THE INFLUENCE OF PROFITABILITY, LIQUIDITY AND LEVERAGE ON TAX AGGRESSIVENESS OF PHARMACEUTICAL COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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Abstrak

Perpajakan adalah bagian yang penting bagi perekonomian dan kesejahteraan negara karena pajak merupakan sumber penerimaan negara. Namun, walau pemerintah menganggap pemungutan pajak sangat penting, perusahaan memandang pajak sebagai pengurangan laba perusahaan. Akibatnya, perusahaan berusaha untuk menekan pembayaran pajak sampai seminimal mungkin, ini dapat dilakuukan dengan cara yang legal maupun ilegal. Perilaku ini disebut agresivitas pajak.Penelitian ini bertujuan untuk menguji pengaruh profitabilitas, likuiditas, dan leverage terhadap agresivitas pajak. Sampel penelitian adalah 8 perusahaan farmasi yang terdaftar di Bursa Efek Indonesia dengan periode penelitian empat tahun (2018-2021) yang dipilih melalui metode purposive sampling. Teknik analisis data yang digunakan dalam penelitian ini adalah analisis regresi linier berganda yang diolah melalui SPSS 26. Hasil penelitian menunjukkan bahwa likuiditas dan leverage berpengaruh signifikan terhadap agresivitas pajak pada perusahaan farmasi di Bursa Efek Indonesia. Sedangkan profitabilitas berpengaruh tidak signifikan terhadap agresivitas pajak. Secara simultan profitabilitas, likuiditas, dan leverage berpengaruh signifikan terhadap agresivitas pajak.

Keywords: Profitabilitas, Likuiditas, Leverage, Agresivitas Pajak, Tarif Pajak Efektif

ABSTRACT

Tax is a vital part to the country's economy and the well-being of its citizens as it is a source of state revenue. However, while the government considers it is crucial to collect taxes, companies view taxes as a reduction of companies' profits. As a result, businesses strive to keep tax payments to a minimum, either in a legal or illegal way. This behavior is called tax aggressiveness.This study aims to examine the influence of profitability, liquidity, and leverage on tax aggressiveness. The sample is 8 pharmaceutical companies listed on the Indonesia Stock Exchange with the research period of four years (2018-2021) selected through purposive sampling method. The data analysis technique used in this research is multiple linear regression analysis which is processed through SPSS 26.The results show that liquidity and leverage have a significant influence on tax aggressiveness. Meanwhile, profitability has an insignificant influence on tax aggressiveness. Simultaneously, profitability, liquidity, and leverage have significant influence on tax aggressiveness.

Keywords: Profitability, Liquidity, Leverage, Tax Aggressiveness, Effective Tax Rate

1.   INTRODUCTION

Tax is a vital part to the country's economy and the well-being of its citizens. The government considers it is crucial to collect taxes, business owners take taxes as burden. Companies view taxes as one of the costs that must be paid and reduce companies' profits.

As a result, businesses strive to keep tax payments to a minimum amount by doing a tax agressiveness.

The difference in interest between the government and taxpayer is called as agency conflict, in which the government, as the principal, has given the mandate for taxpayers to pay tax obligation according to the law, but the taxpayers, as the agents, have the intention to reduce tax payments.

Sari and Prihandini (2019) defined tax aggressiveness as any effort taken with the intention to reduce tax expenses. Tax planning is the first stage of tax aggressiveness, which can result in harmful tax evasion or the legal minimization of tax expenses (tax avoidance). This activity is executed using steps that fall outside the scope of tax regulations. Although not all acts are against the rules, the more ways used by the organization, the more aggressive the company is perceived to be. Excessive use of corporate debt to reduce taxable income by claiming excessive tax deductions for interest expense, as well as excessive use of tax losses, is a common type of tax aggressiveness transaction.

According to Kaplan Schweser (2019), effective tax rate is income tax expense as a percentage of the taxable income. The lower ETR shows more aggressive tax management by company.

According to Warka, Sara and Ningsih (2021), profitability is company's ability to generate profit. It measures how effective company in utilizing its assets. A high number of profitability is favored as it indicates that the firm is getting a lot of profit. However, high profit also comes with a high tax burden.

According to CFA Institute (2020), liquidity is the ability of a company to pay off its short-term operating needs. The better the company's liquidity is, the better the economic condition of the company and that it has little difficulty in paying off its obligation such as tax burden. In contrast, companies with liquidity problem will be more likely to avoid taxes in order to maintain cash flow.

Harahap (2018) defined leverage as the ability of a company to pay off its obligation. Leverage is pictured by a good short-term and long-term cash flow. Leverage shows how much a company depends on borrowed money to fund its operations. Debt results in a fixed rate of return known as interest. As tax incentives on debt interest are increasing, the taxable profit will be smaller as the debt grows. Companies with a high degree of leverage will not be aggressive in terms of taxation because profits are tied to creditors' interests.

The object of this study is pharmaceutical companies registered in IDX for year 2018 – 2021. Pharmaceutical industry is among one of the powerhouse industries in the country.

Pharmaceutical companies are vulnerable to fraud in tax aspect. This vulnerability exists both domestically and internationally. It is reported that numerous pharmaceutical and drug companies worldwide embezzle their income taxes. According to Oxfam (2018), there is a sizable amount of tax fraud in the pharmaceutical industry, totaling about US $ 3.8 billion annually in 16 countries.

Based on the arguments above, the title proposed in this journal is "**The Influence of Profitability, Liquidity and Leverage on Tax Aggressiveness of Pharmaceutical Companies Listed on the Indonesia Stock Exchange**".

2.   LITERATURE REVIEW
2.1   Agency Theory
The term agency relationship was first introduced by Jensen and Meckling in 1976 who defined it as a contract in which one or more individuals (the principals) appoint another individual (the agent) to perform a service on their behalf, with the agent having

some decision-making authority. If both the agent and principals are utility maximizers, there's a possibility that the agent's action will not align with the principal's best interests.

The principal may, but is not required to, delegate authority to the agent. It is necessary to specify both the agent and the delegation of authority. But because the principal is morally superior, he has the final say in how the agent behaves. The agent's pursuit of private interests is limited because he logically tries to avoid being sanctioned, so the agent may install a variety of controls that eventually allow him to sanction any misbehavior. Agency loss occurred when the agent does not act in accordance with the principal's preferences, which is viewed negatively because the principal's moral superiority has been compromised (Brandsma & Adriaensen, 2017).

Darsani and Sukartha (2021) adapted the shareholder-manager agency relationship and implemented it to explain the relationship between government and taxpayers. Government as the principal and taxpayers as the agent each have different interests in tax payments. The government (as principal) wishes to maximize state revenue through taxation but cannot determine the true income of the agent (taxpayers) unless an audit is performed. The taxpayers (as agent) attempt to minimize tax payment as much as possible because taxes lower the company's economic capacity. The government requires funds from tax revenues to finance government spending. As a result of the taxpayer's actions, state revenue from the tax becomes less than optimal due to differences in objectives.

2.2   Tax Aggressiveness

Tax aggressiveness is carried out using tax plans which can either be legal or illegal. Zhang, Rashia and Cheong (2019) defined corporate tax planning as any action that can lower a company's explicit income tax liabilities and decrease its effective corporate income tax rate. This term refers to both entirely lawful and behaviors that fall into a gray area or may even be illegal.

The most frequently utilized indicator used to measure tax aggressiveness behavior is Effective Tax Rate (ETR). The effective tax rate will provide the company with a clear picture of how the company's tax management efforts are impacting the company's tax obligations. If a company's effective tax rate is higher than the statutory rate, the company is perceived to be less aggressive in managing its taxes. If the ETR is less than the statutory rate, the company is seen to be more aggressive towards its tax management. A statutory tax is a tax rate established by law on a specific imposition basis. In Indonesia, statutory tax rates refer to the applicable Taxation Law, which is constantly the subject of tax reform.

2.3   Profitability

According to Kaplan Schweser (2019), profitability ratio is a ratio that measures the ability of a company to generate profit through its resources (assets).

Profitability is crucial to ensure a company's long-term survival because it indicates whether the company has good future prospects. As it is well understood how important profit is for the well-being of the company, the owner of the company and especially the company management will try to increase this profit. In terms of the company itself, profitability can be used to assess the efficiency with which the business entity is managed. For this study, author uses Return on Asset (ROA) to calculate profitability.

2.4   Liquidity

According to Lessambo (2018), liquidity ratios measure a company's ability to settle its short-term obligations as they become due. In other words, these ratios reflect a company's cash position and how easily other assets can be converted into cash so that it can cover its liabilities and other immediate obligations. A company's liquidity includes

more than just its cash flow. It also provides a barometer for how easy it will be for the company to sell off assets to raise the money it needs.

Companies with a high level of liquidity give off the appearance that they will be able to fulfill their short-term obligations without difficulties. To be able to meet its upcoming short-term obligations, the firm needs to have a sufficient amount of cash or other current assets that can be converted into cash quickly.

The tax aggressiveness in a company is predicted to be influenced by its liquidity. Companies with high liquidity have strong cash flows and are not hesitant to meet all of their obligations, which includes paying their taxes in accordance with applicable regulations. For the purpose of this study, author uses Current Ratio as the basis of analysis.

2.5   Leverage

Leverage determines whether the company has the capability to continue operating over the long run by comparing its debt level with its equity, assets, and earnings. Leverage identify going concern issues and a company's capacity for long-term liabilities repayment.

For the purpose of this study, the author decides to use Debt-to-Asset (DAR) ratio. According to Bhebhe (2018), debt-to-asset ratio is the ratio of the total of current and non-current liabilities to total assets. In simpler words, this ratio assesses the amount of assets contributed by creditors and shareholders to a company at a specific point in time. Since the majority of decisions are based on what the lenders say, many businesses with high ratios in this area tend to give up control.

2.6   Research Model

The relationship between independent and dependent variables can be expressed in the following scheme:
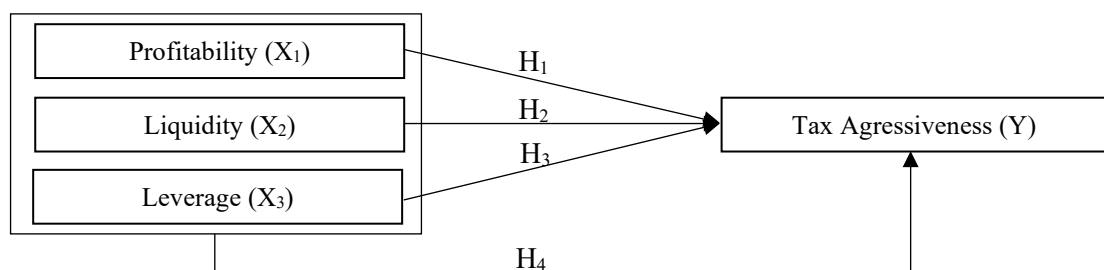

Figure 1 Research Model

Based on the research model above, four hypotheses are proposed as follows:

H_1:   Profitability has a significant influence on tax aggressiveness of pharmaceutical companies listed on the Indonesia Stock Exchange partially.

H_2:   Liquidity has a significant influence on tax aggressiveness of pharmaceutical companies listed on the Indonesia Stock Exchange partially.

H_3:   Leverage has a significant influence on tax aggressiveness of pharmaceutical companies listed on the Indonesia Stock Exchange partially.

H_4:   Profitability, liquidity, and leverage have a significant influence on tax aggressiveness of pharmaceutical companies listed on the Indonesia Stock Exchange simultaneously.

3.   RESEARCH METHODOLOGY

3.1   Research Design

According to Yin (2018), a research design is a methodical strategy for moving from point A to point B, with point A being the set of questions to be addressed and point B being a set of conclusions regarding those questions.

In this study, the research design used by writer is quantitative research design. According to Creswell and Creswell (2018), quantitative research is a method for testing objective theories by investigating the relationship between variables. These variables can then be measured, usually using instruments and the numerical data that are obtained can be statistically analyzed. The design of this research, which takes a quantitative approach, consists of descriptive research and causal research.

3.2   Population and Sample

In this study, writer uses purposive sampling techniques. Purposive sampling as defined by Stockemer (2019) is a technique in which subjects are chosen because of some characteristics, which the research has predetermined before the study. It is very useful when research aims to examine a specific target group. The sampling criteria for this study are as follow:
1. Pharmaceutical companies listed on the Indonesia Stock Exchange during the period 2018-2021.
2. Pharmaceutical companies that consistently published financial statements for four consecutive years from 2018-2021.
3. Pharmaceutical companies that consistently report net profit during the period 2018-2021.

3.3   Data Collection and Analysis Method

The type of data used in this research is the secondary data obtained indirectly through intermediary media, data is gathered from the companies' annual financial statements which are published online. Dubey et. al (2017) defined secondary data as data that are not gathered by the researcher but are obtained from another source. Secondary data is gathered by organizations in the form of financial statements, sales reports, cash flow data, production schedules, budgets, and other documents from other readily accessible sources.

To be precise, the secondary data used by author is annual financial statement of pharmaceutical companies listed on the Indonesia Stock Exchange for period 2018 – 2021. There are no primary data as author did not engage in any direct communication or interaction to the subject of research.

3.4   Operational Variable Definition and Variable Measurement

This research is using two types of variables, they are dependent variable and independent variable. The dependent variable in this research is tax aggressiveness. The independent variables in this research are profitability, liquidity, and leverage.

3.4.1 Dependent Variable

The dependent variable is the variable the researcher wishes to explain. It is the primary variable of interest and depends on other variables (independent variables). In quantitative studies, the dependent variable is donated by the letter "Y" (Stockemer, 2019). The dependent variable of this study is tax aggressiveness which refers to an action carried out with the intention of reducing the amount of tax expense, this action can be legal or illegal. The level of tax aggressiveness can be calculated using Effective Tax Rate (ETR). ETR should be able to determine how aggressive a company tax planning is. Company that is aggressive in tax planning has lower ETR. On the other hand, higher ETR indicates better tax compliance behavior. ETR can be formulated as below:

$$ETR = \frac{\text{Income Tax Expenses}}{\text{Earnings Before Taxes}}$$

3.4.2 Independent Variable

Stockemer (2019) explained that independent variables are hypthosized to explain the variation in the dependent variable. Sometimes, independent variables are also referred to as explanatory variables because they are believed to explain variation or changes in the dependent variable. The independent variable in quantitative studies is denoted by the letter "X". The independent variables in this study are profitability (X_1) , liquidity (X_2) and leverage (X_3).

3.4.2.1 Profitability (X_1)

Profitability refers to the ability of a company to generate profit using its resources. In this study, author uses Return on Asset (ROA), which shows the profit earned by the company using total assets. High profitability indicates high tax burden which could lead to tax aggressiveness behavior. As shown by previous studies conducted by Zhu et al. (2019) and Sauladeen and Ejen (2018), ROA is calculated by dividing net income with the company's total assets, which are formulated as follows:

$$\text{Return on Asset (ROA)} = \frac{\text{Net Income}}{\text{Total Assets}}$$

3.4.2.2 Liquidity (X_2)

Liquidity refers to company's ability to pay short-term liabilities. Companies with good liquidity have sufficient funds to pay its tax expense which could lead to better tax compliance behavior. Author selects Current Ratio to measure companies' liquidity as it is more comprehensive compared to other measurements. As shown by previous research conducted by Chyris et al. (2018), current ratio is calculated by dividing company's current assets with current liabilities, as formulated below:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

3.4.2.3 Leverage (X_3)

Leverage is the ability of a company to pay long-term debt and shows how much of the company's activities is funded using debt. A highly leveraged company is highly dependent on debt and has to pay-off a lot of interest expense. This expense is deductible, leading to lower taxable income and lower tendency of committing tax aggressive behaviors. To measure leverage, writer uses Debt-to-Asset Ratio (DAR). As shown by previous studies conducted by Chan et al. (2013), DAR is calculated by dividing company's total debt with total assets, which can be formulated as follows:

$$\text{Debt} - \text{to} - \text{Asset Ratio (DAR)} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

4.   RESULT

4.1   Sample Size Determination

The sample criteria are as follow:

Table 1 Determination of Sample

No.	Criteria	Total
1	Pharmaceutical companies listed on the Indonesia Stock Exchange during the period 2018-2021.	10
2	Pharmaceutical companies that do not consistently published financial statements for four consecutive years from 2018 to 2021.	(1)
3.	Pharmaceutical companies that do not consistently report net profit during the period 2018-2021.	(1)
	Total companies that meet the criteria	8
	Research year	4
	Total research samples	32

4.2 Descriptive Statistics

The results of descriptive statistics tests are as follows:

Table 2 Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ETR	32	.1237	.7216	.2801	.1103
ROA	32	.0009	.3099	.0920	.0727
CR	32	.8977	4.6577	2.6348	1.2074
DAR	32	.0790	.7927	.3603	.1975
Valid N (listwise)	32				

The minimum value of ETR is 0.1237 which is owned by PT Phapros Tbk in the year of 2021. It means that on that year the company was the most aggressive in managing its taxes. On the other hand, the maximum value is 0.7216, owned by PT Kimia Farma Tbk in the year of 2020. This company committed the least aggressive tax planning. The mean value for the year 2018-2021 is 0.2801 (28.01%), this number is higher than the statutory tax rate in Indonesia which shows that in general this industry was not aggressive in its tax planning for period of 2018-2021.

The minimum value of ROA is 0.0009 which is owned by PT Kimia Farma Tbk in the year of 2019. This amount shows the company was not efficient in utilizing its assets to generate income. On the other hand, the maximum value is 0.310 which is owned by PT Sido Muncul Tbk in the year of 2021. The company used its assets optimally to generate income for the year. The mean value for the year 2018-2021 is 0.0920 and the value of standard deviation of ROA is 0.0727.

The minimum value of current ratio is 0.8977 which is owned by PT Kimia Farma Tbk in the year of 2020. While the maximum value is 4.6577 which is owned by PT Kalbe Farma in the year of 2018. The minimum value of liquidity is less than 1, which shows that the company did not have sufficient current assets to pay off its short-term obligations. On the other hand, the maximum value is more than 1 which represents Kalbe Farma's more than adequate ability on paying off its short-term obligation. The mean value for the year 2018-2021 is 2.6348 and the value of standard deviation of current ratio is 1.2074.

The minimum value of DAR is 0.0790 which is owned by PT Tempo Scan Pacific in the year of 2020. While the maximum value is 0.7927 which is owned PT Pyridam Farma Tbk in the year of 2021. The mean value for the year 2018-2021 is 0.3603 and the value of

standard deviation of current ratio is 0.1975. Standard deviation is lower than mean which indicates that the data of DAR are clustered close around the mean. With the mean result below 1, it indicates that the pharmaceutical industry in Indonesia in its operation relied did not heavily rely on debt. This is also further supported by the fact that both the minimum and maximum value of DAR did not reach 1.

4.3   Classical Assumption Test
4.3.1   Normality Test

The purpose of normality test is to find out whether the residuals in the regression model are normally distributed. If a regression model has a normal distribution, it is considered feasible. This test can be done with Kolmogorov Smirnov test. The result of the test is listed below:

Table 3 Result of Normality Test Using Kolmogorov-Smirnov Test before Outliers Exclusion

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		32
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.10093551
Most Extreme Differences	Absolute	.256
	Positive	.256
	Negative	-.132
Test Statistic		.256
Asymp. Sig. (2-tailed)		.000[c]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

From the table above, it can be seen that the significance value is 0.000 which is less than 0.05. Kolmogorov-Smirnov test requires a significance level above 0.05 in order for residuals to be deemed normally distributed. Therefore, it can be concluded that the data are not normally distributed. Author decided to analyze the cause of it and found out that there are outliers in the data that have to be removed to overcome the residuals that are not normally distributed.
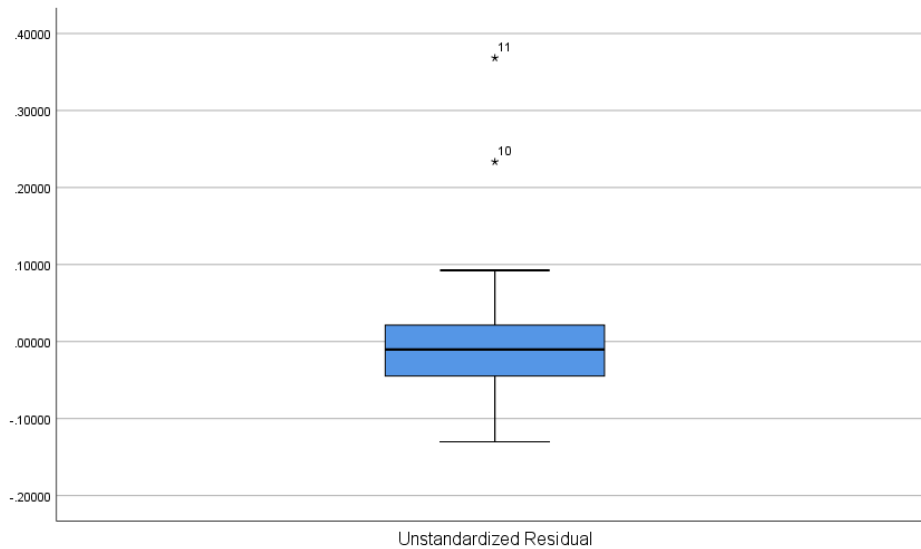
Figure 2 Box Plot

Based on the box plot above, it can be seen that there are 2 outlier data, they are the 10th and 11th data that had to be removed. After deleting the two data, the normality test was carried out again.

Table 4 Result of Normality Test Using Kolmogorov-Smirnov after Outliers Exclusion

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		30
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.04803380
Most Extreme Differences	Absolute	.207
	Positive	.207
	Negative	-.187
Test Statistic		.207
Asymp. Sig. (2-tailed)		.002[c]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

The result of the second Kolmogorov-Smirnov test showed significance value of 0.002 which is less than the required value (0.05). This means that the data is still not normally distributed after outliers' exclusion. Therefore, the data needs to be transformed first so that the assumption of normality is met.

Table 5 Result of Normality Test Using Kolmogorov-Smirnov after Outliers Exclusion and Data Transformation

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		30
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.07694023
Most Extreme Differences	Absolute	.139
	Positive	.139
	Negative	-.130
Test Statistic		.139
Asymp. Sig. (2-tailed)		.144[c]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

From table 4.5, the significance value is seen to be 0.144 which is greater than 0.05. Therefore, it can be concluded that the residuals are now normally distributed.

4.3.2 Heteroscedasticity Test

The heteroscedasticity test is used to determine whether there is a residual inequality of variance from one observation to the next in the regression model. To determine whether there is heteroscedasticity, Scatterplot and Glejser tests are performed.

Table 6 Result of Heteroscedasticity Test using Glejser Test

Coefficients[a]		t	Sig.
Model			
1	(Constant)	.343	.735
	tROA	-.742	.465
	tCR	1.077	.292
	tDAR	1.109	.278

The result of Glejser test shows that all of the independent variables have significance values greater than 0.05, implying that none of the independent variables have a heteroscedasticity problem.

Scatterplot analysis can also be used to support the Glejser Test. If the data are dispersed across the graph, there is no heteroscedasticity problem. The Scatterplot graph results are shown in the figure below:
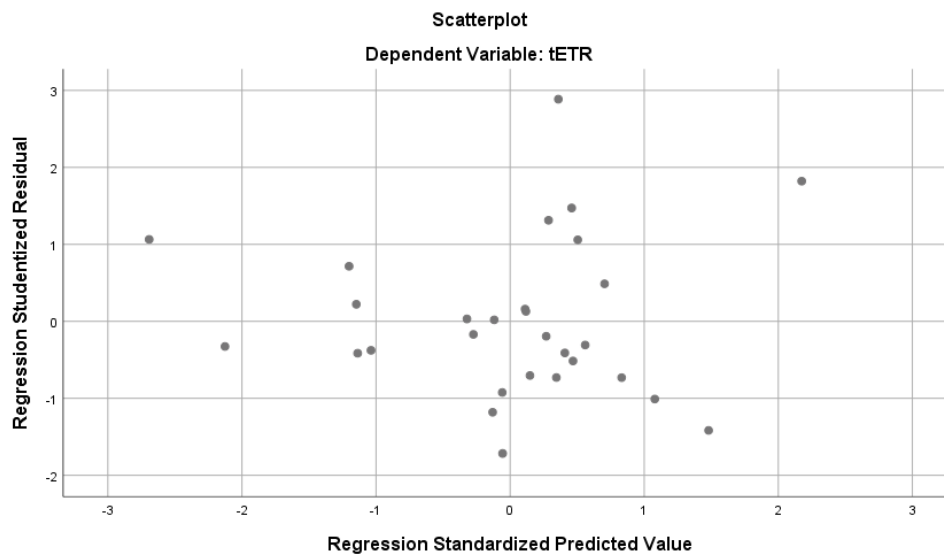
Figure 3 Scatterplot Graph for Heteroscedasticity Test

Figure 4.5 shows that all of the dots are spread randomly above or below zero on the Y axis and do not form a regular pattern. It means that the dependent variable, tax aggressiveness, can be predicted using the input of the independent variables.

4.3.3 Multicollinearity Test

The multicollinearity test is used to assess the relationship between the independent variables. A regression model can be concluded as free from multicollinearity issues when the tolerance value is ≥ 0.10 and the VIF value is ≤ 10. The results are shown below:

Table 7 Result of Multicollinearity Test using Tolerance Value and Variance Inflation Factor (VIF)

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	tROA	.374	2.676
	tCR	.250	3.992
	tDAR	.266	3.764

Based on the result in Table 4.7, it can be concluded that there are no multicollinearity issues on each of the independent variables. The reason is because the tolerance value of each variable is higher than 0.10 and the VIF value is less than 10.00.

4.3.4 Autocorrelation Test

The autocorrelation test seeks to determine whether there is a relationship between the residuals in period t and period t-1. It is favorable to have regression model that is free of autocorrelation. The Durbin-Watson test (DW Test) is used to determine the existence of autocorrelation. The test results are as follows:

Table 8 Result of Autocorrelation Test using D-W Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.482[a]	.232	.144	.08126	1.758

a. Predictors: (Constant), tDAR, tROA, tCR

b. Dependent Variable: tETR

The test result shows Durbin-Watson value of 1.758 (as seen on table 4.8). The value of dL taken from the DW table with n=30 and k=3 is 1.2138 and the value of dU is 1.6498. As the value of Durbin-Watson from table 4.6 is between the value of dU and 4-dU (1.6498 < 1.758 < 2.3502), it can be concluded that there is no autocorrelation occurred.

4.4   Multiple Linear Regression Analysis

Multiple linear regression is a test used to determine whether there is a relationship between one dependent variable with more than one independent variable. The results of multiple linear regression can be seen in the table below:

Table 9 Multiple Linear Regression Analysis

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta
1	(Constant)	-.614	.085	
	tROA	-.053	.048	-.280
	tCR	.227	.093	.733
	tDAR	.232	.074	.921

From the above table, multiple linear regression is formulated as below:

$$Y = -0.614 – 0.053tROA + 0.227tCR + 0.232tDAR$$

The constant amount is -0.614 which shows that if the independent variables (profitability, liquidity, and leverage) do not change, then the tax aggressiveness will be -0.614. The coefficient (β) of profitability (ROA) is -0.053, showing that ETR will decrease by 0.053 unit for each one-unit increase in ROA assuming that the other independent variables remain constant. The coefficient (β) of liquidity (CR) is 0.227, showing that ETR will increase by 0.227 unit for each one-unit increase in CR assuming that the other independent variables remain constant. The coefficient (β) of leverage (DAR) is 0.232, showing that ETR will increase by 0.232 unit for each one-unit increase in DAR assuming that the other independent variables remain constant.

4.5   Partial Hypothesis Test (t-test)

T-test examines the partial influence of the independent variables (profitability, liquidity, and leverage) on the dependent variable (tax aggressiveness). The result of partial testing can be seen as follows:

Table 10 Result of Partial t-test

	Model	T	Sig.
1	(Constant)	-7.259	.000
	tROA	-1.099	.282
	tCR	2.453	.021
	tDAR	3.144	.004

From Table 10, for profitability, negative value of t-count is greater than the negative value of t-table (-1.099 > -2.056). Moreover, the significance level is more than 0.05 (0.282 > 0.05). It is concluded that H1 which stated that profitability has significant influence on tax aggressiveness is rejected.

For liquidity (CR), the t-count value of 2.453 is greater than the t-table value of 2.056. Moreover, the significance value is less than 0.5 (0.021 < 0.05). It is concluded that H2 which stated that liquidity has significant influence on tax aggressiveness is accepted.

For leverage (DAR), t-count value of 3.144 is greater than the t-table value of 2.056. Moreover, the significance level is less than 0.05 (0.004 < 0.05). It is concluded that H3 which stated that leverage has significant influence on tax aggressiveness is accepted.

4.6   Simultaneous Hypothesis Test (f-test)

The followings are the results of simultaneous hypothesis testing:

Table 11 Simultaneous Significant Test

| | | | ANOVA^a | | | |

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.052	3	.017	5.904	.003[b]
	Residual	.074	26	.003		
	Total	.127	29			

a. Dependent Variable: tETR
b. Predictors: (Constant), tDAR, tROA, tCR

From Table 11, it can be seen that F-count value is 5.904, which is greater than F-table value in the amount of 2.975. Moreover, significance value is 0.003 which is less than 0.05. Thus, it can be concluded that H4 is accepted which means that profitability, liquidity, and leverage have significant influence on tax aggressiveness simultaneously.

4.7   Coefficient of Determination Test

Coefficient of determination measures the ability of independent variables to explain the dependent variable. The result of the test is as follows:

Table 12 Coefficient of Determination Test

| | | | Model Summary[b] | | |

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.482[a]	.232	.144	.08126	1.758

a. Predictors: (Constant), tDAR, tROA, tCR
b. Dependent Variable: tETR

From Table 12, the Adjusted R2 value obtained is 0.144 or 14.4%. This means that 14.4% of tax aggressiveness is influenced by the independent variables, which are profitability, liquidity, and leverage. The remaining 85.6% is influenced by other variables that are not examined in this study.

4.8   Discussion
4.8.1   The Influence of Profitability on Tax Aggressiveness
Profitability has a negative t-count value of -1.099 which is greater than the negative t-table value (-1.099 > -2.056) and significance level is greater than 0.05. It is concluded that H1 is rejected while H0 is accepted. This means that profitability (X1) does not have a significant influence on tax aggressiveness (Y). However, the negative coefficient indicates that an increasing profitability rate leads to a lower ETR of a company. As lower ETR indicates higher tax aggressiveness, it is interpreted that profitability has an insignificant positive influence on tax aggressiveness.

This finding is in line with the finding of study conducted by Mahlia et al. (2020) who also found that profitability has an insignificant positive influence on tax aggressiveness. However, it is not in line with study conducted by Tampubolon (2021) who found that profitability has a significant positive impact on tax aggressiveness.

4.8.2   The Influence of Liquidity on Tax Aggressiveness
Liquidity has a t-count value of 2.453 which is greater than t-table value (2.453 > 2.056) and significance level is less than 0.05. It is concluded that H0 is rejected while H2 is accepted. This means that liquidity (X2) has a significant influence on tax aggressiveness (Y). Furthermore, the positive coefficient of liquidity represents a direct relationship between liquidity and ETR. As ETR has an opposite relationship with tax aggressiveness, it is interpreted that liquidity has a significant negative influence on tax aggressiveness.

This finding is in line with the study conducted by Dewi and Cynthia (2018) who also found that liquidity has a significant negative influence on tax aggressiveness. However, it is not in line with study conducted by Dianawati and Agustina (2020), who found that liquidity has an insignificant positive influence on tax aggressiveness.

4.8.3   The Influence of Leverage on Tax Aggressiveness
Leverage has a t-count value of 3.144 which is greater than t-table value (3.144 > 2.056) and significance level less than 0.05. It is concluded that H0 is rejected while H3 is accepted. This means that leverage (X3) has a significant influence on tax aggressiveness (Y). Furthermore, the positive coefficient of liquidity represents a direct relationship of leverage and ETR. As ETR has an opposite relationship with tax aggressiveness, it is interpreted that leverage has a significant negative influence on tax aggressiveness.

This finding is in line with study conducted by Karlina (2018) who found that leverage has a significant negative impact on tax aggressiveness. However, it is not in line with study conducted by Rahayu et al. (2022) who found that leverage has an insignificant positive impact on tax aggressiveness.

4.8.4   The Influence of Profitability, Liquidity, and Leverage on Tax Aggressiveness
Through the hypothesis testing result, it is proven that profitability (X1), liquidity (X2), and leverage (X3) have a significant influence on tax aggressiveness (Y) simultaneously. This statement is supported by the F-test result showing a F-count value of 5.904 which is higher than F-table value (5.904 > 2.975) and significance level less than 0.05. This result indicates that the fourth hypothesis (H4) of this research is accepted.

The following table summarizes the result of hypothesis tests:

Table 13
Summary of Hypothesis Tests Results

No.	Hypothesis	F or T count	F or T table	Sig	α	Result
H_1	Profitability has a significant influence on tax aggressiveness of pharmaceutical companies listed on the Indonesia Stock Exchange partially.	-1.099	-2.056	0.282	0.05	H_1 rejected
H_2	Liquidity has a significant influence on tax aggressiveness of pharmaceutical companies listed on the Indonesia Stock Exchange partially.	2.453	2.056	0.021	0.05	H_2 accepted
H_3	Leverage has a significant influence on tax aggressiveness of pharmaceutical companies listed on the Indonesia Stock Exchange partially.	3.144	2.056	0.004	0.05	H_3 accepted
H_4	Profitability, liquidity, and leverage have significant influence on tax aggressiveness of pharmaceutical companies listed on the Indonesia Stock Exchange simultaneously.	5.904	2.975	0.003	0.05	H_4 accepted

5.   CONCLUSION

Based on the result of hypothesis testing, the following conclusions can be drawn as below:

1.   profitability partially has an insignificant influence on tax aggressiveness of pharmaceutical companies listed on IDX from 2018 – 2021;

2.   liquidity partially has a significant influence on tax aggressiveness of pharmaceutical companies listed on IDX from 2018 – 2021

3.   leverage partially has a significant influence on tax aggressiveness of pharmaceutical companies listed on IDX from 2018 – 2021;

4.   profitability, liquidity, and leverage simultaneously have a significant influence on tax aggressiveness of pharmaceutical companies listed on IDX from 2018 – 2021;

5.   the coefficient of determination of adjusted R2 is 0.144.

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