



The Effect of Liquidity and Capital Intensity on Tax Aggressiveness

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Aims: This research aims to determine and analyze the effect of liquidity and capital intensity on tax aggressiveness.

Study Design: The population in this study are Basic Industry and Chemical sub-sector manufacturing companies listed on the Indonesia Stock Exchange in the 2020-2022 period, namely 66 companies. The sampling method was purposive sampling. The final sample in this research was 22 companies and the total final sample was 66 samples. The data used is secondary data taken from the financial statements obtained from the Indonesian Stock Exchange.

Methodology: The data collection method is document analysis. The data analysis method used is quantitative analysis. The analysis techniques in this research are the classical assumption test, determinant coefficient test and Multiple Linear Regression.

Results: The results of this research show that liquidity influences tax aggressiveness, capital intensity influences tax aggressiveness.

Conclusion: The research results show that liquidity, capital intensity simultaneously affect tax aggressiveness. liquidity has a positive and significant effect on tax aggressiveness. Meaning that Companies with high liquidity are healthy companies with large tax liabilities so they have a higher

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potential for aggressive tax action. so does Capital Intensity has a positive and significant effect on Tax Aggressiveness. Meaning that higher fixed asset investment is carried out as a form of reducing profits and increasing depreciation expenses, thereby reducing the tax burden

Keywords: Liquidity; capital intensity; tax aggressiveness.

1. INTRODUCTION

“Tax collection carried out by the Government does not always receive support from companies. Companies always try to pay as little tax as possible by reducing revenue or net profit. However, the government is trying to increase tax revenues as much as possible to finance state administration. The government's efforts to optimize the tax sector are not without obstacles. One of the government's obstacles in efforts to optimize the tax sector is the existence of tax avoidance (*Tax Avoidance*) and tax evasion (*Tax Evasion*) or with various policies implemented by the company to minimize the amount of tax the company pays. Paying taxes in accordance with the provisions will of course conflict with the company's main objective, namely maximizing profits, so the company tries to minimize the tax costs it bears. Methods used by companies include: *tax planning* or with tax aggressiveness” [1].

“Tax aggressiveness is an action aimed at reducing taxable profits through tax planning, whether using legal or illegal methods” [2]. “This difference is what drives taxpayers to sometimes commit fraud by minimizing tax payments that should be paid in accordance with applicable regulations. Taxes are a source of state income to finance all state expenditure. Taxes are used as an instrument to attract funds from society to the State treasury, as the State budget, taxes are an important element that supports state revenue” [3].

In Indonesia, there are many tax avoidance practices, for example companies deliberately record losses for their operational activities so that they are automatically not subject to tax. These losses usually occur due to the incurrence of quite large debts and quite high interest charges. Higher company debt results in lower ETR [4]. This is meaningful *Leverage* positive effect on tax avoidance. However, it does not rule out the possibility that companies with fairly good profitability also engage in tax avoidance. High profitability can provide opportunities for companies to carry out tax planning, which aims to reduce the amount of tax burden obligations [5].

The practice of tax aggressiveness in Indonesia can be seen from the case of PT Ades Alfindo which is indicated as carrying out earnings management. PT Ades Alfindo Putrasetia Tbk (ADES) has provided misleading information to the public regarding cases of differences in calculating production figures and sales figures in the company's financial reports. According to the Director of Ades, Etienne Benet, the difference in volume uses the assumption of an average selling price excluding VAT. As a result, PT ADES' financial reports for 2017-2019 were stated to be too high (*overstated*). Profit management carried out by PT ADES is increasing income (*increasing income*) because PT ADES manipulates net sales so that PT ADES profits increase, this tax aggressiveness action is used *tax avoidance* where PT ADES engineered taxes that were still within the limits of tax law with the aim of attracting investors to invest shares in the company. However, it had an impact on state tax revenues, where this action resulted in PT ADES paying lower taxes than usual.

It was also reported from www.gresnews.com that acts of tax aggressiveness in Indonesia also occurred with PT Panama Papers, where the phenomenon of the Panama Papers scandal emerged involving politicians and hundreds of businessmen suspected of committing acts of tax aggressiveness. This phenomenon has occurred over the last 50 years, tax aggressiveness continues to increase significantly, and is carried out in countries that implement tax free or implement low taxes. This very aggressive tax practice has the potential to reduce state income, the aggressiveness of taxes carried out by companies has a negative impact on the government, thereby hampering the entire development process in Indonesia, where a percentage of the state's income comes from taxes. This shows the importance of taxes, thus motivating the author to study further regarding tax aggressiveness. The proxies used to measure tax aggressiveness include liquidity and capital intensity which can be seen from the company's financial reports.

“Liquidity is the company's ability to meet short-term debt. Companies with a high level of

liquidity are likely to have *resources* which is good so that it has good current assets to cover its current liabilities, whereas if the company's liquidity is low it indicates that the company's ability to fulfill its obligations is not good so it may refer to tax aggressiveness measures to improve the company's liquidity. Companies with low levels of liquidity will tend to take tax aggressive actions to maintain the company's cash flow. Meanwhile, companies with a high level of liquidity will take fewer tax aggressive actions" [6]

Research on tax aggressiveness has been widely studied by various parties with different variables and has different empirical evidence. Research conducted by [6,7,8,9,10,11] shows that liquidity has a positive effect on tax aggressiveness, and [8] shows the results that liquidity has a negative effect on tax aggressiveness while the research results [12,13,14] states that liquidity has no effect on tax aggressiveness

"Another factor that influences tax aggressiveness is capital intensity. Capital intensity is a company's investment activity which is associated with investment in fixed assets and inventory. The capital intensity ratio can show the efficiency of using assets to generate sales" [15]. "Capital intensity can also be defined by how the company sacrifices funds for operating activities and asset funding in order to obtain company profits" [7]. "High fixed asset investment has an impact on increasing depreciation expenses on fixed assets, which can reduce profits. Reduced profits can automatically reduce the company's tax burden, so it can be interpreted that the higher the level of capital intensity, the greater the tax aggressiveness" [16].

The results of research [17,9,11] state that "capital intensity has a positive effect on tax aggressiveness". However, in contrast to previous research, according to [7,14,18] it is stated that "capital intensity has no effect on tax aggressiveness"

This research was conducted by the author to seek information related to company compliance in paying taxes or companies taking tax aggressiveness. In this research the author uses a proxy *effective tax rate* (ETR) as a measurement of corporate tax aggressiveness. ETR is considered capable of reflecting the difference between book calculations and fiscal profit. Meanwhile, previous research used *Cash Effective Rate* (CETR), namely the calculation of

cash or operational activities spent by a company for tax payment costs which are divided by profit before tax.

This research attempts to reexamine the differences in previous research findings where liquidity and capital intensity have positive, negative and non-affecting effects on tax aggressiveness. Researchers reexamine the significance and direction of the influence of liquidity and capital intensity in influencing tax aggressiveness. Researchers chose basic industry and chemical subsector companies as the focus of the research because of their awareness stemming from the existing problems outlined in the background.

2. LITERATURE REVIEW

2.1 Agency Theory

According to [19] "agency theory is a contractual relationship between the principal and the agent. This theory is the granting of authority by the company owner to the company management to carry out company operations in accordance with the agreed contract. If both parties have the same interest in increasing the value of the company then management will act in accordance with the interests of the company owner. The important thing in agency theory is the authority given to the agent to carry out an action in the interests of the owner. Agency theory provides an important way to explain the conflicting interests of managers and owners".

The relationship between agency theory and tax aggressiveness is that agency theory explains the relationship between the management of a company and the company owners. The company owner is the party who gives orders to the company management to carry out activities on behalf of the company owner. This means that business activities are not processed directly by the company owner, so that company owners and management can influence company performance, one of which is to regulate company policies regarding taxes, maximize agent performance compensation, namely by reducing the company's tax burden to maximize company performance.

2.2 Liquidity

"The liquidity ratio is a ratio that describes the company's ability to meet its short-term obligations that will soon mature" [20]. Liquidity ratios are needed for credit analysis or financial

statement analysis. This can be seen by the extent to which the operating profit margin (operating cash flow) can cover financial needs and fulfill obligations (debts) that are due. This short-term liquidity capability looks at current assets and current liabilities. This liquidity measure typically links short-term debt to the current assets available to repay it.

Companies that have low liquidity tend to have a high level of corporate tax aggressiveness, while the higher the liquidity ratio, the lower the company's tax aggressiveness, this is because a company that is liquid means the company is able to pay all its current debts, including tax debts. There are three ways to measure the liquidity ratio most commonly used in a company, namely [21]:

- (1) Current Ratio
- (2) Quick Ratio
- (3) Cash Ratio

"In this research the author uses *Current Ratio* because the current ratio is a ratio that measures a company's ability in the short term by looking at the company's current assets against its current liabilities (debt in terms of looking at the company's current assets against its current liabilities, one of which is tax debt)" [22].

2.3 Capital Intensity

"Capital intensity is a company's investment activity which is associated with investment in fixed assets and inventory. The capital intensity ratio can show the efficiency of using assets to generate sales" [15]. So it can be interpreted that capital intensity describes how much a company invests its assets in fixed assets, and almost all fixed assets will experience depreciation which in the company's financial statements will become costs that can reduce income in company tax calculations. The greater the depreciation costs for the asset, the lower the level of tax the

company must pay. This has a significant impact on companies with a large capital intensity ratio indicating a low active tax level. This indicates that the company is practicing tax aggressiveness.

"In this research, capital intensity is proxied using the fixed asset intensity ratio. Fixed asset intensity is how large the proportion of the company's fixed assets is in the total assets owned by the company" [1].

2.4 Tax Aggressiveness

According to [2] tax aggressiveness is an action aimed at reducing taxable profits through tax planning, using either method *tax avoidance* or *tax evasion*. Tax aggressiveness is actions taken by companies to reduce their tax obligations, either based on legal or non-illegal methods, so as to reduce the costs of spending on corporate tax obligations that must be paid to the government.

Tax aggressiveness provides benefits for companies in the form of savings on tax expenditure so that the profits obtained by owners become greater to fund company investments which can increase company profits in the future.

In this research, the author used *effective tax rate* (ETR) to measure tax aggressiveness. According to [1] "*effective tax rate* (ETR) is calculated or assessed based on financial information produced by the company *effective tax rate* (ETR) is a widely used form of calculating corporate tax rates". According to [7], "the lower the ETR value indicates the presence of tax aggressiveness in the company. A low ETR indicates an income tax burden that is smaller than pre-tax income".

Based on the description above, the framework of thought can be depicted in Fig. 1 below:

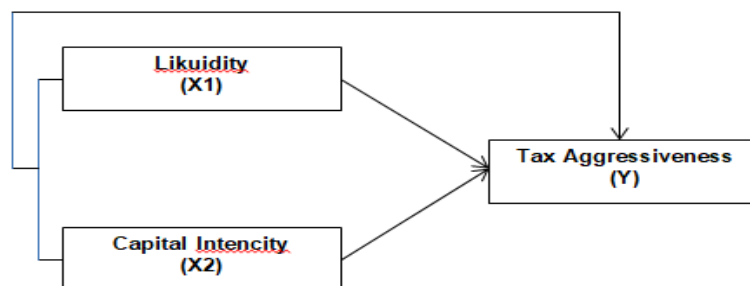


Fig. 1. Framework of thought

Based on the framework above, the formulation of the hypothesis in this research is as follows:

- H1: Liquidity and Capital Intensity Influence Tax Aggressiveness
- H2a: Capital Intensity Influences Tax Aggressiveness.
- H2b: Capital Intensity Influences

3. METHODS AND DATA

The type of research used by the author in this research is associative research which aims to determine the relationship between each variable, either one or more variables, namely the liquidity variable and the capital intensity variable.

This research was conducted on the Indonesian Stock Exchange on manufacturing companies in the basic industry and chemical sub-sectors in 2020-2022 (3 years). All financial reports are obtained and accessed from: www.idx.co.id.

The population in this study were manufacturing companies in the basic industry and chemical sub-sectors listed on the Indonesia Stock Exchange, namely 66 companies. The sampling technique used in this research is purposive sampling. Based on the sampling criteria, 22 companies were obtained as research samples. The statistical analysis technique in this research uses multiple linear regression analysis. Multiple linear regression analysis can explain the influence between the dependent variable and several independent variables. After the required data is collected, data analysis is then carried out consisting of classical assumption tests and hypothesis tests. The data analysis technique in this research was assisted by *Statistical Program for Special Scene* (SPSS).

3.1 Variable Devendent

The dependent variable in this research is tax aggressiveness which is measured by *effective tax rate* (ETR). According to [1] *effective tax rate* (ETR) is calculated or assessed based on financial information produced by the company so that *effective tax rate* (ETR) is a widely used form of calculating corporate tax rates. According to [7], the lower the ETR value indicates the existence of tax aggressiveness in the company. A low ETR indicates an income tax burden that is smaller than pre-tax income. Formula *Effective Tax Rate* (ETR) as a proxy for tax aggressiveness according to [15]:

$$ETR = (\text{Amount of Income Tax}) / (\text{Profit Before Income Tax})$$

3.2 Independent Variable

3.2.1 Liquidity

The liquidity ratio can be calculated using *Current Ratio*, the reason is because the current ratio is a ratio that measures a company's ability in the short term by looking at the company's current assets against its current liabilities (one of which is tax debt) [22].

Liquidity Formula uses *current ratio*, as follows:

$$\text{Current Ratio LIQ} = (\text{Current Assets}) / (\text{Current Liabilities})$$

3.2.2 Capital Intensity

Capital intensity can be measured using *capital intensity ratio*. Fixed asset intensity is how large the proportion of the company's fixed assets is in the total assets owned by the company [1]. The Capital Intensity Formula is as follows:

$$CAP = (\text{Total Fixed Assets}) / (\text{Total Assets})$$

Table 1. Sample Criteria

| Number | Criteria | Amount |
|--------|---|-----------|
| 1 | Manufacturing Companies in the Basic Industry and Chemical sub-sectors | 66 |
| 2 | Companies that do not present complete financial reports | 2 |
| 3 | Companies that present financial reports not in rupiah | 13 |
| 4 | Companies that present financial reports do not comply with the required data | 29 |
| 5 | Number of Samples | 22 |
| 6 | Number of financial reporting years | 3 |
| | Total Financial Report | 66 |

Source: Author, 2023.

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistical Analysis

The variables analyzed in this research are Liquidity and Capital Intensity on Tax Aggressiveness in Basic Industry and Chemical Sub-Sector Manufacturing Companies Listed on the Indonesian Stock Exchange in 2020-2022. Before being processed, the data is first changed via software *MS Excel* then the data was applied to the SPSS version 21 program using descriptive analysis tests.

Based on table 2, it shows that the amount of data used in this research was 66 samples. From table 2 it is known: The Liquidity Variable (X1) has the lowest value of 0,6558, the highest value is 9.4574 with an average value of 2.0651, and a standard deviation of 1.8472. The Capital Intensity variable (X2) has the lowest value of 0,0173, the highest value of 0,9225, with an average value of 0,4480, and standard deviation of 0,2515. Tax Aggressiveness Variable (Y) has the lowest value of 0,0103, the highest value

of 2,1024, with an average value of 0,2908, and standard deviation of 0,2960.

4.2 Classic Assumption Test

4.2.1 Normality test

“The normality test is used to show whether the residual values in this regression model are normally distributed or not” [23]. “The normality test in this study used the method *Kolmogorov-Smirnov* A good regression model must have residual values that are normally distributed, and can be declared normal if the values *asympt. sig* > 0,05” [24].

4.2.2 Multicollinearity test

“The multicollinearity test is used to determine and show whether in this regression model there is an indication of correlation between the independent variables” [23]. “In multiple regression, a regression model must be free from symptoms of multicollinearity by seeing if the VIF value < 10 and the *tolerance* > 0.1, then the regression model can be declared free from symptoms of multicollinearity” [23].

Table 2. Results of descriptive statistical analysis

| Descriptive Statistics | | | | | |
|------------------------|----|---------|---------|--------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| X1_Liquidity | 66 | .6558 | 9.4574 | 2.0651 | 1.8472 |
| X2_Capital Intensity | 66 | .0173 | .9225 | .4480 | .2515 |
| Y_Tax Aggressiveness | 66 | .0103 | 2.1024 | .2908 | .2960 |
| Valid N (listwise) | 66 | | | | |

Source: output Processed SPSS 21, 2023.

Table 3. Normality Test Results *Kolmogorov-Smirnov*

| One-Sample Kolmogorov-Smirnov Test | | |
|------------------------------------|----------------|-------------------------|
| | | Unstandardized Residual |
| N | | 66 |
| Normal Parameters ^{a,b} | Mean | .0000000 |
| | Std. Deviation | .80786106 |
| Most Extreme Differences | Absolute | .143 |
| | Positive | .136 |
| | Negative | -.143 |
| Kolmogorov-Smirnov Z | | 1.161 |
| Asymp. Sig. (2-tailed) | | .135 |

a. Test distribution is Normal.

b. Calculated from data.

Source: output Processed SPSS 21, 2023.

Based on table 3, normality test method *Kolmogorov-Smirnov* earned value *asympt. sig* equal to 0.135 > 0.05, it can be concluded that the normality test in this study is normally distributed.

Table 4. Multicollinearity Test Results Tolerance dan VIF

| Coefficients ^a | | |
|---------------------------|-------------------------|-------|
| Model | Collinearity Statistics | |
| | Tolerance | VIF |
| 1 (Constant) | | |
| X1_Liquidity | .767 | 1.304 |
| X2_Capital Intensity | .767 | 1.304 |

a. Dependent Variable: Y_Tax Aggressiveness

Source: output Processed SPSS 21, 2023

Based on Table 4, the values obtained *tolerance* X1_Liquidity and X2_Capital Intensity (0.767) > 0.1 and VIF value X1_Liquidity and X2_Capital Intensity (1.304) < 10, then the regression model in this study can be stated to not contain symptoms of multicollinearity.

4.2.3 Heteroscedasticity test

“The heteroscedasticity test aims to find out and show whether in the regression model there is an inequality in the variance of the residuals from one observation to another” [23]. The heteroscedasticity test in this research's regression model uses the method *White*. A good regression model must be free from symptoms of heteroscedasticity, which means that the variance of the residuals must be constant for all variables, looking at the value *Chi Square Count* < *Chi Square Table*.

Based on Table 5, the values obtained *Chi Square Count* < *Chi Square Table* is 13.66 < 79.08, so it can be stated that the heteroscedasticity test in this regression model shows that there are no symptoms of heteroscedasticity.

4.2.4 Autocorrelation test

“The autocorrelation test is carried out to determine whether or not there are deviations from the classic assumption of autocorrelation, namely the correlation that occurs between the residuals in one observation and other observations in the regression model” [23]. The autocorrelation test in this study uses the method *Runs Test*. A good regression model must have a residual value that does not have autocorrelation and can be stated that there is no autocorrelation if the value *asympt. Sig* > 0,05.

Table 5. Heteroscedasticity Test Results

| Model Summary | | ANOVA ^a | | |
|---------------|----------|--------------------|----------|----|
| Model | R Square | Model | df | |
| 1 | .207 | 1 | Residual | 60 |

a. Dependent Variable: Res_Square

b. Predictors: (Constant), Multiplication_X1_X2, X2_Square, X1_Square, X2_Capital Intensity, X1_Liquidity

Source: output Processed SPSS 21, 2023.

$$\begin{aligned} \text{Chi Square Count} &= n \times R \text{ Square} \\ &= 66 \times 0,207 \\ &= 13,66. \end{aligned}$$

$$\begin{aligned} \text{Chi Square Table} &= df = 0,05, 60 \\ &= 79,08. \end{aligned}$$

Table 6. Autocorrelation Test Results Runs Test

| Runs Test | |
|-------------------------|------------------------------------|
| Test Value ^a | Unstandardized Residual -.00910 |
| Cases < Test Value | 33 |
| Cases >= Test Value | 33 |
| Total Cases | 66 |
| Number of Runs | 27 |
| WITH | -1.737 |
| Asymp. Sig. (2-tailed) | .082 |
| a. Median | |

Source: output Processed SPSS 21, 2023.

Based on Table 6, autocorrelation test with method *Runs Test* get value *asympt. sig* amounting to 0.082 > 0.05, it can be stated that in the regression model of this research there is no autocorrelation.

4.3 Hypothesis Testing

4.3.1 Coefficient of Determination Test (R²)

Determination Coefficient Test (Adj R²) basically aims to measure how far the model's ability is to explain variations in the dependent (dependent) variable [24].

Based on Table 7, the value of the Determination Coefficient (Adj R²) of 0.217, which means that the contribution of the independent variable (*independent*) namely variables Liquidity (X1) and Capital Intensity (X2) to the dependent variable (*dependent*) namely Tax Aggressiveness in Basic Industry and Chemical Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange in 2020-2022 of 21.7%, while the remaining 78.3% is influenced by other variables that have not been studied or are not included in the regression in this research

4.4 Multiple Regression Analysis

This research uses multiple regression analysis which is used to determine the accuracy of the relationship between Liquidity and Capital Intensity on Tax Aggressiveness in Basic Industry and Chemical Sub-Sector Manufacturing

Companies Listed on the Indonesian Stock Exchange in 2020-2022.

Based on Table 8, it can be seen that the constant values and regression coefficients can be formed using multiple linear equations as follows:

$$Y = -1.272 + 0.350 \beta_1 + 0.477 \beta_2 + e$$

Information:

- AND = Tax Aggressiveness
- β_1 = Liquidity
- β_2 = Capital Intensity
- It is = Fall

From the regression equation above, it can be concluded as follows:

- a. Constant (a) is -1.272, meaning that without the Liquidity and Capital Intensity variables, Tax Aggressiveness would decrease by -1.272.
- b. The regression coefficient for the Liquidity variable is 0.350, meaning that if Liquidity is increased by one unit, while the other variables remain constant, it will cause Tax Aggressiveness to increase by 0.350.
- c. The regression coefficient for the Capital Intensity variable is 0.477, meaning that if Capital Intensity is increased by one unit while the other variables are constant, it will cause Tax Aggressiveness to increase by 0.477.

Table 7. Coefficient of Determination Test Results

| Model Summary | | | | |
|---------------|-------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .491 ^a | .241 | .217 | .82058 |

a. Predictors: (Constant), X2_Capital Intensity, X1_Liquidity

Source: output SPSS 21 data processed, 2023.

Table 8. Results of Multiple Regression Analysis

| Coefficients ^a | | | | | |
|---------------------------|-----------------------------|------------|---------------------------|--------|------|
| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | B | Std. Error | Beta | | |
| 1 (Constant) | -1.272 | .150 | | -8.455 | .000 |
| X1_Liquidity | .350 | .126 | .348 | 2.774 | .007 |
| X2_Capital Intensity | .477 | .108 | .553 | 4.416 | .000 |

a. Dependent Variable: Y_Tax Aggressiveness

Source: output SPSS 21 data processed, 2023.

4.4.1 Simultaneous (F Test)

The calculated F test in this study was used to test the simultaneous influence of variables Liquidity and Capital Intensity on Tax Aggressiveness in Basic Industry and Chemical Sub-Sector Manufacturing Companies Listed on the Indonesian Stock Exchange in 2020-2022. A variable is considered influential if F count > F table, and is declared significant if the value is sig. < 0.05. The results of the calculated F test in this research can be seen in the Table 9.

Based on Table 9. The calculated F value is 10.021, to determine the table F value with a significance level of 5%, as well as *degree of freedom* (degrees of freedom), $df = (n-k)$ or $(66-3)$ and $(k-1)$ or $(3-1)$, $df = (66-3 = 63)$ and $(3-1 = 2)$, then it can be obtained The result for F table is 3.14. Calculated F value > F table ($10.021 > 3.14$) and sig value. $0.000 < 0.05$, can be stated Liquidity and Capital Intensity simultaneous effect on Tax Aggressiveness in Basic Industry and Chemical Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange in 2020-2022.

4.4.2 Partial test (t Test)

The t test is used to test the independent variable against the dependent variable. In this research,

the t test is used to determine the effect of variables Liquidity and Capital Intensity Partially on Tax Aggressiveness in Basic Industry and Chemical Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange in 2020-2022. The results of the t test calculations in this research can be seen in the Table 10.

Based on Table 10, the t table value is obtained with the provisions $\alpha = 0.05$ and $dk = (n-k)$ or $(66-3) = 63$ so that the t table value = 1.99834.

Based on the analysis results, it is known that the liquidity variable with a calculated t value > t table ($2,774 > 1.99834$) and a significance value of $0.007 < 0.05$, it can be concluded that the hypothesis is accepted. Namely, the Liquidity variable influences Tax Aggressiveness in Basic Industry and Chemical Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange 2020-2022.

The Capital Intensity variable obtains a calculated t value > t table ($4,416 > 1.99834$) and a significance value of $0.000 < 0.05$, it can be concluded that the hypothesis is accepted. Namely, Capital Intensity influences Tax Aggressiveness in Basic Industry and Chemical Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange 2020-2022.

Table 9. F Test Results

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|----|-------------|--------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | themselves. |
| 1 | Regression | 13.495 | 2 | 6.748 | 10.021 | .000 ^b |
| | Residual | 42.422 | 63 | .673 | | |
| | Total | 55.917 | 65 | | | |

a. *Dependent Variable:* Y_Tax Aggressiveness

b. *Predictors:* (Constant), X2_Capital Intensity, Ln_X1_Liquidity

Source: output SPSS 21 data processed, 2023

Table 10. t test results

| Coefficients ^a | | | | | | |
|---------------------------|----------------------|-----------------------------|------------|---------------------------|--------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Say. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -1.272 | .150 | | -8.455 | .000 |
| | X1_Liquidity | .350 | .126 | .348 | 2.774 | .007 |
| | X2_Capital Intensity | .477 | .108 | .553 | 4.416 | .000 |

a. *Dependent Variable:* Y_Tax Aggressiveness

Source: output SPSS 21 data processed, 2023.

4.4.3 The effect of liquidity and capital intensity on tax aggressiveness

Based on the results of this research, it is stated that Liquidity and Capital Intensity simultaneous effect on Tax Aggressiveness in Basic Industry and Chemical Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange in 2020-2022. Liquidity is the company's ability to pay its short-term debt before it matures and Capital Intensity is a company's investment in the form of fixed assets which is reduced by depreciation costs so that taxable profits are reduced and reduces the tax costs that must be paid, while tax aggressiveness is an action taken by a company to reduce its tax burden.

Tax aggressiveness occurs because companies view taxes as an additional cost burden that can reduce company profits. Therefore, the Basic Industry and Chemical Sub-Sector Manufacturing Companies that are the sample in this study are predicted to take action to reduce the company's tax burden. Although not all tax planning actions violate the law, the more loopholes used, the more aggressive the company is considered to be.

Considerations for paying taxes efficiently encourage companies to develop tax planning through tax avoidance. As is the case with ESIP companies, the greater the liquidity, the lower the company's actions to carry out tax aggressiveness, but the greater the level of capital intensity, the greater the indication for the company to take tax aggressive actions. So in this case liquidity and capital intensity have a simultaneous influence on tax aggressiveness in Basic Industry and Chemical Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange 2020-2022.

The results of this study are in line with the results of research conducted by [7,8,9] which stated that Liquidity and Capital Intensity has a simultaneous effect on Tax Aggressiveness because the lower the company's ability to pay short-term debt, the greater the action to carry out tax aggressiveness and the higher the company's investment in the form of fixed assets, the greater the action to carry out tax aggressiveness because high fixed assets increase the tax costs incurred. large and reduces the company's profit or profits.

The results of this research are also in line with agency theory, where to realize large company profits, management must take tax aggressive action through regulating liquidity and capital intensity. The higher the capital intensity, the greater the management's interest in maximizing depreciation expenses, but for the government the depreciation burden will be detrimental because it will reduce the amount of corporate tax [25].

4.4.4 Liquidity influences tax aggressiveness

Based on the results of this research, it shows that liquidity has an effect on Tax Aggressiveness in Basic Industry and Chemical Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange 2020-2022.

Liquidity is a company's ability to pay its short-term debt before it matures. When a company has high liquidity, it can be described that the company's cash flow is running well. With good cash turnover, the company will pay all obligations including paying taxes in accordance with applicable legal regulations.

This shows that a liquid company will not take tax aggressive actions because a liquid company is a company that has twice the liquidity value of its debt or every one rupiah of debt is guaranteed by its current assets, but on the other hand, a company that is unable to pay its short-term debt is a company They will become more aggressive in carrying out tax avoidance. For example, PT ADES where the liquidity value is increasing and the company is able to pay its short-term debt so that it does not need to take aggressive tax measures. So this shows that liquidity has an effect on tax aggressiveness in manufacturing companies in the basic industry and chemical sub-sectors listed on the Indonesian stock exchange in 2020-2022.

On the other hand, it proves that highly liquid companies tend to avoid or delay paying taxes. This is done by manipulating the timing of tax payments or by shifting profits to countries or regions with lower taxes. In addition, highly liquid companies have easy access to funding sources from professional tax advisors and legal advisors who can help optimize their tax strategies. Therefore, liquidity will be a key factor in determining how aggressively a company will work to minimize tax liabilities

The results of this research are in line with the results of research conducted by [11,26,7,8] which stated that liquidity influences tax aggressiveness because whether the company's liquidity value is large or small influences the company's actions to carry out tax aggressiveness or not. The results of this research are also in line with agency theory, where to realize large company profits, management must take tax aggressive action by regulating current assets and current debt in order to maximize liquidity value.

4.4.5 Capital intensity influences tax aggressiveness

Based on the research results in this study, it shows that Capital Intensity has an effect on Tax Aggressiveness in Basic Industry and Chemical Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange 2020-2022.

Capital Intensity is a company's investment in the form of fixed assets which is reduced by depreciation costs so that taxable profit is reduced and reduces the tax costs that the company must pay. This is because a company that uses capital intensity to invest in assets, the company can use depreciation as a cost that can be deducted from income. These depreciation costs will later cause the Company's taxable profit to decrease and the amount of tax that must be paid will also decrease. For example, in the APLI and TALF companies, the level of capital intensity is getting lower but the aggressiveness is getting bigger. So this shows that capital intensity has an effect on tax aggressiveness in manufacturing companies in the basic industry and chemical sub-sectors listed on the Indonesian stock exchange in 2020-2022.

This is in line with the results of research conducted by [11,8,17] which stated that Capital Intensity influences Tax Aggressiveness. The results of this research are also in line with agency theory, where to realize large company profits, management must take tax aggressive action through capital intensity regulation.

5. CONCLUSION

Based on the results and discussion above, a conclusion can be drawn that at the same time liquidity and capital intensity simultaneously influence tax aggressiveness in manufacturing companies in the basic industry and chemical sub-sectors listed on the Indonesia Stock Exchange in 2020-2022. These results indicate

that the greater the liquidity, the lower the company's actions to carry out tax aggressiveness, but the greater the level of capital intensity, the greater the indication for the company to take tax aggressive actions.

Moreover, liquidity has a significant effect on tax aggressiveness in basic industry and chemical sub-sector manufacturing companies listed on the Indonesia Stock Exchange in 2020-2022. These results explain that if the liquidity value increases, the company will be able to pay its short-term debt so that it does not need to take tax aggressive actions. Likewise, capital intensity has a significant effect on tax aggressiveness in manufacturing companies in the basic industry and chemical sub-sectors listed on the Indonesia Stock Exchange in 2020-2022. These results indicate that a higher level of capital intensity will encourage greater aggressiveness. Companies with high capital tend to have large assets with a long economic life, so companies tend to implement more aggressive tax strategies by depreciating their assets more. This can reduce tax liabilities and increase net income.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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