The Influence of Liquidity, Profitability and Capital Intensity Toward Tax Avoidance in Mining Companies Listed on the Indonesia Stock Exchange

Louis Yosen Primsa Tarigan¹*, Deva Aulia Ningrum Ubaidillah²
Universitas Pelita Harapan
Corresponding Author: Louis Yosen Primsa Tarigan primsa.tarigan@uph.edu

ARTICLE INFO

Keywords: Tax Avoidance, Liquidity, Profitability, Capital Intensity

Received : 20, August
Revised : 21, October
Accepted: 25, November

©2023 Tarigan, Ubaidillah: This is an open-access article distributed under the terms of the Creative Commons Atribusi 4.0 Internasional.

ABSTRACT

This research has the objective to analyze the influence of liquidity, profitability and capital intensity on tax avoidance practices. The research is conducted on mining companies listed on the Indonesia Stock Exchange (IDX) for the period 2018 to 2021. Using the purposive sampling method, 19 companies were selected. Statistical tests conducted are descriptive test, classical assumption, multiple linear regression, and hypothesis test. All tests were performed by using SPSS version 26. This research shows that liquidity and capital intensity partially have an insignificant influence toward tax avoidance. Profitability partially has a significant influence toward tax avoidance. Furthermore, liquidity, profitability and capital intensity simultaneously have a significant influence toward tax avoidance.

DOI: https://doi.org/10.55927/ajabm.v2i4.6931
https://journal.formosapublisher.org/index.php/ajabm
INTRODUCTION

Tax avoidance is an effort by taxpayers to utilize the gray area contained in tax laws in order to reduce the tax payable amount. Tax avoidance has a broad spectrum. This includes tax planning, tax management, tax protection, tax aggressiveness, and tax avoidance itself (Hanlon et al., 2010). Reducing the tax burden, decreasing cash flow, and increasing company value are activities companies carry out tax avoidance (Chen et al., 2018). Lanis & Richardson (2013) said that by using Effective Tax Rate (ETR), it is possible to detect tax avoidance practices in a company. Dividing the tax expense with the income before tax is how ETR is calculated.

Tax case in mining sector happened with Adaro. Global Witness (2019) divulged in period 2009 to 2017, Adaro, through one of its Singapore subsidiaries, Coaltrade Services International, had managed a scheme so that they paid 125 million dollars lower in taxes than they should have been paid in Indonesia. By transferring large sums of money through tax havens, Adaro has reduced its tax bill in Indonesia, reducing income for the Indonesian government by nearly 14 million US dollars annually which could be used for the public interest (Global Witness, 2019). The high potential for state revenue from mining products and the track record of tax avoidance cases in the mining sector are the main reasons why this sector is interesting to be studied more deeply using the tax avoidance point of view.

Tax avoidance tends to be carried out by companies when the company has higher profits, so profitability is considered as one factor of tax avoidance practices in a corporation. Profitability indicates the ability of the corporation to gain profit in a particular period. The company’s tax burden is low if profitability is low (Andhari & Sukartha, 2017).

Profitability is calculated using the profitability ratio, which measures the efficiency of using the assets of a corporation to generate profits in a period. According to Corporate Finance Institute (2020), one of the financial indicators used to assess a firm’s ability to generate revenue is the profitability ratio. This ratio shows how the business’s performance in undertaking its resources generates added value for shareholders and increases business income.

In carrying out tax avoidance, management uses the company's operating activities as a motive. One example is the implementation of company capital management. The size of the capital invested in the form of fixed assets and inventories at the company is directly related to the company's capital intensity (Suciarti et al., 2020). The proportion of asset depreciation arising from the fixed assets of a corporation can reduce the tax expense liable in a period (Darsani & Sukartha, 2021).

Liquidity indicates a firm’s capacity to sort out its short-term obligations. Tax is one of the short-term obligations that businesses must pay. Cash flow that runs well in high liquidity companies is an indicator that shows that a company can complete its interim obligations (Utama et al., 2021). Conversely, companies with cash flows that tend to be stagnant or unfavorable and have low corporate liquidity will find it difficult to settle their short-term obligations.
Seeing the alluring correlation between the Indonesia mining sector condition and its contribution to state revenue, as well as the differences of previous research that have been provided and explained, the writer decided to conduct research with title "The Influence of Liquidity, Profitability and Capital Intensity Toward Tax Avoidance in Mining Companies Listed on the Indonesia Stock Exchange".

LITERATURE REVIEW

Agency Theory

Jensen & Meckling (1976) promoted the agency theory as a hierarchical model between the principal and the agent, where there is a delegation of authority by the principal to the agent to make decisions and carry out tasks on behalf of the principal.

According to Reinganum & Wilde (1985), agency theory in the case of tax avoidance has been applied when a conflict arises between the firms (taxpayer) as the agent and tax authority as the principal. The tax authorities expect significant tax revenues to meet the target of state revenues for financing government administration. On the other hand, corporations as taxpayers consider that taxes are a burden on income earned in a single period whose impact may reduce net profit. Taxpayer actions taken because of differences in interests with the government have not maximized tax revenue that can be realized. Conflict arises between the corporation as taxpayers and the tax authorities as tax collectors because of both viewpoints. Based on agency theory, this difference in interests results in non-compliance by the taxpayer as an agent to the tax authority as the principal.

Tax Avoidance

Dyreng et al., (2010) argued tax avoidance as a tool to exploit tax system for one's benefit to reduce the tax payable by lawful means. Huseynov & Klamm (2012) mentions some terms to express tax avoidance, such as tax management, tax planning, tax sheltering, tax aggressiveness, and tax evasion.

In this study, researchers use the Effective Tax Rate (ETR) to identify company strategies for executing tax avoidance. The effective tax rate can reflect the company's total tax burden in a certain year that is paid based on the statutory tax rate established by law at that time. The ETR has been considered one of the most effective ways to measure tax avoidance (Satyadini et al., 2019). The use of ETR is more comprehensive to capture overall corporate tax expenses. According to Lanis & Richardson (2013), recent empirical tax research has also discovered that ETRs represent the most popular proxy measure of tax avoidance utilized by academics. The higher percentage of ETR rates that are close to the corporate income tax rate of 25% for the year of 2018 and 2019 and 22% for the years 2020 and 2021 based on Indonesia’s income tax provision, demonstrates that the companies pay a higher tax burden, which indicates a lesser level of tax avoidance activity.
Liquidity

Liquidity determines the company's capacity to pay all or a portion of the debt due at the time of collection. It shows the company's ability to convert assets into cash or to convert some money for interim obligations. Although it is associated with a company's typical operational cycle, the short term is typically thought of as lasting up to one year, the period used to encompass the buy, produce, sell, and collect cycle (Subramanyam & Wild, 2009).

Liquidity shows the ability of a company to pay the maturing obligations using current assets owned by company. Thus, it can be said that the usefulness of this ratio is to ascertain the company's competence to finance and execute their obligations when billed. Various sorts of liquidity ratios can be employed depending on the objectives to be met. According to Corporate Finance Institution (2020), current ratio is one of the measurements used by company to determine its liquidity.

H1: Liquidity partially has a significant influence toward tax avoidance in mining companies listed on the Indonesia Stock Exchange.

Profitability

According to Munawir (2002), profitability is the company's competency in raising its earnings within a time. Firms with higher profitability can place themselves in tax planning that lessens the tax expense. Profitable firms might be more independent in taking benefits of loopholes in tax laws to manage tax burden (Darsani & Sukartha, 2021).

Profitability ratios are able to periodically measure and evaluate the ability of a business to generate money (profit). Good or inadequate use of resources in a business to generate income and add value to shareholders can be analyzed using profitability ratios (Corporate Finance Institution, 2020). This ratio serves as a gauge of the effectiveness of an enterprise's management.

H2: Profitability partially has a significant influence toward tax avoidance in mining companies listed on the Indonesia Stock Exchange.

Capital Intensity

Capital intensity is a firm's venture activity in fixed assets (Andhari & Sukartha, 2017). The addition of fixed assets in a company will potentially increase the company's productivity, leading the company to increase profits (Mustika, 2017). Depreciation expense correlated with owning fixed assets can be utilized to reduce tax payments. Significant investment in depreciable assets can lead to greater tax savings (Stickney & McGee, 1982).

Capital intensity ratio is essential for creditors and business owners. Still, it will be even more significant for management because it can demonstrate how well a company uses its assets to initiate revenue. The depreciation cost of an asset can reduce income in calculating the amount of tax (Hanum & Zulaikha, 2013) while the cost of depreciation rises along with the value of fixed assets.

H3: Capital intensity partially has a significant influence toward tax avoidance in mining companies listed on the Indonesia Stock Exchange.
Simultaneous analysis of the combined data will optimize the results of the research. To concurrently understand how each independent variable affects the dependent variable, the fourth hypothesis of this research is formulated as below:

H4: Liquidity, profitability and capital intensity simultaneously have a significant influence toward tax avoidance in mining companies listed on the Indonesia Stock Exchange

The independent and dependent variables in this research are tested in a research model as below:

![Conceptual Framework](image)

**Figure 1. Conceptual Framework**

**METHODOLOGY**

**Research Design**

This research is done by the quantitative descriptive method, which approach involves gathering, evaluating, and calculating data from the IDX. Numbers on a numerical scale data will be taken from the company’s annual financial reports of the companies selected to be sampled in the study.

**Population and Sample**

According to Weiss (2012), the grouping of all individuals or items are considered in a statistical study is called population. This research uses the mining companies listed on the IDX from 2018 until 2021 as the population. The number of companies listed is 48 in total. The researcher chooses the mining sector as its field focus because the company in this sector has long been central and mainstay of Indonesia’s economic expansion and acts as one of Indonesia's most significant tax revenue contributors.

A sample is a part of a population that is used as an object of direct observation and as a basis for conclusion-making. If a population sets the whole thing under study, the sample is the part taken from the population. According to Weiss (2012), the part of the population from which information is obtained is called sample.

According to Pandey & Pandey (2015), judgment sampling, quota sampling, incidental or accidental sampling, and purposive sampling are the four types of non-probability sampling. This study applies purposive sampling method to filter its sampling. This technique is designed to represent the total
population, producing a well-matched grouping. It selects samples only if they meet specific criteria to meet the research goal.

The sample criteria in this research are as follows:
1. Mining companies registered on the IDX from 2018 to 2021.
2. Mining companies that consistently issued and published the complete financial statement consistently from 2018 to 2021.
3. Profitable mining company for the years 2018 to 2021. Profitable companies are the companies that are expected to pay taxes to the government.

Data collection and Analysis Method

This study utilized secondary data. Researchers use data that has been collected and processed by other parties (Nuryadi et al., 2017). Financial statements of the mining companies listed on the IDX for 2018 to 2021 are the data source in this study. Furthermore, this research uses the literature study methodology to examine a range of journals, literature, articles, and other written materials pertinent to the study’s topic and goals.

Operational Variable Definition and Variable Measurement

Tax avoidance is chosen as the dependent variable in this research. This study uses ETR to measure tax avoidance strategy by company with the following formula:

\[
\text{Effective Tax Rate (ETR)} = \frac{\text{Tax expense}}{\text{Pretax income}}
\]

Current ratio is used in this study to measure liquidity. It considers all current assets, such as cash, inventory, receivables, prepaid expenses, and marketable cash securities, to measure the company's liquidity with the following formula:

\[
\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}
\]

Return on Assets (ROA) is the measurement of profitability used in this research. A higher ROA value means growth in company profits, which manifest the appropriateness and effectiveness of the company’s asset management. This study will calculate profitability using the following formula:

\[
\text{Return on Assets (ROA)} = \frac{\text{Net income}}{\text{Total assets}}
\]

Capital intensity ratio is used to measure the capital intensity in this research. The company manages to have more fixed assets in order to raise profit to rise (Mustika, 2017). The formula of the capital intensity ratio is as follows:

\[
\text{Capital Intensity Ratio} = \frac{\text{Total fixed assets}}{\text{Total assets}}
\]
RESULT
Sample Selection

The IDX, from 2018 to 2021, lists 48 mining companies. Through the purposive sampling method, this research eliminates companies so that 26 companies remain as selected samples.

Based on criteria in Chapter 3, we have selected samples as below:

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mining companies listed on the IDX from 2018 to 2021</td>
<td>48</td>
</tr>
<tr>
<td>2.</td>
<td>Mining companies that do not consistently publish annual financial statements from 2018 to 2021</td>
<td>(3)</td>
</tr>
<tr>
<td>3.</td>
<td>Mining companies that ever-suffered losses from 2018 to 2021</td>
<td>(26)</td>
</tr>
</tbody>
</table>

Number of Company Eligible as Samples: 19
Research Years: 4
Total Research Samples: 76

Descriptive Statistics

A descriptive statistical analysis will be performed to provide an overview of all data used in the research. It focuses on the identification of lowest, highest, average and standard deviation values. The descriptive statistical has the results are as follows:

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR</td>
<td>76</td>
<td>.3802</td>
<td>10.0743</td>
<td>2.274246</td>
<td>1.8409581</td>
</tr>
<tr>
<td>ROA</td>
<td>76</td>
<td>.0141</td>
<td>.5202</td>
<td>.125779</td>
<td>.1195040</td>
</tr>
<tr>
<td>CAPINT</td>
<td>76</td>
<td>.0311</td>
<td>.6602</td>
<td>.256895</td>
<td>.1628129</td>
</tr>
<tr>
<td>ETR</td>
<td>76</td>
<td>.0311</td>
<td>.7178</td>
<td>.265967</td>
<td>.1128532</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The current ratio (X1) with a total sample of 76 has the lowest value of 0.3802, representing PT Astrindo Nusantara Infrastruktur Tbk (BIPI) in 2020, and the highest value of 10.0743, representing PT Harum Energy Tbk (HRUM)
in 2020. Meanwhile, the mean value is 2.274246, and the standard deviation is 1.8409581. As the standard deviation value is less than the mean, the data is less varied and clustered around the mean.

Return on asset ($X_2$) with a total sample of 76 has a minimum value of 0.0141, representing PT Radiant Utama Interinsco Tbk (RUIS) in 2021, and a maximum value of 0.5202 representing PT Bayan Resources Tbk (BYAN) in 2021. Meanwhile, the mean value is 0.125779, and the standard deviation is 0.1195040. As the standard deviation value is smaller than the mean value, the data is less varied and clustered around the mean.

Capital intensity ($X_3$) with a total sample of 76 has a minimum value of 0.0311, representing PT TBS Energi Utama Tbk (TOBA) in 2021 and a maximum value of 0.6602 representing PT Vale Indonesia Tbk (INCO) in 2019. Meanwhile, the mean value is 0.256895, and the standard deviation is 0.1628129. As the standard deviation value is smaller than the mean value, the data is less varied and clustered around the mean.

Effective tax rate ($Y$) with a total sample of 76 has the lowest value of 0.0311, representing PT Baramulti Suksessarana Tbk (BSSR) in 2020, and a maximum value of 0.7178 representing PT Aneka Tambang Tbk (ANTM) in 2019. Meanwhile, the mean value is 0.265967, and the standard deviation is 0.1128532. As the standard deviation value is less than the mean value, the data is less varied and clustered around the mean.

**Classical Assumption Test**

The first classical assumption to test is normality. It is tested through Kolmogorov-Smirnov test and histogram test.

**Table 3. Normality Test - Kolmogorov-Smirnov Test**

<table>
<thead>
<tr>
<th>One-Sample Kolmogorov-Smirnov Test</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>76</td>
</tr>
<tr>
<td>Normal Parameters$^{a,b}$</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>.000000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.10197141</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td></td>
</tr>
<tr>
<td>Absolute</td>
<td>.098</td>
</tr>
<tr>
<td>Positive</td>
<td>.098</td>
</tr>
<tr>
<td>Negative</td>
<td>-.076</td>
</tr>
<tr>
<td>Test Statistic</td>
<td>.098</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.066$^c$</td>
</tr>
</tbody>
</table>
a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

According to Table 3 above, the Kolmogorov-Smirnov test outcome sums up a significant level (Asymp. Sig. 2-tailed) of 0.066, which is greater than 0.05, indicating that the data are normally distributed, and the regression model passed the normality test. The graphical and statistical normality test results, namely histogram, Kolmogorov-Smirnov test, and normal probability plot demonstrate that the regression model's normality assumptions are met.

![Histogram](image)

Figure 2. Normality Test - Histogram

Further, based on the histogram at Figure 2, the data distribution forms a bell-shaped curve in the middle. Both left and right tails are symmetrically distributed, indicating that the data are normally distributed, and the regression model passes the normality test.

The second classical assumption to test is multicollinearity. It is tested through tolerance value and Variance Inflation Factor (VIF) as below:

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized Coefficients</td>
</tr>
<tr>
<td></td>
<td>B</td>
</tr>
</tbody>
</table>

Table 4. Multicollinearity Test
Based on Table 4 above, liquidity has a tolerance value of 0.993 (0.993 > 0.1) and the VIF value of 1.007 (1.007 < 10). This indicates no multicollinearity between liquidity with other independent variables.

Profitability has a tolerance value of 0.885 (0.885 > 0.1) and the VIF value of 1.130 (1.130 < 10). This indicates no multicollinearity between profitability with other independent variables.

The tolerance value for the capital intensity is 0.890 (0.890 > 0.1), meanwhile the VIF value of 1.123 (1.123 < 10). This indicates no multicollinearity between capital intensity and other independent variables.

The third classical assumption to test is heteroscedasticity. It is tested through white test as below:

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.011</td>
<td>.013</td>
<td>.814</td>
</tr>
<tr>
<td></td>
<td>CR</td>
<td>.001</td>
<td>.008</td>
<td>.076</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>-.025</td>
<td>.100</td>
<td>-.152</td>
</tr>
<tr>
<td></td>
<td>CAPINT</td>
<td>.001</td>
<td>.070</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>X1_KUADRAT</td>
<td>.000</td>
<td>.001</td>
<td>.193</td>
</tr>
<tr>
<td></td>
<td>X2_KUADRAT</td>
<td>.045</td>
<td>.149</td>
<td>.131</td>
</tr>
<tr>
<td></td>
<td>X3_KUADRAT</td>
<td>.118</td>
<td>.101</td>
<td>.703</td>
</tr>
<tr>
<td></td>
<td>X1X2</td>
<td>-.001</td>
<td>.018</td>
<td>-.016</td>
</tr>
</tbody>
</table>
The White test results in Table 5 above show that every variable in this research has a significance value of more than 0.05, demonstrating no heteroscedasticity issue.

The last classical assumption to test is autocorrelation. It is tested through Durbin-Watson test as below.

According to the Durbin-Watson test in Table 6, with a significant level of 5%, the number of independent variables (k) is 3, and the number of samples (n) is 76, the lower limit value (dL) obtained is 1.5467, and the upper limit value (dU) obtained is 1.7104. Table 4.6 above shows that the Durbin-Watson value (d) is 1.697. As a result, shows that dL ≤ d ≤ dU (1.5467 ≤ 1.697 ≤ 1.7104), it demonstrates that the Durbin-Watson result yields no decision. Therefore, to ensure no autocorrelation in the regression model, run tests are performed with the following result.

![Table 6. Autocorrelation Test – Durbin-Watson](image)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.428&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.184</td>
<td>.150</td>
<td>.1040741</td>
<td>1.697</td>
</tr>
</tbody>
</table>

<sup>a</sup> Predictors: (Constant), CR, CAPINT, ROA

b. Dependent Variable: ETR

![Table 7. Autocorrelation Test - Runs Test](image)

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.00604</td>
</tr>
<tr>
<td>Cases &lt; Test Value</td>
<td>38</td>
</tr>
<tr>
<td>Cases &gt;= Test Value</td>
<td>38</td>
</tr>
<tr>
<td>Total Cases</td>
<td>76</td>
</tr>
</tbody>
</table>

<sup>a</sup>
According to Table 7 above, the Runs Test results show a significance value of 0.875. This value is more significant than 0.05, indicating no correlation issue, and the regression model passes the autocorrelation test. The results of the two autocorrelation tests, Durbin-Watson and the Runs test, are similar, demonstrating that the autocorrelation assumptions of the regression model are fulfilled.

The following table summarizes the results of the classical assumption test conducted in this research:

Table 8. Summary of Classical Assumption Test

<table>
<thead>
<tr>
<th>Classical Assumption Test</th>
<th>Type of Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normality Test</td>
<td>Kolmogorov-Smirnov Test and Histogram</td>
<td>Normally distributed.</td>
</tr>
<tr>
<td>Multicollinearity Test</td>
<td>Tolerance and Variance Inflation Factor (VIF)</td>
<td>No multicollinearity problem.</td>
</tr>
<tr>
<td>Heteroscedasticity Test</td>
<td>White Test</td>
<td>No heteroscedasticity problem.</td>
</tr>
<tr>
<td>Autocorrelation Test</td>
<td>Durbin-Watson Test and Runs Test</td>
<td>No autocorrelation problem.</td>
</tr>
</tbody>
</table>

**Multiple Linear Regression Analysis**

This analysis represents a mathematical equation to estimate between independent variables of liquidity, profitability and capital intensity toward tax avoidance. The following is the outcome of multiple linear regression analysis:

Table 9. Multiple Linear Regression Analysis

<table>
<thead>
<tr>
<th>Coefficientsa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Based on Table 9, the multiple linear regression is formulated as below:

\[ ETR = 0.291 - 0.273X_1 + 0.125X_2 - 0.101X_3 + \epsilon \]

**Partial Hypothesis Test (T-Test)**

This test is used to determine whether the independent variable has significant partial influence toward the dependent variable. The hypothesis is accepted and can be concluded that the independent variable has a significant partial influence on the dependent variable if \( t_{\text{count}} \) is greater than \( t_{\text{table}} \) or \(- t_{\text{count}} \) is smaller than \(- t_{\text{table}} \) (\( t_{\text{count}} > t_{\text{table}} \) or \(- t_{\text{count}} < - t_{\text{table}} \)) and the significance value must be less than 0.05 (Sig. < 0.05).

<table>
<thead>
<tr>
<th>Coefficients&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>CR</td>
</tr>
<tr>
<td>ROA</td>
</tr>
<tr>
<td>CAPINT</td>
</tr>
</tbody>
</table>

The degree of freedom is determined by subtracting the number of the sample with the number of independent variables \((n-k)\) formula, which is 73 \((76-3)\). Referring to the t-distribution table with a significance level of 5%, a
confidence interval of 95%, and a degree of freedom (df) of 73, the positive $t_{table}$ value is 1.9930, or the negative $t_{table}$ value is -1.9930.

The liquidity variable ($X_1$) shows that $t_{count}$ of -1.508 with significance of 0.136. The result of $t_{count}$ is higher than the $t_{table}$ (-1.508 > -1.9930), and the significance value is higher than 0.05. This demonstrates that in the case of tax avoidance, liquidity has no significant partial influence toward mining companies listed on the IDX. Thus, the third hypothesis ($H_3$) in this research is rejected.

The profitability variable ($X_2$) shows that $t_{count}$ of -2.553 with a significance of 0.013. The result of $t_{count}$ is smaller than the $t_{table}$ (-2.553 < -1.9930), and the significance value is lower than 0.05. As a result, these findings indicate that profitability partially has a significant influence toward tax avoidance in mining companies listed on the IDX. Thus, the first hypothesis ($H_2$) in this research is accepted.

The capital intensity variable ($X_3$) shows a $t_{count}$ of 1.596 with a significance of 0.115. The result of $t_{count}$ is smaller than the $t_{table}$ (1.596 < 1.9930), and the significance value is higher than 0.05. This demonstrates that in the case of tax avoidance, capital intensity has no significant partial influence toward mining companies listed on the IDX. Thus, the second hypothesis ($H_3$) in this research is rejected.

**Simultaneous Hypothesis Test (F-Test)**

To determine the simultaneous hypothesis testing, researcher can conduct either the comparison of $f_{count}$ and $f_{table}$, or observation upon the significance value of the regression model. The hypothesis is accepted and can be assumed that the independent variables simultaneously have a significant influence on the dependent variable if $f_{count}$ is greater than $f_{table}$ ($f_{count} > f_{table}$) and the significance value must be less than 0.05 (Sig. < 0.05).

<table>
<thead>
<tr>
<th>Table 11. Simultaneous Hypothesis Test (F-Test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANOVA$^a$</td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>a. Dependent Variable: ETR</td>
</tr>
<tr>
<td>b. Predictors: (Constant), CR, CAPINT, ROA</td>
</tr>
</tbody>
</table>
The degree of freedom is obtained from the number of independent variables, which is three independent variables. Meanwhile, the value of the denominator’s degree of freedom is determined by subtracting the number of the sample from the number of the independent variable (n-k) formula, resulting in 73 (76-3). The value of \( f_{\text{table}} \) is 2.730. According to the result of simultaneous hypothesis testing in Table 4.11 above, the significance value of the regression model is 0.002 (0.002 < 0.05), and the \( f_{\text{count}} \) value is 5.396 (5.396 > 2.730). It demonstrates that \( f_{\text{count}} \) is greater than \( f_{\text{table}} \) the significance level is less than 0.05. This indicates that liquidity, profitability and capital intensity simultaneously have a significant influence toward tax avoidance in the mining sector listed on the IDX. Thus, the fourth hypothesis (H4) in this research is accepted.

**Coefficient of Determination Test (R²-Test)**

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CR, CAPINT, ROA  
b. Dependent Variable: ETR

The coefficient of determination test (R2-test) examines the proportion of influence the independent variables have on the dependent variable simultaneously. The coefficient of determination has a value between 0 and 1. The higher the r square value, the better the independent variable can influence the dependent variable.

According to the coefficient of determinations test results in Table 12, the adjusted R square value is 0.150. It indicates that the independent variable, profitability, capital intensity and liquidity, have a 15% act on tax avoidance as the dependent variable. Meanwhile, the remaining 85% was impacted by another variable not considered in this research.

**DISCUSSION**  
**The Influence of Liquidity Toward Tax Avoidance**  
The first hypothesis (H1) states that liquidity partially has a significant influence toward tax avoidance in the mining companies listed on the IDX.

Liquidity refers to the firm’s competence to wind up its short-term obligations. Taxes are one of the short-term obligations that companies must pay. Liquid companies are able to meet interim commitments because they have good cash flow (Utama et al., 2021). Conversely, less liquid companies may find it challenging to fulfill interim obligations as companies choose to save to maintain
their cash flow. This research uses liquidity to assess the company’s capacity for financing its short-term obligations. The proxy used to estimate liquidity is the current ratio, which shows the proportion of current assets used to fulfill current obligations. Its strong liquidity ratio demonstrates a firm’s competencies in meeting their debt. As businesses try to maintain their cash flows, companies with low liquidity levels may be unable to satisfy their short-term obligations or pay taxes. On the other hand, companies with good liquidity show healthy cash flow and can cover obligations, especially in paying taxes.

This research result is in line with the previous research conducted by Novita & Herliansyah (2019) and Ariani & Hasymi (2018), which shows liquidity has no significant impact toward tax avoidance. However, the research result is contrary to the previous research conducted by Rahayu et al., (2022), Novianto & Yusuf (2021), and Budianti & Curry (2018) which shows that liquidity has a significant impact toward tax avoidance.

The Influence of Profitability Toward Tax Avoidance

The second hypothesis (H2) declares that profitability partially has a significant influence toward tax avoidance in mining companies listed on the IDX.

Jensen & Meckling (1976) claimed that the agency theory is the contractual relationship between the principal (authorizer) and the agent as the authorized party. Seen through the point of view of tax avoidance, agency theory can elucidate the conflict that arises amid the government as tax authorities and companies as taxpayers. The results of this study support the agency theory that there is a difference between the interests of agents and principals. The authority (principal) has the legal right to gather taxes from the taxpayers, but taxpayers (agents) have their own interest in maximizing profits. This difference in interests results in non-compliance by the taxpayer to the tax authority.

The more profitable a company is, the more profit it generates, and therefore the higher the taxes imposed on profits. Under these circumstances and according to the agency theory, companies tend to make tax avoidance efforts to maximize profits because they don't want to spend money to pay high taxes.

This research result is in line with the previous research conducted by Darsani & Sukartha (2021), Delgado et al., (2018), Sonia & Suparmun (2019), Novianto & Yusuf (2021), Budianti & Curry (2018), and Ariani & Hasymi (2018) that shows profitability has significant impact toward tax avoidance. However, the research result contradicts the previous research conducted by Aryatama & Raharja (2021) and Aksoy Hazir (2019), which shows that profitability has no significant impact toward tax avoidance.

The Influence of Capital Intensity Toward Tax Avoidance

The third hypothesis (H3) states that capital intensity partially has no significant influence toward tax avoidance in mining companies listed on the IDX.

In accordance with Article 6 paragraph 1 (2) Law No. 36 the Year 2008 on Income Tax, depreciation expense is classified as a deductible expense. The amount of capital invested by a business in the form of fixed assets is known as
capital intensity. The depreciation expense of owning fixed assets can reduce a
company's tax liability. The more significant the investment in depreciable assets,
the greater the tax savings, and the lower the ETR (Stickney & McGee, 1982). Conflicts of interest between governments (principals) and businesses (agents)
prove that tax authorities aim to collect taxes from firms. On the other hand, the
company (agent) is encouraged to take advantage of fixed asset depreciation to
reduce tax liability.

The study proves that companies that purchase large amounts of fixed
assets do not intend to use depreciation as a tax deduction. Instead, the company
has other goals, such as supporting the company's cost-effectiveness.

This research result is in line with the previous research conducted by
Delgado et al., (2018), Sonia & Suparmun (2019), Budianti & Curry (2018), and
Ariani & Hasymi (2018) that shows capital intensity has no significant impact
toward tax avoidance. However, the research result is contrary with the previous
research conducted by Darsani & Sukartha (2021), Aryatama & Raharja (2021),
and Aksoy Hazir (2019) that shows that capital intensity has significant impact
toward tax avoidance.

The Influence of Liquidity, Profitability and Capital Intensity Toward Tax
Avoidance

The fourth hypothesis (H4) states that liquidity, profitability and capital
intensity simultaneously have a significant influence toward tax avoidance in the
mining companies listed on the IDX.

CONCLUSION AND RECOMMENDATION

Based on the results of the data analysis and discussion in the preceding
chapters, the research closure can be summarized as follows:

1. Liquidity partially has no significant influence toward tax avoidance in
   mining companies listed on the Indonesia Stock Exchange. Thus, it
   concludes that H1 is rejected.
2. Profitability partially has a significant influence toward tax avoidance in
   mining companies listed on the Indonesia Stock Exchange. Thus, it
   concludes that H2 is accepted.
3. Capital intensity partially has no significant influence toward tax
   avoidance in mining companies listed on the Indonesia Stock Exchange.
   Thus, it concludes that H3 is rejected.
4. Liquidity, profitability and capital intensity simultaneously have
   significant influence toward tax avoidance in mining companies listed on
   the Indonesia Stock Exchange. Thus, it concludes that H4 is accepted.
5. The coefficient of determination (adjusted R²) is 0.150. It indicates that
   the independent variables have a 15% effect on tax avoidance as the
   dependent variable. Meanwhile, the remaining 85% were influenced by
   other variables not discussed in this research.

Based on the conclusions mentioned above and the limitations of the
study, the authors make the following recommendations:
1. R-squared (adjusted $R^2$) results show that other variables still explain 85% of the factors affecting tax avoidance. It is recommended that future researchers should consider other variables such as leverage, firm size, good corporate governance, and others that are meant to provide a more comprehensive analysis of the factors that influence tax avoidance.

2. This research is also expected to raise the knowledge and awareness among investors about the factors that influence tax avoidance when deciding or considering a company to invest in by scrutinizing the background and financial statements of companies.

ADVANCED RESEARCH

Future researchers can utilize other sectors and extend the observation period by more than five years to obtain more accurate results on the influence of liquidity, profitability and capital intensity on tax avoidance. Expanding the observation period allows researchers to have more samples and produce more comprehensive research.

REFERENCES


