease in the effective tax rate. By taking action tax aggressiveness can help companies to minimize and make savings in planning tax expense expenses with the aim of maximizing the value of profits earned [7].

## 2.4 Research Hypothesis

### 2.4.1 Effect of company size on tax aggressiveness

Company size can be consideration for investors to make investments related to the funds they have. Company size can also describe the scale of the company regarding the number of assets owned by the company. Cahyono, et al [8] explain that company size is a scale or value that can classify a company into large or small categories from various criteria such as total assets or total assets of the company, or stock market, average sales level and total sales. Of course, the greater and higher the total assets owned also shows the size of the company's operations. In each accounting period, namely 1 year, of course the company will calculate and record related depreciation expenses on assets. This depreciation expense will affect the net profit generated by the company, and the amount of tax reported and paid by the company will also decrease. In this case too, there tends to be an act of tax aggressiveness.

This also agrees based on research conducted by Yuliana & Wahyudi [9] and Liani & Saifudin [10] which concluded that company size has a significant effect on tax aggressiveness. In addition, research conducted by Legowo, et al [11] also resulted in conclusions stating that company size has an effect on tax aggressiveness.

### **H1: Company Size has a Significant Effect on Tax Aggressiveness**

#### 2.4.2 Leverage effect on tax aggressiveness

The company certainly needs sufficient funds and is able to support the company's process in achieving the company's well-formulated goals. As for one of the ways that can be done by the company, namely by applying for a loan of funds through a third party, namely the bank or doing debt funding. According to Cashmere (2018:151) states that the leverage ratio is a ratio used to measure the extent to which the company's assets are financed with debt. This means how much debt burden the company bears compared to its assets. The greater the leverage ratio in a company, the higher the value of investment funded from loans. High leverage signals that there is an increase in debt, of course if the loan used by the company to the bank is very large and high, it will also have an impact on the high interest expense, and of course with the increase in this interest expense, it will also affect the net profit value obtained by the company.

This will certainly affect the company in the act of tax aggressiveness, because the company must maintain profits for the benefit of investors and creditors. This is also in line with the results of research conducted by Dharmayanti [12] and Awaliyah, et al [13] which state that leverage has a significant effect on tax aggressiveness. In addition, research conducted by Liani & Saifudin [10] also resulted in a statement that leverage has a positive effect on tax aggressiveness.

#### **H2: Leverage has a Significant Effect on Tax Aggressiveness**

#### 2.4.3 Effect of capital intensity on tax aggressiveness

According to Andhari & Sukartha [14] Capital Intensity is an investment made by the company against fixed assets used by the company in carrying out production and collecting profits.

The investment made by the company in fixed assets will cause depreciation expense on these fixed assets. With the depreciation expense on the fixed assets owned, sometimes there is a possibility that the company can perform tax aggressiveness actions, because with greater value of the depreciation expense on the number of fixed assets owned will be able to affect the value of profit or loss achieved by the company. Companies that have investments in fixed asset in a large percentage of the amount will report and deposit taxes payable with a lower amount

due to the high value of depreciation expense on the many fixed assets owned.

This also agrees based on the results of research conducted by Yuliana & Wahyudi [9] and Maulana [15] which state that capital intensity affects tax aggressiveness. In addition, research conducted by Legowo, et al [11] also resulted in a statement that capital intensity has a positive and significant effect on tax aggressiveness.

#### **H3: Capital Intensity has a Significant Effect on Tax Aggressiveness**

#### 2.4.4 Effect of liquidity on tax aggressiveness

Liquidity is used to measure the company's ability to pay its short-term obligations [16]. The greater the value of this liquidity ratio, it illustrates that the company is getting healthier, because it can mean that the company has a healthy financial condition and can easily and be able to sell its assets if this is necessary to pay off short-term debt that will mature in the near future, beside that it means that the company also has good cash flow so that it supports the company to be on time and smooth in paying off all obligations and also has a good ability to pay off the tax value reported by the company. Good cash flow is certainly affect the company in the act of tax aggressiveness, as an effort to reduce the tax burden that must be paid and paid by the company.

This also agrees based on research conducted by Yuliana & Wahyudi [9] and Dharmayanti [12] which states that liquidity has a significant positive effect on tax aggressiveness. In addition, research conducted by Awaliyah, et al [13] also resulted in a statement that liquidity has a positive and significant effect on tax aggressiveness.

#### **H4: Liquidity has a Significant Effect on Tax Aggressiveness**

#### 2.4.5 Effect of profitability on tax aggressiveness

Profitability is a ration to assess the company's ability to seek profit (Kasmis, 2018). Profitability is referred to as the output of various policies and decisions made by the company in achieving the desired goals. Of course, obtaining a high profit or profit will be able to support and be able to develop company activities in order to further increase the company's innovation and

creativity. The profitability is also a factor that can affect the tax burden, because of course it the profit generated by the company is high, this will also affect the reported tax burden which will also be high and this shows that the higher the level of profit generated by the company, the higher the possibility of tax aggressiveness carried out by the company.

This is also in line with the results of research conducted by Liani & Saifudin [10], Maulana [15], and Kartika & Nurhayati [17] which resulted in a statement that profitability has a significant and positive effect on tax aggressiveness. In addition, research conducted by Legowo, et al [11] also resulted in a statement that profitability has a positive effect on Tax Aggressiveness.

**H5: Profitability has a Significant Effect on Tax Aggressiveness**

**3. METHODOLOGY**

This research is causal associative research considering that this research aims to test and analyze the effect of company size, leverage, capital intensity, liquidity and profitability on tax aggressiveness. This research is quantitative research. The sample of this research is a health sector company in the pharmaceutical manufacturing company subsector listed on the Indonesia Stock Exchange from 2016 to 2020 which is accessed via www.idx.co.id. The sampling technique used in this study is to uses purposive sampling method with the aim of obtaining a representative sample and in accordance with the predetermined criteria, as shown in Table 2.

**Table 2. Research sample criteria**

No.	Criteria	Total
1.	Pharmaceutical manufacturing companies listed on the Indonesia Stock Exchange for the last 5 years, namely from 2016 to 2020	11
2.	Pharmaceutical manufacturing companies that do not publish financial reports for 5 consecutive years, from 2016 to 2020	(2)
3.	Pharmaceutical manufacturing companies that do not publish financial statements in rupiah currency	(0)
4.	Pharmaceutical manufacturing companies that have experienced losses for the last 5 years, namely from 2016 to 2020	(1)
	Number of Companies	8
	Total Observation Data (5 x 8)	40

**Table 3. List of companies that become research objects**

No.	Code	Company Name	No.	Code	Company Name
1	MERK	PT Merck Tbk	5	DVLA	PT Darya-Varia Laboratoria Tbk
2	SCPI	PT Organon Pharma Indonesia Tbk	6	KAEF	PT Kimia Farma Tbk
3	KLBF	PT Kalbe Farma Tbk	7	PYFA	PT Pyridam Farma Tbk
4	TSPC	PT Tempo Scan Pacific Tbk	8	SIDO	PT Industri Jamu dan Farmasi Sido Muncul Tbk

**Table 4. Operational research variables**

Variable name	Variable type	Measurement	Unit
Tax Aggressiveness	Dependent	$ETR = \frac{\text{Beban Pajak Penghasilan}}{\text{Laba Sebelum Pajak}} \times 100\%$	%
Company Size	Independent	$SIZE = \ln(\text{Total Assets}) \times 100\%$	%
Leverage	Independent	$DAR = \frac{\text{Total Debt}}{\text{Total Assets}} \times 100\%$	%
Capital Intensity	Independent	$CIR = \frac{\text{Total Aset Tetap Bersih}}{\text{Total Aset}} \times 100\%$	%
Liquidity	Independent	$CR = \frac{\text{Total Current Assets}}{\text{Total Current Liabilities}} \times 100\%$	%
Profitability	Independent	$ROA = \frac{\text{Earning after Interest \& Tax}}{\text{Total Assets}} \times 100\%$	%

Based on the criteria determined above, the final number of samples that have met the criteria and have complete data in this study are 8 companies, and with a total sample of 40 samples. The data analysis method in this study is multiple linear regression, partial test, simulation test and coefficient of determination which previously had to pass the classical assumption test.

The variables in this study are as follows in above Table 4.

#### 4. RESULTS AND DISCUSSION

Before linear regression analysis and hypothesis testing, the processed data has passed classical assumption tests such as Normality Test, Multicollinearity Test, Heteroscedacity Test and Autocorrelation Test. The Following are the result of multiple linear regression analysis.

**Table 5. Multiple linear regression analysis results**

Model	Unstandardized coefficients	
	B	Std. error
(Constant)	-.338	.251
Ukuran Perusahaan	.014	.008
Leverage	.352	.078
Capital Intensity	.330	.117
Likuiditas	.002	.008
Profitabilitas	-.069	.087

Source: Secondary Data processed with SPSS 25, 2022

Based on table 5, the multiple regression equation is obtained as follows:

$$ETR = \alpha + \beta_1 SIZE + \beta_2 DAR + \beta_3 CIR + \beta_4 CR + \beta_5 ROA + e$$

$$ETR = -0,338 + 0,014SIZE + 0,352DAR + 0,330CIR + 0,02CR - 0,069ROA + e$$

This equation can be interpreted as a constant of -0,338, which means that if there is no change in the value of X1 to X5, the value of the tax aggressiveness variable is -0,338. Company size has a coefficient value of 0,014, meaning that if Company size increases significantly by 1 point and the value of other variables is fixed, then Tax aggressiveness will increase by 0,014. Leverage has a coefficient value of 0,352. Meaning that if leverage increases significantly by 1 point and the value of the other variables is fixed, then tax

aggressiveness will increase by 0,352. Capital intensity has a coefficient value of 0,330, meaning that if Capital Intensity increases significantly by 1 point and the value of the other variables is fixed, then tax aggressiveness will increase by 0,330. Liquidity has a coefficient value of 0,002, meaning that if liquidity increases significantly by 1 point and the value of the other variable is fixed, then tax aggressiveness will increase by 0,002. Profitability has a coefficient of -0,069, meaning that if profitability increases significantly by 1 point and the value of the other variables is fixed, then the tax aggressiveness will decrease by -0,069. This shows that of the five independent variables, four independent variables have a positive influence (unidirectional) and one independent variable has a negative influence (opposite direction).

Furthermore, a simultaneous test is carried out to determine whether the independent variables included in the model have a joint influence on the dependent variable. And the results of the F test in this study have a significance value of  $0,000 < 0,05$ , while, for  $F_{count}$  obtained a value of  $6,909 > F_{Tabel}$ , which is 2,485 (real level of 5%, thus obtaining F Table data of  $(k; n-k) = (5,35) = 2,485$ ) as shown in table 6. Based on these results, it can be concluded that the independent variables in the form of Company Size, Leverage, Capital Intensity, Liquidity, and Profitability simultaneously affect the dependent variable, namely tax aggressiveness.

The F test results are supported by the results of the coefficient of determination measuring the extent to which the model can explain the dependent variable [18]. Where the Adjusted R value of this research is 0,431, this means that 43% of the variation in the tax aggressiveness variable can be explained by the variation of the five independent variables, namely company size, leverage, capital intensity, liquidity, and profitability. While the remaining 57% ( $100\% - 43\% = 57\%$ ) is influenced by other variables outside this study, such as inventory intensity, corporate social responsibility, managerial ownership, and political connections.

The t (Partial) test is used to prove whether each independent variable, namely company size, leverage, capital intensity, liquidity and profitability, has an influence on the Dependent variable, namely tax aggressiveness partially. If the tcount value is greater than the ttable value and the significance value is below 0,05, it can be concluded that the independent variable has a significant effect on the dependent variable.

**Table 6. Hypothesis test results**

ANOVA <sup>a</sup>					
Model	Sum of squares	df	Mean Square	F	Sig.
Regression	.181	5	.036	6.909	.000 <sup>b</sup>
Residual	.179	34	.005		
Total	.360	39			

Source: Secondary Data processed with SPSS 25, 2022

**Table 7. Determination coefficient test results**

Model	R	R Square	Adjusted R square	Std. error of the estimate
1	.710 <sup>a</sup>	.504	.431	.0724786

Source: Secondary data processed with SPSS 25, 2022

**Table 8. T test results**

Model	t	Sig.
(Constant)	-1.346	.187
Ukuran Perusahaan	1.746	.090
Leverage	4.494	.000
Capital Intensity	2.813	.008
Likuiditas	.029	.977
Profitabilitas	-.802	.428

Source: Secondary data with SPSS 25, 2022

**H1: Company size has a significant effect on tax aggressiveness**

The t test results prove that the significance value for variable X1 is 0,090 > 0,05 and the t test results prove the  $t_{count}$  value of 1,746, this means that the company size variable partially has no significant effect on tax aggressiveness, so it can be concluded that hypothesis 1 in this study is "Rejected".

These results are in line with research conducted by Sumarsan Goh, et al [19], Yauris & Agoes [20] and Prasetyo & Wulandari [21] which state that company size has no significant effect on tax aggressiveness. On the other hand, it is different from the results of research conducted by Yuliana & Wahyudi [9], Liani & Saifudin [10], and Legowo, et al [11] which state that company size has a significant effect on Tax Aggressiveness.

The results in this study are in line with the theory of planned behavior from the negative side, where corporate behavior arises in individuals due to intentions and interest to take negative actions, namely companies can have a low level of awareness of compliance with tax obligations in accordance with applicable regulations. But it is not in line if it is related to agency theory, where company size is a benchmark used by the principal, namely

investors in carrying out investment activities in various companies. The greater the assets of a company, it shows that the company can manage assets very well. The higher the assets owned by the company, of course, can support and increase company profits. Of course, high profits can attract the attention of investors to invest in the company. And thus the agent will try to get a profit so that the investor does not feel disadvantaged after making an investment [21].

Company size is certainly a consideration for investors to make investments related to the funds they have. Company size can also describe the scale of the company regarding the number of assets or assets owned by the company. Large companies certainly have large resources and support to make tax planning very well to achieve company goals. In addition, taxes are still considered a burden for all companies, which can reduce company profits, so that both small, medium and large companies are likely to continue to take actions tax aggressiveness to reduce the tax burden.

**H2: Leverage has a Significant Effect on Tax Aggressiveness**

The t test results show that the significance value for the X2 variable is 0,000 < 0,05 and the t test results show a  $t_{count}$  value of 4,494, this means that the leverage variable partially has a significant effect on tax aggressiveness, so it can be concluded that hypothesis 2 in this study is "Accepted".

This is in line with research conducted by Liani & Saifudin [10] which states that leverage has a significant effect on tax aggressiveness. Conversely, it is different from the results of research conducted by Yuliana & Wahyudi [9], Sumarsan Goh, et al [19], Legowo, et al [11] and



Prasetyo & Wulandari [21] which state that leverage has no significant effect on tax aggressiveness.

The results of this study are in line with the theory of planned behavior from the negative side, where corporate behavior arises within individuals because of the intention and interest to realize goals by taking negative actions, reflected through when the company has a high level of leverage, the tendency to take higher tax aggressiveness actions, this shows that the company has a low level of awareness of compliance with tax obligations in accordance with applicable regulations so that it takes negative actions and tax burden is one of the expenses that can reduce the company's cash balance. Likewise with agency theory, where tax aggressiveness is an activity that can facilitate management opportunistic such as manipulating profits and can cause losses for shareholders and creditors [22].

The results of this study provide evidence that the higher the leverage value generated by the company will indicate that the company will certainly be more aggressive in arranging the reported tax value, and if the leverage value generated by the company is low, the company's tax aggressiveness is also low. High leverage signals that there is an increase in debt, of course, if the loan used by the company to the bank is very large and high, it will have an impact on the high interest expense, and of course with the increase in this interest expense, it will also affect the net profit value obtained by the company. This will certainly affect the company in the action of tax aggressiveness, because of the company must maintain profits for the benefit of investors and creditors and this shows that the company has a low level of awareness of compliance with tax obligations in accordance with applicable regulations, because when the company has a high level of leverage, the tendency to take tax aggressiveness is even higher.

Leverage is used to measure the company's ability to pay all its obligations, both short and long term if the company is dissolved (liquidation). In carrying out operational activities, the company certainly needs sufficient funds and is able to support the company's process in achieving the company's well-formulated goals. As for one of the ways that can be done by the company, namely by applying for a loan of funds through a third party, namely the bank or conducting debt funding.

### **H3: Capital Intensity has a Significant Effect on Tax Aggressiveness**

The t test results prove that the significance value for variable X3 is  $0,008 < 0,05$  and the t test results prove the  $t_{count}$  value of 2,813, this means that the capital intensity variable partially has a significant effect on tax aggressiveness, so it can be concluded that Hypothesis 3 in this study is "Accepted".

This is in line with research conducted by Yuliana & Wahyudi [9], Maulana [15], and Legowo, et al [11] which state that capital intensity has a significant effect on tax aggressiveness. Conversely, it is different from the results of research conducted by Liani & Saifudin [10], Awaliyah, et al [13] and Prasetyo & Wulandari (2021) which state that capital intensity has no significant effect on tax aggressiveness.

These results are in line with the theory of planned behavior from the negative side, where corporate behavior arises within individuals because of the intention to realize goals but with negative actions. If taxpayers are able to behave positively, the company does not take tax aggressiveness because the company has a high awareness of the norms of compliance with tax obligations in accordance with applicable regulations. In additions, this research is also in line with agency theory, companies are able to behave negatively towards tax payments so that they take tax aggressiveness actions with the aim of depositing low amounts of tax. The company invest in fixed assets by using the company's idle funds to get maximum profit.

Capital intensity is an investment made by the company against fixed assets which is one of the assets that is certainly used by the company in carrying out production and collecting profits. The more capital owned by the company to support operational and production activities, one of which is in fixed assets, then of course it is expected to further support and maximize company profits. However, the high profit of the company will result in a high tax burden that must be borne by the company. Companies that have investments in fixed assets in large amounts and proportions certainly have a high depreciation expense. The company can depreciate all fixed assets owned during a certain period based on asset groups. The high depreciation expense can certainly reduce the profit earned by the company, and cause the company to report and deposit taxes with a low amount. Through depreciation expense, the

company takes advantages of this situation to launch tax aggressiveness behavior by reducing the profit earned by the company and shows that the company has a low level of awareness of compliance with tax obligations in accordance with applicable regulations, because when the company has a high level of capital intensity, the tendency to take tax aggressiveness is even higher.

#### **H4: Liquidity has a Significant Effect on Tax Aggressiveness**

The t test result show that the significance value for variable X4 is  $0,977 > 0,05$  and the t test results show a  $t_{count}$  value of 0,029, this means that the liquidity variable partially has no significant effect on tax aggressiveness, so it can be concluded that hypothesis 4 in this study is "Rejected".

This is in line with research conducted by Liani & Saifudin [10] which states that liquidity has no significant effect on tax aggressiveness. Conversely, it is different from the results of research conducted by Yuliana & Wahyudi [9], along with Dharmayanti [12] which states that liquidity has a significant effect on tax aggressiveness.

Of course, this result is in line with the theory of planned behavior from the positive side, where company behavior arises within individuals because of the intention and interest to realize goals by taking positive actions, reflected through when the company has a high liquidity ratio but the level of desire to the tax aggressiveness is low, this indicates that the company has a high level of awareness of the norms of compliance with tax obligations in accordance with applicable regulations, so actions to reduce profits will be reluctant. In addition, the results of this study are in line with agency theory, namely companies that have a high liquidity ratio will provide extensive information about the company's financial condition to convince shareholders, because a high liquidity ratio indicates the strong financial condition of the company.

Liquidity is used to measure the company's ability to pay its short-term obligations [16]. The greater the value of this liquidity ratio, it illustrates that the company is getting healthier, because it can mean that the company has a healthy financial condition and can easily and be able to sell assets owned if this is necessary to pay off short-term debt that will mature in the near future.

This indicates that the higher the liquidity ratio of the company, the action to reduce profits will be reluctant to be taken on the grounds that the company is able to pay off its short-term obligations including tax obligations. Companies that have a high level of liquidity, illustrating that the company's cash flow is running well, because the company is able to fulfill its short-term obligations by converting assets into cash quickly and will be able to pay taxes in accordance with applicable regulations, and the results of this study are good research results, because the company will report taxes in accordance with applicable regulations, even though it has a high level of liquidity but the tendency to take low tax aggressiveness.

#### **H5: Profitability has a Significant Effect on Tax Aggressiveness**

The t test results show that the significance value for variable X5 is  $0,428 > 0,05$  and the t test results show a  $t_{count}$  value of -0,802, this means that the profitability variable partially has no significant effect on tax aggressiveness, so it can be concluded that hypothesis 5 in this study is "Rejected".

This is in line with research conducted by Yuliana & Wahyudi [9], Dharmayanti [12], and Prasetyo & Wulandari [21] which state that profitability has no significant effect on tax aggressiveness. On the other hand, it is different from the results of research conducted by Sumarsah Goh, et al [19], along with Liani & Saifudin [10], which state that Profitability has a significant effect on tax aggressiveness.

This results is in line with the theory of planned behavior from the positive side, where corporate behavior arises in individuals because of the intention and interest to realize goals by taking positive actions, reflected through when the company has a high profitability ratio but the level of desire to take action tax aggressiveness is low, this indicates that the company has a high level of awareness of the norms of compliance with tax obligations in accordance with applicable regulations, and accompanied by the complexity of the company's operational activities, the company will be more careful in taking action to control the company's external environment. However, it is contrary to the concept of agency theory, because agents increase company profits so that the amount of income tax will increase in accordance with the increase in company profits. Corporate profits as profitability ratio is high, it

means that it shows the efficiency carried out by management and the high tax burden borne by the company can reduce the amount of net profit earned by the company and the dividends distributed by the company.

Profitability ratio is one of the measuring tools for a company in showing its ability to generate profits in a certain period at a certain level of sales, assets and share capital. The profitability is also a factor that can affect the tax burden, because of course if the profit generated by the company is high, this will also affect the reported tax burden which will also be high.

This can show that profitability is not a determining factor for the company to take action tax aggressiveness. The greater the profit, the profitability of the company will also increase, and this actually results in the amount of tax that must be paid by the company is also high, and accompanied by the complexity of operational activities able to increase awareness of compliance with tax obligations in accordance with applicable regulations, and the results of this study are good research results, because companies with low profitability will report in accordance with the value of profits earned so that they have a low tax burden. And vice versa, companies with high profitability will report in accordance with the value of profits earned so that they have a high tax burden and show that the company has awareness of compliance with tax obligations in accordance with applicable regulations, despite having a high level of profitability but the tendency to take low tax aggressiveness.

## 5. CONCLUSION

The results of this study are company size, liquidity and profitability have no significant effect on tax aggressiveness. Because taxes are still considered a burden for all companies, which can reduce company profits, so that both small, medium and large companies will still tend to take action tax aggressiveness to reduce the tax burden. While leverage and capital intensity have a significant effect on tax aggressiveness. The company must maintain profits for the benefit of investors and creditors.

Futhermore, from the results of this study it is recommended to add more varied independent variables apart from the five variables used in this study. Independent variables that can be used as further research such as earnings

management, independent commissioners, good corporate governance, inventory intensity, managerial ownership, corporate social responsibility, political connections and external auditor quality. In addition, It can also add to the population period of research such as the agriculture, mining, consumer goods, and property and real estate sectors so that further research can be more varied and can better represent what factors affect tax aggressiveness.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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