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# THE FINANCIAL PUZZLE OF TAX AVOIDANCE: INSIGHTS FROM PROFITABILITY, LEVERAGE, ASSET INTENSITY AND SALES GROWTH

## *O QUEBRA-CABEÇA FINANCEIRO DA EVASÃO FISCAL: PERCEPÇÕES SOBRE LUCRATIVIDADE, ALAVANCAGEM, INTENSIDADE DE ATIVOS E CRESCIMENTO DE VENDAS*

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**Abstract**
Tax revenue is a crucial component in financing national development, particularly in infrastructure, healthcare, and education sectors. However, the effectiveness of tax collection in Indonesia is hindered by the widespread practice of tax avoidance. Tax avoidance, although legal, reduces the state's tax revenue and poses a challenge to the government's fiscal policies.

***Resumo***
*A receita tributária é um componente crucial no financiamento do desenvolvimento nacional, particularmente nos setores de infraestrutura, saúde e educação. No entanto, a eficácia da arrecadação de impostos na Indonésia é prejudicada pela prática generalizada de elisão fiscal. A elisão fiscal, embora legal, reduz a receita tributária do estado e representa um*

This study examines the impact of profitability, leverage, fixed asset intensity, and sales growth on tax avoidance among mining companies listed on the Indonesia Stock Exchange (IDX) from 2021 to 2022. Using a quantitative approach with panel data regression analysis, this study aims to provide empirical evidence regarding corporate tax behavior in Indonesia. The findings indicate that profitability and leverage significantly influence tax avoidance, whereas fixed asset intensity and sales growth exhibit mixed effects. The results align with agency and legitimacy theories, suggesting that firms engage in tax avoidance to optimize financial performance while maintaining stakeholder legitimacy. These findings contribute to the literature on corporate tax strategies and offer practical insights for policymakers in designing tax regulations that minimize loopholes for aggressive tax avoidance. Strengthening tax governance and ensuring stricter enforcement mechanisms are recommended to enhance tax compliance among corporations.

**Keywords:** Tax Avoidance. Profitability. Leverage. Fixed Asset Intensity. Sales Growth. Mining Sector. Indonesia.

*desafio para as políticas fiscais do governo. Este estudo examina o impacto da lucratividade, alavancagem, intensidade de ativos fixos e crescimento das vendas na elisão fiscal entre empresas de mineração listadas na Bolsa de Valores da Indonésia (IDX) de 2021 a 2022. Utilizando uma abordagem quantitativa com análise de regressão de dados em painel, este estudo visa fornecer evidências empíricas sobre o comportamento tributário corporativo na Indonésia. Os resultados indicam que a lucratividade e a alavancagem influenciam significativamente a elisão fiscal, enquanto a intensidade de ativos fixos e o crescimento das vendas apresentam efeitos mistos. Os resultados estão alinhados com as teorias de agência e legitimidade, sugerindo que as empresas se envolvem em elisão fiscal para otimizar o desempenho financeiro, mantendo a legitimidade das partes interessadas. Essas descobertas contribuem para a literatura sobre estratégias tributárias corporativas e oferecem insights práticos para formuladores de políticas na elaboração de regulamentações tributárias que minimizem brechas para a elisão fiscal agressiva. Recomenda-se o fortalecimento da governança tributária e a garantia de mecanismos de fiscalização mais rigorosos para aprimorar a conformidade tributária entre as empresas.*

***Palavras-chave:*** *Evasão Fiscal. Rentabilidade. Alavancagem. Intensidade de Ativos Fixos. Crescimento de Vendas. Setor de Mineração. Indonésia.*

## 1 INTRODUCTION

Taxes play a crucial role in sustaining a nation’s economic and social development. As the primary source of state revenue, taxes provide essential funding for various government expenditures, including infrastructure development, public facilities, healthcare, education, and other productive initiatives at both central and regional levels. The effective management of tax revenue is fundamental to ensuring economic stability, fostering growth, and improving the overall well-being of society. Given its significance, understanding tax policies and their implications is essential for optimizing fiscal strategies and enhancing public welfare.

According to Law No. 28 of 2007 concerning General Provisions and Taxation Procedures, taxes are taxpayers' contributions to the State owed by individuals or entities

that are coercive based on the law, without receiving direct compensation and used for the needs of the State for the greatest possible prosperity of the people. So, people should understand the importance of taxes for the State and have the awareness to pay taxes.

According to Law No. 36 of 2008 article 2 paragraph (1) concerning Income Tax which is the subject of taxes collected and subject to tax, one of which is an Agency or Company both domestically and abroad. In Indonesia, there is a difference of interest between the government as a tax collector and the taxpayer as a tax collector, on the one hand the government tries to get the largest tax government from all taxpayers, while on the other hand, all taxpayers, especially companies, try to pay the smallest possible taxes to get the largest profit. The difference in interests between the government and company management as taxpayers causes many companies to feel reluctant to pay taxes, thus encouraging management to overcome it in various ways, one of which is by minimizing the tax burden.

Management conducts tax *avoidance* and tax *evasion*. *Tax avoidance* is an effort to minimize the tax burden legally without violating tax regulations called *tax avoidance*. While *tax evasion* is an illegal way to reduce tax debts, this is because tax evasion uses unlawful means to reduce or eliminate the tax burden that must be paid by the company Sinaga & Sukartha (2018).

Tax avoidance is a strategy in reducing the tax burden that takes advantage of legal provisions and weaknesses in tax regulations but is still in the legal path. Tax avoidance is allowed, but not desirable because it can cause a decrease in the amount of State revenue, especially for the tax sector, Subekti & Amin (2019).

The phenomenon that occurs in Indonesia regarding *tax avoidance* can be seen from the relatively low tax *ratio*. *The tax ratio* can be used to measure the performance of tax authorities, in 2019 *the Organisation of Economic Action and Development* (OECD) released *the Revenue Statistics in Asia and Pacific Economies* 2019 which then placed Indonesia's *tax ratio* in the lowest position. In the OECD report based on a study of revenue performance in 2019, the performance of Indonesia's tax ratio is only 11.5%, this figure is the lowest even when compared to small island countries in the Pacific region, such as Tokelau which reached 14.2% or Vanuatu which reached 17.1%. Even though the OECD average at that time was 34.2%. One of the causes of Indonesia's low *tax ratio*, according to the report, is due to tax avoidance (ekonomi.bisnis.com: 2019)

*Tax avoidance* is stated not to violate tax regulations because taxpayers do so by trying to reduce the amount of tax owed by looking for weaknesses (*gray areas*) in Pohan's tax regulations in Nugraha & Mulyani, (2019). *Tax avoidance* is a complicated thing because on the one hand tax avoidance is allowed (legal), but on the other hand tax avoidance is not desired by the government because it can have the effect of reducing state revenue. In this study, there are components that affect *tax avoidance*, including profitability, *leverage,* fixed asset intensity and sales growth.

The first component that can affect tax avoidance is profitability. Profitability is the first ratio in the financial statements of an organization that has the goal of realizing excessive income, the better the cost of this ratio, the higher it is because it proves that an agency can manage its capital very well so that it can generate the desired income. High profits are a benchmark for buyers against the valuation of an employer, while for creditors, income is a measure of operating cash flow which can later be used as a source of interest payments (Handayani, 2018).

The studies that have been carried out still have inconsistencies in affecting *tax avoidance*. This encourages researchers to conduct another test on the influence of profitability, *leverage*, fixed asset intensity and sales growth on *tax avoidance*. This research is a development of research that has been conducted by Putri et al., (2019). The difference between this study and the previous research lies in (1) the research year in the *new normal period*, because this researcher wants to find out the state revenue in the post-covid-19 period, 2021-2022. (2) The object of the research, namely mining companies listed on the Indonesia Stock Exchange. (3) Inconsistency of research results so that researchers are interested in raising the topic of *tax avoidance* by using the variables of profitability, *leverage*, fixed asset intensity and sales growth as independent variables.

This research is important to prevent companies from carrying out aggressive tax evasion, so that there is no decrease in the amount of state revenue in the State Revenue and Expenditure Budget (APBN), especially for the tax sector that can harm the state. The reason for choosing a mining company in this study is because mining companies have different characteristics and industrial characteristics from other industries. The mining sector is one of the pillars of a country's economic development, because of its role as a provider of energy resources that are indispensable for the growth of a country's economy. The rich potential of natural resources will be able to foster the openness of companies to exploit these resources. Another reason for choosing the mining sector is

because the stocks of mining sector companies are in high demand by investors. The high trading volume of mining sector stocks encourages companies to display their financial statements as best as possible.

## 2 LITERATURE REVIEWS

### 2.1 Legitimacy theory

The Theory of Legitimacy has been widely used in the study of the field of accounting in developing the theory of social and environmental responsibility disclosure (Luft Mobus, 2005). According to (Blay et al., 2018; Dowling & Pfeffer, 1975), companies in business and business activities strive to create a harmonious relationship between social values related to their activities and norms contained in the social system of society and their reaction to the importance of norm limits in order to suppress organizational behavior in paying attention to the environment in which the company is located. As long as the relationship between the two systems is aligned, it is seen as the legitimacy of the company.

### 2.2 Tax avoidance

Taxes are one of the most potential State revenue assets for the continuity of the State's improvement, especially in Indonesia. During the New Order period, state financing and improvement investment came from oil, fuel and foreign loans, but now state financing and development investment have shifted to the tax quarter. The tax tool used in Indonesia is the self-assessment system, in this tax system taxpayers are required to calculate, deposit and report their own tax responsibilities. Therefore, taxpayers must acknowledge the applicable tax obligations, namely the applicable tax laws and regulations (Adelina & Nugrahanto, 2021; Arifiyanto, 2021)

## 2.3 Hyphothesis development

### *2.3.1 Effect of profitability on tax avoidance*

Profitability is an overview of the company's performance in obtaining and generating profits, as well as providing a measure of the level of management effectiveness in a Cashmere company (2019). One of the profitability ratios is Return on Equity (ROE). With the increase in ROE value, it also has an impact on increasing the profit obtained by the company even higher. The theory of legitimacy explains that to get recognition from the public, companies carry out tax avoidance by means of profitability, where the lower the profit, the higher the tax avoidance, therefore it will minimize tax input that will be channeled to the public.

Companies that carry out tax avoidance actions cause losses to the state, especially related to the source of state revenue in the tax sector. The results of research conducted by Apriatna & Oktris, (2022); Rahmayani et al., (2023) shows that profitability has a positive effect on tax avoidance. Based on the description above, the formulation of the third hypothesis in this study is as follows:

**H1: Profitability affects tax avoidance**

### *2.3.2 Effect of leverage on tax avoidance*

To meet their operational and investment needs, companies often rely on debt as a source of financing (Miller, 1977). The extent to which a company utilizes debt to fund its assets is measured using the leverage ratio. This ratio serves as a critical indicator of a firm's financial structure, reflecting its reliance on external financing and its potential risk exposure. Understanding leverage is essential for assessing a company's financial stability and its ability to meet long-term obligations while optimizing capital structure. According to (Nathania et al., 2021), leverage is the ability of a company to use debt to finance the process of a company's activities. Where the larger the debt, the taxable profit will be smaller, because the tax incentive on debt interest is getting bigger.

The theory of legitimacy explains that to gain recognition from the public, companies carry out tax avoidance by means of leverage, where the lower the leverage, the higher the tax avoidance, therefore it will minimize tax input that will be channeled

to the public. The high value of leverage owned by the company shows that the company is more dependent on debt in financing the company's assets. The higher the debt owned by the company, the greater the company's debt burden. Where a high debt burden can reduce the amount of tax burden borne by the company. Reducing the amount of tax burden is a loophole in tax avoidance.

Times Interest Earned Ratio (TIE) is a calculation to measure a company's ability to pay interest expenses to creditors. The greater the value of the company's TIE Ratio, the safer the creditor. Because the high ratio value shows the company's ability to pay interest costs from the operating profit generated. The high interest cost will have the effect of reducing the company's tax burden. The higher the value of a company's debt, the lower the Effective Tax Ratio (ETR) value will be. With a low ETR value, the higher the level of tax avoidance carried out by the company. Based on previous research conducted by Fatmawati and Solikin (2017), it has a significant influence on tax avoidance.

**H2: *Leverage* affects tax avoidance**

*2.3.3 Effect of fixed asset intensity on tax avoidance*

Fixed asset intensity is a big picture of the fixed assets owned by a company. The intensity of ownership of fixed assets can affect the company's tax burden due to the depreciation burden attached to fixed assets. Fixed assets tend to depreciate and depreciation costs can be used as a deduction from tax burden (Damayanti & Gazali in Afifah & Hasymi, 2020). The theory of legitimacy explains that to get recognition from the public, companies carry out *tax avoidance* by means of the intensity of the company's assets, which the lower the intensity, the higher the tax avoidance, therefore it will minimize the tax input that will be channeled to the public.

**H3: Fixed Asset Intensity affects tax avoidance**

*2.3.4 Effect of sales growth on tax avoidance*

Sales growth is a change in sales from year to year or from time to time. Sales growth describes the success of investments in the previous period and can be a predictor for the next period's growth. The theory of legitimacy explains that to gain recognition

from the public, companies carry out tax avoidance by means of sales growth, which is higher but does not affect tax avoidance, therefore this does not affect taxes that will be channeled to the public.

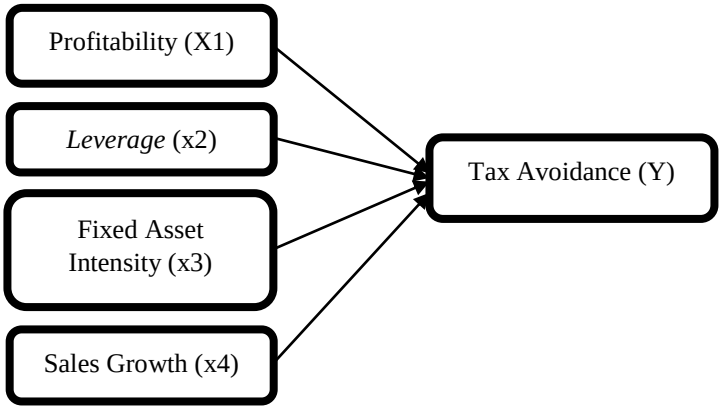
**H4: Sales growth affects tax avoidance**

### 2.4 Conceptual framework

Based on the theoretical foundation and several previous studies, this study examines the influence of profitability, *leverage*, fixed asset intensity and sales growth on *tax avoidance*. So the framework of thinking used is as follows:

**Figure 1.**

*Conceptual Framework*




*Source: Data processed by researchers (2023)*

## 3 RESEARCH METHODOLOGY

### 3.1 Research sample

The type of research approach used in this study is a quantitative approach. This study explains how Profitability, *Leverage*, Fixed Asset Intensity and Sales Growth affect Tax Avoidance. The type of research approach used in this study is a quantitative approach. The population in this study is 56 mining companies listed on the Indonesia Stock Exchange (IDX) in the period 2021-2022.

The method is sampled by selecting points in the population. The criteria chosen by the researcher in determining the sample are as follows:

1. Mining companies listed on the Indonesia Stock Exchange during the 2021-2022 period.
2. Mining companies that publish financial statements during the 2021-2022 period.
3. Mining companies that did not suffer losses during the 2021-2022 research period. Because this criterion is used on the basis of imposition of taxes obtained from the company's income. Therefore, if the company suffers a loss, it has no obligation to pay taxes.

Table 3.1 is the results of the sample calculation carried out by the author by checking the financial statements of each mining company in the *idx.co.id* and *idnfinancials.com* using *purposive sampling* based on the criterias. Following the sampling process, a total of 35 samples were identified that met the established criteria for this study. Consequently, the research dataset comprises 70 observations over the two-period timeframe.

**Table 2.**

*Sampling Criteria*

| No. | Criterion | Sum |
|---|---|---|
| 1 | Mining companies listed on the IDX during the 2021-2022 research period | 52 |
| 2 | Mining companies that did not publish financial statements during the 2021-2022 period. | (4) |
| 3 | Mining companies that suffered losses during the 2021-2022 research period. | (13) |
| | **Number of research samples** | 35 |
| | **Number of years of observation** | 2 |
| | **Amount of researcher data** | 70 |

Source: IDX Data Fact Book 2023

## 3.2 Variable operations

Duli, (2015) defines a variable as a characteristic or attribute that possesses varying values. In research, variables are generally categorized into dependent and independent variables. Furthermore, operational definitions refer to measurable properties that allow for systematic observation and analysis. According to Ganesha & Aithal, (2022); Whyte, (2021), establishing clear operational definitions is essential for selecting appropriate data collection instruments, ensuring the accuracy and reliability of research findings.

***Table 3.***

*Variable Operational Identity*

| Variable | Formula | Data | Data Source |
|---|---|---|---|
| Profitability (X1) | $\frac{Net\ Income}{Total\ Equites}$ | ● Net profit<br>● Total equity | ● Income statement<br>● Financial position statement |
| *Leverage* (x2) | $\frac{Earning\ Before\ Interest\ and\ Tax\ (EBI}{Interest\ Expense}$ | ● Profit before interest/tax<br>● Interest payments | ● Income statement<br>● Cash flow statement |
| Fixed Asset Intensity (x3) | $\frac{Total\ Fixed\ Asset}{Total\ Asset}$ | ● Supplies<br>● Total assets | ● Balance<br>● Report on financial position |
| Sales Growth (x4) | $\frac{Sales_{\mathrm{n}} - Sales_{\mathrm{n}} - 1}{Sales_{\mathrm{n}} - 1}$ | ● Sales | ● Income Statement |

Source: Data processed by authors (2023)

### 3.3 Data analysis techniques

This study employs panel data regression analysis, which integrates both time series and cross-sectional data. Panel data provides a more extensive dataset, increasing the degree of freedom and enhancing estimation accuracy. Time series data consists of observations collected over multiple periods, while cross-sectional data represents data gathered from multiple entities at a specific point in time. The analysis in this study is conducted using the EViews version 12 statistical software, which facilitates efficient processing and interpretation of panel data regression models. The panel data regression equation model applied in this study is as follows:

$$\mathbf{Y = \alpha + \beta 1X1it + \beta 2X2it + \beta 3X3it + \beta 4X4it + eit} \qquad \mathbf{(1)}$$

# 4 RESULTS

## 4.1 Descriptive analysis

***Table 4.***

*Descriptive Analysis Test Results*

| | ROE | TIE | IAT | SG | ETR |
|---|---|---|---|---|---|
| | 0,291529 | 6,461602 | 0,241152 | 0,601185 | 0,296108 |
| an | 0,209541 | 5,172280 | 0,184778 | 0,443575 | 0,229907 |
| mum | 0,963917 | 16,60539 | 0,620126 | 1,719468 | 0,646333 |
| hum | 0,030257 | 0,650311 | 0,019385 | 0,050063 | 0,139471 |
| Dev. | 0,262038 | 4,512230 | 0,184660 | 0,519396 | 0,139308 |
| hess | 1,186976 | 0,848966 | 0,705922 | 0,846165 | 1,266482 |
| sis | 3,517920 | 2,839088 | 2,368040 | 2,538938 | 3,505521 |
| e-Bera | 17,21967 | 8,484197 | 6,978648 | 8,973293 | 19,45842 |
| bility | 0,000182 | 0,014377 | 0,030522 | 0,011258 | 0,000060 |
| | 20,40705 | 452,3122 | 16,88065 | 42,08298 | 20,72756 |
| Sq. Dev. | 4,737803 | 1404,855 | 2,352852 | 18,61426 | 1,339059 |
| vations | 70 | 70 | 70 | 70 | 70 |

Source: Processed Data Using Eviews 12, 2023

Based on Table 4.1, it can be known that the number of data on each variable is 70. The number came from 35 mining companies listed on the Indonesia Stock Exchange (IDX) in the 2021-2022 period.

a. Profitability (ROE) show results with an average value of 0.291529, a median value of 0.209541, a maximum value of 0.963917, a minimum value of 0.030257 and a standard deviation of 0.262038.

b. *Leverage* (TIE) show results with an average value of 6.461602, a median value of 5.172280, a maximum value of 16.60539, a minimum value of 0.650311 and a standard deviation of 4.512230. The lowest value of the *leverage* variable indicates a company's ability to use its capital to pay off its obligations. The lowest value in this variable is 0.650311 which is owned by PT Rudiant Utama Interinsco Tbk in 2021, which explains that the company's ability to pay off its obligations with capital is worse than other companies. The highest value of this variable is at a value of 16.60539 which indicates the ability of a company to pay off its obligations well compared to other companies, this value is owned by the company PT Adaro Energy Indonesia Tbk. The average value contained in this

variable is 6.461602 and the value is greater than the median which indicates that the average company in the mining sector is able to meet its obligations by using capital well. In the standard deviation, it can be seen that the value is lower than the average value, which illustrates that the variable data is well distributed so that there is a possibility of bias data.

c. Fixed Asset Intensity show results with an average value of 0.241152, a median value of 0.184778, a maximum value of 0.620126, a minimum value of 0.019385 and a standard deviation of 0.184660.

d. Sales Growth show results with an average value of 0.601185, a median value of 0.443575, a maximum value of 1.719468, a minimum value of 0.050063 and a standard deviation of 0.519396.

e. Tax Avoidance show results with an average value of 0.296108, a median value of 0.229907, a maximum value of 0.646333, a minimum value of 0.139471 and a standard deviation of 0.139308.

### 4.2 Panel data regression test

**Table 5.**

*Panel Data Regression Test*

| Variable | Common Effect Model | | Fixed Effect Model | | Random Effect Model | |
|---|---|---|---|---|---|---|
| | Coefficient | Prob. | Coefficient | Prob. | Coefficient | Prob. |
| C | 0,426346 | 0,0000 | 0,299629 | 0,0085 | 0,417256 | 0,0000 |
| Profitability | -0,210486 | 0,0017 | -0,360780 | 0,0150 | -0,234888 | 0,0019 |
| *Leverage* | -0,005646 | 0,1120 | -0,001571 | 0,7460 | -0,005877 | 0,0701 |
| Fixed Asset Intensity | -0,104333 | 0,2380 | 0,421166 | 0,2872 | -0,080354 | 0,4586 |
| Tax Avoidance | -0,012035 | 0,6934 | 0,017039 | 0,5789 | 0,007787 | 0,7610 |

Source: Processed Data Using Eviews 12, 2023

### 4.3 Model selection estimation

The Chow test is used to determine the correct panel data model estimation between *the common effect model* and *the fixed effect model.* The tests performed gave the following results:

***Table 6.***

*Chow Test Results*

| Effects Test | Statistics | d.f | Prob. |
|---|---|---|---|
| Cross-Sections F | 3,938106 | (34,31) | 0,0001 |
| Cross-Section Chi-Square | 116,992770 | 34 | 0,0000 |

*Source: Processed Data Using Eviews 12, 2023*

Based on Table 4.5, the *probability* value in *the chi-square cross-section statistic* is 116.992770 with a *probability* value of 0.0000. This means that the value obtained is less than 0.05, so statistically H1 is accepted and H0 is rejected. Therefore, it can be concluded that in this chow test, the selected model is *the fixed effect model* (FEM). The Hausman test is used to determine the correct estimation of the panel data model between *the fixed effect model* and *the random effect model.* The tests performed gave the following results:

***Table 7.***

*Hausman Test Results*

| Test Summary | Chi-Sq.statistic | Chi-Sq.d.f | Prob. |
|---|---|---|---|
| Cross-section random | 3,383061 | 4 | 0,4959 |

*Source: Processed Data Using Eviews 12, 2023*

Based on Table 4.6, the statistical value of Chi Square is 3.383061 with the *probability value* in the *Cross-section random* is 0.4959 or above the significance reference of 0.05 (5%). Therefore, H1 is rejected and H0 is accepted. So in this Hausman test, the selected model is a *random effect model* (REM).

The *Lagrange Multiplier test* is used to determine the correct estimation of the panel data model between *the Common effect model* and *the Random effect model.* The tests performed gave the following results:

***Table 8.***

*Lagrange Multiplier Test Results*

| | Cross-section | Test hypotheses time | Both |
|---|---|---|---|
| Breusch-Pagan | 11,68754<br>(0,0006) | 0,221038<br>(0,6383) | 11,90858<br>(0,0006) |
| Honda | 3,418705<br>(0,0003) | -0,470147<br>(06809) | 2,084946<br>(0,0185) |
| King-Wu | 3,418705<br>(0,0003) | -0,470147<br>(0,6809) | 0,114485<br>(0,4544) |
| Standardized Honda | 3,692331 | 0,099201 | -2,759493 |

| | | | |
|---|---|---|---|
| | (0,0001) | (0,4605) | (0,9971) |
| Standardized King-Wu | 3,692331<br>(0,0001) | 0,099201<br>(0,4605) | -1,992064<br>(0,9768) |
| Gourieroux, et al. | -<br> | -<br> | 11,68754<br>(0,0010) |

Source: Processed Data Using Eviews 12, 2023

Based on Table 4.7, the *Breusch-Pagan cross section* distribution is 11.90858 with a probability value of 0.0006. It concludes that less than 0.05 (5%). So in this *Lagrange Multiplier* test , the selected model is the *Random Effect Model* (REM).

Based on the test of the selection of the panel data regression model, it can be concluded that *the random effect model* (REM) is the right model to be used in this study, this panel data regression is further used in estimating the influence of profitability, *leverage*, fixed asset intensity and sales growth on tax avoidance in mining companies listed on the IDX in 2021-2022. The following are the results of the regression test of the random *effect model* (REM) panel data.

### 4.4 Panel data regression test result

The research data has successfully passed the classical assumption test, with all assumptions being met. Based on the chow test, hausman test, and *lagrange multiplier* test, the selected model is *the random effect model* (REM). From the selected model, the regression equation of the panel data can be arranged as follows:

**Tax Avoidance = 0.417258 – 0.234888ROE – 0.005877TIE – 0.080354FAI + 0.007787SG + err (2)**

Based on the equation, it can be described as follows:

a. The value of the constant is positive, which is 0.417258, which indicates that the independent variable is constant.

b. The regression coefficient of the profitability variable has a negative value of -0.234888. This shows that if Profitability increases, it will reduce tax avoidance by 0.234888 assuming that other independent variables are constant.

c. The regression coefficient of the *legerage* variable has a negative value, which is -0.005877. This shows that if *leverage* increases, it will reduce tax avoidance by 0.005877 assuming that other independent variables are constant.

d. The regression coefficient of the fixed asset intensity variable is negative which is -0.080354. This shows that if the intensity of fixed assets increases, it will reduce tax avoidance by 0.080354 with the assumption that other independent variables are constant.

The regression coefficient of the sales growth variable is positive, which is 0.007787. This shows that if sales growth increases, it will reduce tax avoidance by 0.007787 assuming that other independent variables are constant.

Based on Figure 2, the *Adjusted R-Squared value* is 0.188987, meaning that the ability of independent variables to describe the dependent variable is 18.8987% while the remaining 81.1013% is influenced by other factors that are not present in the model. This means that the variables of profitability, *leverage*, fixed asset intensity and sales growth of 18.8987% can predict corporate tax avoidance, while the remaining 81.1013% is influenced by factors not examined in this study.

The *Prob F-Statistic* value is 0.001376. This proves that the value is smaller than the level of significance. So that profitability, *leverage*, fixed asset intensity and sales growth affect corporate tax avoidance in the mining sector.

## 5 RESEARCH DISCUSSION

### 5.1 The effect of profitability ratio on tax avoidance

Based on the results of statistical testing with the t-test, it shows that the Profitability variable (*Return On Equity*) shows a significance value of 0.0019 < 0.05 and a calculated t-value of -3.241480 < 1.668271, then Ho is rejected. So that ROE affects ETR. Therefore, it can be concluded that the profitability variable affects tax avoidance (ETR) in mining companies on the Indonesia Stock Exchange (IDX). Because the lower the ROE, it increases the indication or risk of tax avoidance.

Profitability, as measured by ROE, reflects a company's ability to generate profits from its total equity. A lower ROE indicates a lower return compared to equity, which in the context of tax avoidance, indicates an increased risk or tendency to avoid taxes. This is in accordance with the results of the study that there is a significant influence between ROE and ETR on mining companies on the IDX.

Low ROE is often associated with a company's need to maintain profitability by minimizing its tax liability (Abor, 2005; Akintoye et al., 2020). In a competitive industry, companies may take certain steps to maintain profit stability, one of which is through tax avoidance strategies. A decrease in ROE can motivate companies to reduce their tax burden in order to remain competitive in the long term (Picas et al., 2021; Roe, 2021).

In this study, companies that earn large profits from their total equity may feel compelled to comply with tax obligations in order to maintain a good image and social legitimacy (Baudot et al., 2020). Stakeholders, including the public, will be more supervised by companies with high profits. In order to meet public expectations and gain social recognition, more profitable companies may tend to be tax compliant, in line with their goals to maintain legitimacy and strengthen relationships with the community (Ghozali & Chariri, 2007).

The results of this study are consistent with the findings of Karundeng et al., (2020); Mulyati et al., (2019); Tanko, (2020)who stated that profitability has a negative and significant effect on tax avoidance. In these studies, the higher the level of profitability, the lower the level of tax avoidance. This is based on the reason that companies with large profits are better able to carry out tax planning efficiently and have greater financial capacity to meet their tax obligations.

This contrary research implies that tax avoidance decisions can be more complex and not solely determined by profitability. Other factors such as market pressures, tax regulations, and corporate culture can also influence how companies choose to manage their tax liabilities (Armstrong, Blouin, & Larcker, 2012).

From the discussion above, it can be concluded that the profitability variable, measured by ROE, has a significant influence on tax avoidance (ETR) in mining companies on the IDX. Theoretically, high profitability tends to reduce tax avoidance because companies with large profits tend to be more compliant to maintain their image and social legitimacy. This result is also in line with the theory of legitimacy, where companies that prioritize legitimacy from the public will be more compliant with tax obligations to maintain a good reputation in the eyes of the public.

However, the study also acknowledges another perspective that suggests that profitability may not always determine tax avoidance decisions. This reflects the importance of considering the various factors that affect a company's tax strategy, especially in the context of different industries and tax policies.

### 5.2 The effect of leverage ratio on tax avoidance

Based on the results of statistical testing with the t-test, it shows that the *leverage* variable shows an insignificant value, which is 0.0701 > 0.05 and the calculated t-value is -1.841278 < 1.668271, then Ho is accepted. Therefore, it can be concluded that the *leverage* variable has no effect on tax avoidance (*effective tax rate*) in mining companies listed on the Indonesia Stock Exchange (IDX), meaning that the higher *the leverage*, the less it will affect tax avoidance activities.

If the company in financing its operations uses financing derived from debt, it will result in the company having high debt and the interest burden that must be paid is even greater so that the company will consider not financing with debt on a large scale. A high debt ratio also causes the company to be seen as unhealthy by investors and creditors if it is unable to show a good profit in the future. The use of large amounts of debt will pose a great risk, which will be faced by the company, so the management will act cautiously and not take the risk of high debt to avoid taxes.

*The Times Interst Earned Ratio* (TIE) is used as a measure of a company's ability to meet interest payments. In the use of this ratio, it is expected to provide large profits so that it will increase the profits available to shareholders.

Based on the results of the partial test, it can be concluded that the leverage variable has no effect on tax avoidance. *Leverage* is one of the ratios that describes debt to finance the company's operating activities. A high level of corporate debt will affect tax avoidance practices. This is because a high level of corporate debt will make profit management conservative in making financial statements. Management must be more cautious and do not want to take the risk of tax evasion to reduce the tax burden. Creditors will be interested if the company earns a large profit and assumes that the company can carry out its operational activities well. So that *the leverage* variable does not affect tax avoidance.

According to the theory of legitimacy used by the researcher, the use of debt by companies can be used to save taxes by obtaining benefits such as reduction in tax rates, tax exemptions, and tax deferrals, then the interest cost will be a deduction of taxable income. In this theory, the company benefits so that the company avoids unwanted things and can increase the company's value.

The results of this test support research conducted by (Mardianti, 2020) (Rahmadani *et al*, 2020) (Handayani, 2018) and (Wastam W.H, 2018) which states that *leverage* does not have a significant effect on tax avoidance. This means that the size of the company is not a reason to take tax evasion actions, this is because there is an opinion that taxes are a burden for companies.

### 5.3 The effect of fixed asset intensity ratio on tax avoidance

Based on the results of statistical testing with the t-test, it shows that the variable of fixed asset intensity shows an insignificant value, which is 0.4586 > 0.05 and the t-value is calculated as -0.745613 < 1.668271, so it can be concluded that the intensity of fixed assets has no effect on tax avoidance. This is because the intensity of fixed assets is always changing according to the company's needs in supporting its operational needs. So the addition or subtraction of existing assets is carried out by the company to support the company's operational activities so that the company's performance can run optimally, not used by the company to reduce the amount of its tax liability. So that the intensity of fixed assets owned by the company does not illustrate that tax evasion has occurred in the company.

This difference in results may be due to other factors that affect the relationship between fixed asset intensity and tax avoidance, such as corporate financial strategies, tax policies, and industry characteristics. For example, in some industries, fixed assets play a crucial role in generating income and will therefore be more associated with tax deductions through depreciation. However, in companies that rely heavily on intangible assets, the relationship between fixed asset intensity and tax avoidance may be less relevant.

### 5.4 The effect of sales growth ratio on tax avoidance

The results of statistical testing with the t-test show that sales growth has a positive but insignificant effect on tax avoidance as shown by the calculated t-value of 0.305393 and the probability value of 0.7610. This shows that sales growth has no effect on tax avoidance, because the higher the sales growth, the more the company is able to pay its tax payable and avoid tax avoidance practices.

Sales growth in a company can show the level of sales from year to year. Logically, sales growth reflects the company's prospects and profitability in the future. The increased profitability of the company, the growth of sales will increase and the company's performance will improve. Brush et al., (2000); Williamson, (1966)The increasing profitability of the company, the more profit a sale will increase which can encourage an increase in sales growth from year to year. If sales growth increases, the company will get a lot of profits and later the tax will be more collected. Therefore, companies will look for even larger funds to be able to reduce their payable taxes so that the taxes that will be imposed can be minimized, so that companies that have increasing sales growth tend to take *tax avoidance measures.*

Sales growth reflects the manifestation of investment success in past periods and can be used as a prediction of future growth. The company can predict the amount of profit that will be achieved with the amount of sales growth. The higher the sales growth of a company will increase the tax avoidance rate. This happens because if sales increase, it will increase the company's profit so that it will have an impact on the higher tax costs that must be paid. Therefore, companies will carry out tax avoidance so that the company's tax burden is not high.

The results of this test support research conducted by Apriatna & Oktris, (2022); Shubita, (2024) which show that sales growth has no significant effect on tax avoidance. This reflects that the size of the company's sales growth does not affect the company's decision to avoid taxes, because companies with increased or decreased sales growth have the same obligations in paying taxes, so sales growth is not a benchmark for companies in tax avoidance.

## 6 CONCLUSION, IMPLICATION, AND RECOMMENDATIONS FOR FUTURE RESEARCH

### 6.1 Conclusion

This study aims to analyze the influence of profitability, leverage, fixed asset intensity, and sales growth on tax avoidance. Based on the results and discussions, the following conclusions can be drawn:

- The test results indicate that profitability significantly influences tax avoidance. Higher profitability is associated with lower tax avoidance, as companies with substantial profits tend to be more compliant with tax regulations. This is because companies seek to maintain a positive reputation among stakeholders, including the public, and gaining social recognition or endorsement encourages them to fulfill their tax obligations transparently.
- The leverage variable does not have a significant effect on tax avoidance. This finding suggests that companies utilize debt to optimize tax savings through mechanisms such as reduced tax rates, tax exemptions, and tax deferrals. Additionally, interest expenses serve as a deductible component of taxable income, reducing the company's overall tax burden without necessarily engaging in tax avoidance practices.
- The fixed asset intensity variable does not significantly influence tax avoidance. This implies that companies with high asset intensity do not intentionally acquire fixed assets to avoid taxes. Instead, these assets are primarily utilized for operational purposes, which means that fixed asset intensity does not play a decisive role in a company's tax avoidance decisions.
- The sales growth variable also does not have a significant effect on tax avoidance. Companies experiencing increased sales growth from the previous year do not necessarily engage in tax avoidance, as higher growth attracts greater scrutiny from investors and regulatory bodies. Consequently, minimizing taxes becomes more challenging, and the potential risks associated with tax avoidance may outweigh the perceived benefits.

### 6.2 Mangerial implication

Based on the findings of this study, several important implications can be drawn. For companies, particularly those in the mining sector, the results highlight the importance of carefully evaluating every financial decision, especially those related to tax avoidance. Company management must recognize that tax-related strategies can impact not only financial performance but also corporate reputation and stakeholder trust. A well-managed approach to taxation can enhance corporate credibility and sustainability in the long run.

For investors, this study serves as a valuable resource for making informed investment decisions. By understanding the implications of tax avoidance strategies, investors can be more selective and cautious when assessing a company's financial health and reputation. A company's tax practices can reflect its overall governance and risk management approach, making it a critical factor in investment evaluation. Therefore, investors should consider both financial performance and ethical corporate behavior to ensure sustainable and responsible investments.

### 6.3 Recommendations for future research

Based on the findings and discussions presented in this study, several recommendations can be proposed for future research. First, considering that this study only examined a two-period timeframe, future research is encouraged to extend the time span to obtain a more comprehensive understanding of tax avoidance trends over a longer period. A broader timeframe may reveal more significant patterns and provide deeper insights into the long-term impact of financial decisions.

Second, future studies should explore additional independent variables that may influence tax avoidance. Factors such as company size, capital intensity, and inventory intensity could provide a more nuanced perspective on corporate tax strategies. Expanding the scope of financial variables can help uncover deeper relationships between corporate characteristics and tax-related behaviors.

Furthermore, future research should also consider incorporating non-financial factors, such as institutional ownership, audit quality, audit committee effectiveness, good corporate governance (GCG), and corporate social responsibility (CSR). These elements play a crucial role in shaping a company's ethical stance and compliance with tax regulations. Investigating these dimensions may offer a more holistic view of corporate decision-making regarding tax strategies.

Lastly, it is highly recommended that future research explore different industry sectors, ensuring that the sample selection represents a broader population of companies in Indonesia. A cross-sectoral analysis could provide valuable insights into how various industries approach tax management and compliance, offering a more comprehensive understanding of tax avoidance behavior across different economic landscapes.

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