

THE INFLUENCE OF CAPITAL INTENSITY AND INVENTORY INTENSITY ON TAX AGGRESSIVENESS WITH INDEPENDENT COMMISSIONERS AS A MODERATING VARIABLE (Empirical Study on Mining Companies Listed on the IDX for the Period 2020-2023)

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ABSTRACT

This study aims to determine the effect of capital intensity and inventory intensity on tax aggressiveness and the effect of independent commissioners in moderating the effect of independent variables on dependent variables in mining companies listed on the IDX for the 2020-2023 period. This study uses a quantitative research type using secondary data from company annual reports. The research sample used was mining companies listed on the IDX for the 2020-2023, totaling 40 companies. Determination of the number of samples using the purposive sampling method. The data analysis techniques used were multiple linear regression analysis and moderation regression analysis processed using the SPSS version 25 application. This study's results indicate that capital and inventory intensity have a positive and significant effect on tax aggressiveness. Meanwhile, independent commissioners cannot moderate the effect of capital intensity, and inventory intensity has a positive and significant effect on tax aggressiveness. Further researchers should add other variables that can affect a company's tax aggressiveness. In addition, banking companies should pay attention to their tax planning actions because they can affect shareholder assessments.

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I. INTRODUCTION

The fantastic economic value generated by the coal mining industry, it turns out, has a very minimal tax contribution. Data from the Ministry of Finance shows that in 2016, the tax ratio contributed by the mineral and coal mining sector was only 3.9%, while the rational tax ratio in 2016 was 10.4%. The low tax ratio cannot be separated from the issue of tax evasion carried out by coal industry players.

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It is recorded by the Ministry of Finance that the number of taxpayers holding mineral and coal mining business licenses who do not report their annual tax return (SPT) is higher than those who do report. In 2015, out of 8,003 coal industry taxpayers.

Suandy (2017) In his written work, several factors are outlined that prompt taxpayers to strive to reduce their tax burden. First, the amount of tax that must be paid. With the increasing amount of tax imposed, the greater the likelihood that taxpayers will violate the regulations. Second, the amount of money spent on bribing tax officers. The smaller the bribe cost, the higher the potential for violations. Third, the low likelihood of violations being detected also affects taxpayers' attitudes towards violations. In addition, the severity of the sanctions also affects this; if the imposed sanctions tend to be light, there will be a higher tendency for taxpayers to violate the rules.

The tax collection system that relies on self-assessment gives companies the opportunity to implement aggressive tax strategies, thereby increasing the likelihood of violations by taxpayers. Official (2016) The self-assessment system in tax collection grants taxpayers the authority to estimate the amount of tax to be paid each year in accordance with the applicable tax regulations. Through this mechanism, taxpayers have the responsibility to calculate, pay, and report the total tax owed themselves, which also creates the possibility for taxpayers to manipulate the tax figures owed. The underlying assumption of this system is that taxpayers have an understanding of tax calculations, comprehend tax laws, and possess integrity and a high level of awareness regarding their tax obligations. In this system, the role of the tax authorities or government is more limited to supervision, making it less effective in preventing potential aggressive tax-related actions by taxpayers. This opportunity allows taxpayers to reduce their taxable income, thereby enabling companies to lower the tax burden they have to pay (Pratama, 2020).

Frank et al. (2009) Aggressive tax is an action aimed at manipulating a company's taxable income through tax planning, either legally (tax avoidance) or illegally (tax evasion). Companies engage in aggressive tax practices to reduce the tax burden they should bear. Companies around the world are increasingly implementing this practice (Chen, Qjang, & Shevlin, 2010). The company considers that taxes are one of the elements that suppress post-tax net income, so they are likely to adopt a more active strategy in managing their tax liabilities.

The researchers want to investigate whether capital intensity affects aggressive tax behavior. Rodriguez & Arias (2012) Capital intensity is defined as a ratio that reflects how actively a company invests in fixed assets. The company decided to invest in fixed assets to reduce its tax liabilities, because most fixed assets, except for land, depreciate over time. This depreciation becomes an expense that can reduce profits, thereby lowering the taxes that need to be paid. Thus, the more fixed assets one owns, the higher the depreciation expense that can be used to reduce tax liabilities.

Previous research by Muliawati and Karyada (2020), Linda (2021), and Arianti (2021) In this study, the results show that the level of investment contributes positively and significantly to tax aggressiveness measured using ETR. This occurs because the company utilizes its fixed assets to reduce the tax burden. These findings contrast with the research conducted by Pratama (2020) and Priskila et al. (2023). In that study, it was found that the capital used did not have a significant effect on tax aggressiveness. The reason is the high number of fixed assets owned by the company to support its operations.

Inventory intensity is a part of capital intensity that reflects the proportion of a company's investment activities related to inventory. According to Saputro et al. (2018), inventory intensity is a ratio that serves to evaluate the proportion of capital invested. Companies that have a high amount of inventory usually experience a significant burden or require substantial costs to manage that inventory. Darmadi & Zulaikha (2013) The additional costs arising from inventory investment are recognized as expenses in the period in which the costs occur. This expenditure will impact the company's profit, which in turn can reduce the amount of tax that needs to be paid.

Research by Sitorus and Bowo (2018), Fahrani et al. (2018), and Maulana et al. (2022) indicates that inventory intensity has a positive and significant impact on tax aggressiveness measured through ETR. This is due to the fact that companies with high inventory levels will face additional pressure to reduce their tax liabilities. According to Linda (2021) and Pratama (2020), inventory intensity does not show a significant effect on tax aggressiveness, due to the variation in inventory turnover from one year to another. Additionally, companies tend to use inventory to boost sales value. Additional expenses or costs arising from investments in inventory are recognized as expenses in the period in

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which those costs occur. These additional expenses will impact the reduction of the company's profit, thereby potentially lowering the amount of tax that needs to be paid.

A review of previous studies discussing tax aggressiveness still shows a research gap, marked by differing results among those studies. This research opens up opportunities for researchers to formulate hypotheses by involving independent commissioners as moderating variables. Independent commissioners are members of the board of commissioners who are not affiliated with a particular issuer or company and must meet a number of established criteria. Independent commissioners play a role in corporate governance and can help prevent conflicts of interest. With the increasing number of independent commissioners, their oversight and control performance over management actions, especially related to opportunistic behavior, will also improve (Jensen & Meckling, 1976).

Members of the board of commissioners known as independent commissioners come from outside the organization and are required to meet a number of conditions specified in the Decree of the Chairman of the Capital Market and Financial Institution Supervisory Agency No. Kep-643/BL/2012 regarding the establishment and guidelines for the implementation of the Audit Committee's work. According to the Republic of Indonesia Law Number 40 of 2007 concerning Limited Liability Companies, the appointment of independent commissioners is conducted in the General Meeting of Shareholders, and they must come from individuals who have no affiliation with the main shareholders, members of the board of directors, or other members of the board of commissioners. Hery (2017) It is said that independent commissioners have joint responsibilities and roles in conducting oversight and providing advice to the board of directors, in addition to ensuring the implementation of good corporate governance principles. Effective governance principles, supported by strong oversight from the independent board of commissioners, can help reduce tax aggressiveness. The high level of oversight conducted by independent commissioners on the company's management performance is a consideration for the author to make independent commissioners a moderating variable in this research. Strict oversight by independent commissioners has the potential to reduce the likelihood of management engaging in tax savings, both legitimate and illegitimate, in order to maintain the company's profit performance. Therefore, it is believed that independent commissioners can limit opportunistic actions by management, so it is expected that this variable can moderate the influence between capital intensity and inventory intensity on the level of tax aggressiveness.

II. LITRATURE REVIEW

Capital Intensity

Statement of Financial Accounting Standards (PSAK) No. 16 (revised 2011) on Fixed Assets and Other Assets explains that fixed assets are physical assets owned for the purpose of production or provision of goods and services, to be leased to others, or for administrative needs, with the expectation of being used for more than one period. The fixed assets of a company are included in the types of assets listed in the statement of financial position. These fixed assets are divided into two categories: tangible fixed assets and intangible fixed assets.

Capital intensity is often associated with the extent of fixed assets owned by the company. Based on tax regulations, in accordance with Article 11 of Law No. 36 of 2008 on Income Tax, fixed assets are defined as tangible assets that can be depreciated, located in Indonesia, owned and used to obtain, collect, and maintain income that is subject to tax, with a useful life of more than one year (Ria, 2017).

Capital intensity refers to the investment activities undertaken by a company related to expenditures on fixed assets. According to Wijayanti (2020), capital intensity reflects how efficiently a company utilizes its assets to generate revenue. Almost all fixed assets will experience depreciation, and the depreciation cost can affect the amount of tax paid by the company. The more fixed assets a company has, the lower the taxes paid. The higher the capital intensity of a company, the greater the burden of fixed asset depreciation. The decrease in the company's profit will result in a reduction in the taxes that must be paid. When the company's profit decreases, the company will have a low Effective Tax Rate (ETR), indicating an increase in tax avoidance. This occurs because companies with significant fixed assets tend to engage in tax planning, resulting in a low Effective Tax Rate (ETR) (Dwiyanti & Jati, 2019).

Inventory Intensity

The company's inventory is classified as a current asset that serves to support the company's operations and needs in the long term. The stock intensity measure is calculated by comparing the

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total amount of stock with the total assets owned by the company. Companies that invest in stock storage will incur costs for maintenance and repairs, which can increase total expenses and reduce profitability. These maintenance and repair costs will be recorded in the income statement for the period in which the costs occur. If there is a decline in profit, companies with a high inventory intensity tend to be more proactive in addressing potential tax liabilities.

According to Artinasari & Mildawati (2018), inventory intensity describes how significantly a company allocates its assets into inventory. When a company invests a large amount of funds in inventory, it will result in high costs for the maintenance and storage of those goods. As a result, the total burden borne by the company will increase, which in turn can reduce the profit earned.

According to Andhari & Sukartha (2017), inventory intensity is measured by comparing the amount of inventory with the total assets of the company. When a company invests funds in inventory stored in a warehouse, this will incur maintenance and storage costs, which in turn can increase the company's burden and reduce profits. Companies with high inventory levels tend to be more aggressive in managing the taxes they pay. In addition, the company also has the potential to achieve cost efficiencies, which can contribute to increased profits. In a given period, profits can be affected by high inventory levels, which can be allocated to future periods.

Independent Commissioner

The board of commissioners is one of the entities within the company that is collectively responsible for monitoring and providing recommendations to the board of directors, as well as ensuring the implementation of good governance practices. However, the board of commissioners is not permitted to be directly involved in the company's decision-making process. The number of board members should be adjusted according to the complexity of the company, while still considering the effectiveness in decision-making. There are two types of board members: affiliated commissioners and independent commissioners, who are non-affiliated members.

An independent commissioner is a member of the Board of Commissioners who comes from outside the company's management and is not an employee of the company but deals directly with the organization's internal affairs. The company appoints independent commissioners to oversee how the organization's internal operations are managed and to mediate between internal commissioners and shareholders in case of conflicts. Independent commissioners are believed to act as mediators between both parties because they are objective and have a low risk in internal conflicts (Hanim & Fatahurrazak, 2018).

Based on the Financial Services Authority Regulation Number 33/POJK.04/2014 regarding the Board of Directors and Board of Commissioners of Issuers or Public Companies, it states that independent commissioners are members of the Board of Commissioners who come from outside the Issuer or Public Company and meet the criteria as independent commissioners in accordance with the provisions in this Financial Services Authority regulation (Ria, 2017).

Tax Aggressiveness

Corporate tax aggressiveness is an action of engineering taxable income designed through tax planning, either using legal means such as tax avoidance or illegal means such as tax evasion. The company considers taxes as an additional cost burden that can reduce the company's profits. Therefore, the company is predicted to take actions that will be able to reduce the company's tax burden. The company considers taxes as an additional cost burden that can reduce the company's profits, therefore the company is predicted to take actions that can reduce the company's tax burden (Sugiyarti & Ramadhani, 2019).

The taxes paid by a company can play a role in reducing the profit earned. If the tax burden that the company has to bear is very high, this can encourage the company to adopt more aggressive tax strategies. These actions fall under tax management, which consists of three elements: tax planning, execution of tax obligations, and tax control.

DEVELOPMENT OF RESEARCH HYPOTHESIS

The Influence of Capital Intensity on Tax Aggressiveness

Capital intensity is the ratio of a company's investment activity conducted in the form of fixed assets. According to Wijayanti (2020), capital intensity can indicate the level of efficiency of a company

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in using its assets to generate revenue. Almost all fixed assets experience depreciation, and this depreciation cost can affect the amount of tax paid by the company. The more fixed assets a company has, the lower the taxes paid. The higher the capital intensity of a company, the greater the depreciation burden of fixed assets. The depreciation cost for fixed assets is an expense that can reduce the company's profit, so the tax burden will also decrease due to this depreciation cost. Thus, the more fixed assets a company owns, the higher the depreciation expense that can be deducted to reduce taxes.

Based on agency theory, company management will act opportunistically by utilizing depreciation expenses to reduce taxes in order to maximize profits. The reduction in tax burden indicates tax evasion, so it can be said that high capital intensity has a positive relationship with tax evasion. In other words, the higher the capital intensity, the more tax evasion tends to increase. Previous research conducted by Muliawati and Karyada (2020), Maulana et al. (2022), Linda (2021), and Arianti (2021) shows that capital intensity has a significant positive effect on tax aggressiveness as proxied by ETR. Therefore, the formulated hypothesis is:

H1: Capital Intensity Has a Positive and Significant Effect on Tax Aggressiveness

The Influence of Inventory Intensity on Tax Aggressiveness

Inventory Intensity is a ratio used to assess the extent of investment allocated to inventory within a company. Companies with high inventory levels will face significant operational costs or require substantial expenditures to manage that inventory. Darmadi & Zulaikha (2013) explain that the additional burden or costs arising from inventory investment are recognized as expenses in the period the costs occur. These additional costs will reduce the company's profit, thereby minimizing the amount of tax the company has to pay. Based on agency theory, managers will strive to minimize the additional burden due to high inventory levels to avoid reducing profits. Therefore, managers will maximize the additional costs that the company must bear to reduce the tax burden. Research conducted by Sitorus and Bowo (2018), Fahrani et al. (2018), and Maulana et al. (2022) shows that inventory intensity has a significantly positive effect on tax aggressiveness with the proxy ETR. Therefore, the formulated hypothesis is:

H2: Inventory Intensity Has a Positive and Significant Effect on Tax Aggressiveness

The Influence of Capital Intensity on Tax Aggressiveness with Independent Commissioners as a Moderating Variable

An independent commissioner is a member of the board of commissioners who comes from outside the company's management and is not an employee of the company, but deals directly with the organization's internal affairs. The company appoints independent commissioners to oversee how the organization's internal operations are managed and to act as mediators between internal commissioners and shareholders in case of conflicts. Independent commissioners are trusted as conflict preventers between both parties because they are objective and have a low risk of internal conflicts (Hanim & Fatahurrazak, 2018).

In agency theory, independent commissioners provide guidance and supervision to prevent information asymmetry that often occurs between the company's owners (principals) and management (agents). Independent commissioners act as intermediaries between management and company owners in making legal policy decisions and determining tax-related strategies. Independent commissioners are the best position to perform monitoring functions in business activities due to their objectivity in carrying out their duties, thus it is expected that their presence can minimize opportunistic behavior from management.

Hery (2017) explains that independent commissioners have collective responsibilities and duties to oversee and advise the board of directors, as well as ensure the company implements good governance. Effective oversight by the independent board of commissioners contributes to a reduction in the level of tax aggressiveness. The high level of oversight by the independent board of commissioners on the company's management performance caught the author's attention to make the independent commissioners variable a moderating variable in this study. Strict oversight by independent commissioners is expected to reduce opportunities for management to engage in tax

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avoidance, both legally and illegally, in order to maintain the company's profit performance. Independent commissioners are believed to be able to limit opportunistic actions by management, so this variable is expected to moderate the influence of the capital intensity variable on the level of tax aggressiveness.

Previous research by Muliawati and Karyada (2020), Sitorus and Bowo (2018) shows that independent commissioners are able to moderate the influence of capital intensity on tax aggressiveness. Therefore, the hypothesis formulated is:

H3: Independent Commissioners Can Moderate the Influence of Capital Intensity on Tax Aggressiveness

The Influence of Inventory Intensity on Tax Aggressiveness with Independent Commissioners as a Moderating Variable

Independent commissioners are members of the board of commissioners who come from outside the company's management and are not employees of the company, but deal directly with the organization's internal affairs. The company appoints independent commissioners to oversee how the organization's internal operations are conducted and to act as mediators between internal commissioners and shareholders in the event of a conflict. Independent commissioners are trusted as conflict preventers between both parties because they are objective and have a low risk of internal conflicts (Hanim & Fatahurrazak, 2018).

In agency theory, independent commissioners provide direction and oversight to prevent information asymmetry that often occurs between company owners (principals) and management (agents). Independent commissioners act as intermediaries between management and company owners in legal policy-making and tax strategy determination. Independent commissioners are the best position to perform monitoring functions in business activities due to their objectivity in carrying out tasks, thus it is expected that their presence can minimize opportunistic behavior from management.

Hery (2017) explains that independent commissioners have the collective responsibility and duty to oversee and advise the board of directors, as well as ensure that the company implements good governance principles. Good governance, through effective oversight by the independent board of commissioners, can lead to a lower level of tax aggressiveness. The high level of oversight by the independent board of commissioners on the company's management performance caught the author's attention to make the independent commissioners variable a moderating variable in this research. Strict oversight by independent commissioners is believed to reduce management's opportunities to engage in tax savings, whether legal or illegal, in order to maintain the company's profit performance. Independent commissioners are believed to have the ability to limit opportunistic actions by management, so it is expected that the variable of independent commissioners can moderate the influence of the inventory intensity variable on the level of tax aggressiveness.

Previous research by Sitorus and Bowo (2018) showed that independent commissioners are able to moderate the influence of inventory intensity on tax aggressiveness. Therefore, the hypothesis formulated is:

H4: Independent Commissioners Are Able to Moderate the Influence of Inventory Intensity on Tax Aggressiveness

III. METHODS

The type of research is quantitative research. This method is called the quantitative method because the research data consists of numbers and the analysis uses statistics. The type of data used in this research is quantitative data. Quantitative data is data in the form of numbers, either directly from research results or from data processing. Quantitative data in this study consists of the annual financial statements of mining companies listed on the IDX for the years 2020-2023.

The population in this study consists of mining companies listed on the IDX from 2020 to 2023. The number of companies in the population to be studied is 51 companies. However, not all of the population will be the subject of the research, so sampling needs to be conducted. This study uses criteria based on judgment as follows:

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1. Mining companies listed on the IDX from 2020-2023.
2. Mining companies that publish financial statements consecutively during the observation period of 2020-2023.
3. Companies that have an independent board of commissioners structure consecutively during the observation period of 2020-2023.

Table 1. Sampling Criteria

No	Criteria	Total
1	Mining companies listed on the IDX from 2020-2023	51
2	Companies that do not present financial statements consecutively during the observation years 2020-2023	(7)
3	Companies that do not have an independent board of commissioner's structure consecutively during the observation years 2020-2023	(4)
Total Sampel Used		40
Research Year		4
The total combined sample over 4 years		160

*Data processed by the author, 2024

IV. RESULTS AND DISCUSSION

Multiple Regression Test

Multiple linear regression analysis was conducted using the SPSS application. In this study, there are two independent variables, namely Capital Intensity (X1) and Inventory Intensity (X2), and a dependent variable, namely Tax Aggressiveness (Y). Here are the results of the multiple linear regression test in this study.

Table 2. Multiple Regression Test Result

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	0,955	0,283		0,547	0,585
Capital Intensity (X1)	1,548	0,517	0,652	1,762	0,011
Inventory Intensity (X2)	1,233	0,625	0,284	1,755	0,040

*Data processed by the author, 2024

Based on the table above, the resulting regression equation is as follows:

$$Y=0,955+1,548X1+1,233X2+e$$

$$Y = 0,955 + 1,548X1 + 1,233X2 + e$$

Notes:

- Y : Tax Aggressiveness
- a : Constanta
- X1 : Capital Intensity
- X2 : Inventory Intensity
- β_{1-2} : Regression Coefficient
- e : Error Residual

Based on the regression equation, it can be interpreted as follows:

1. The constant (α) of 0.955 means that if the variables Capital Intensity (X1) and Inventory Intensity (X2) are considered constant or zero, then Tax Aggressiveness (Y) will be 0.955.

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2. The coefficient of the Capital Intensity variable (X1) is 1.548 with a positive value, meaning that every increase of 1 unit in Capital Intensity will increase Tax Aggressiveness by 1.548.
3. The coefficient of the Inventory Intensity variable (X2) is 1.233 with a positive value, meaning that every increase of 1 unit in Inventory Intensity will increase Tax Aggressiveness by 1.233.

Moderated Regression Analysis

Moderated Regression Analysis (MRA) is a specific application of multiple linear regression that includes interaction elements (multiplication of two or more independent variables), aimed at determining whether the moderation variable strengthens or weakens the relationship between the independent variable and the dependent variable (Ghozali, 2018). Here are the results of the MRA test. Images can be displayed in the form of graphs, maps, photos, etc. and are made with high resolution. Images and tables can be made in 2 columns or 1 column. If written in 1 column, the location must be in the middle (centered). The image title is placed at the bottom of the image and written in Nunito 8pt font (Figure 1. Example of image format).

Table 3. Moderated Regression Analysis (MRA)

Model	Coefficients ^a				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	31,418	30,085		1,044	0,302
<i>Capital Intensity</i> (X1)	2,694	2,063	2,090	1,306	0,198
<i>Inventory Intensity</i> (X2)	0,329	1,060	0,355	0,310	0,758
Komisaris Independen (M)	1,609	1,218	1,723	1,321	0,193
X1*M	0,090	0,085	2,331	1,052	0,298
X2*M	0,003	0,045	0,008	0,005	0,996

a. Dependent Variable: agresivitas pajak

*Data processed by the author, 2024

Based on data analysis using SPSS 25, the results of the moderation analysis regression equation are as follows:

$$Y=31,418+2,694X1+0,329X2+1,609M+0,090X1*M+0,003X2*M+e$$

$$Y = 31,418 + 2,694X1 + 0,329X2 + 1,609M + 0,090X1*M + 0,003X2*M + e$$

$$Y=31,418+2,694X1+0,329X2+1,609M+0,090X1*M+0,003X2*M+e$$

Notes:

- Y : Tax Aggressiveness
- a :Constanta
- X1 : Capital Intensity
- X2 : Inventory Intensity
- M : Independent Comissioner
- X1*M : Capital Intensity * Independent Comissioner
- X2*M : Inventory Intensity * Independent Comissioner
- e : Error

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The interpretation of the regression equation is as follows:

1. The constant of 31.418 means that if the variables Capital Intensity (X1), Inventory Intensity (X2), Independent Commissioner (M), and moderators (X1M and X2M) are considered constant, then Tax Aggressiveness will be 31.418.
2. The coefficient of the Capital Intensity variable (X1) of 2.694 means that every 1 unit increase in Capital Intensity will increase Tax Aggressiveness by 2.694.
3. The coefficient of the Inventory Intensity variable (X2) of 0.329 means that every increase of 1 unit in Inventory Intensity will increase Tax Aggressiveness by 0.329.
4. The coefficient of the Independent Commissioner variable (M) of 1.609 means that each increase of 1 unit of Independent Commissioner will increase Tax Aggressiveness by 1.609.
5. The coefficient of the moderator variable (X1M) of 0.090 means that each increase of 1 unit of Capital Intensity of Independent Commissioners will increase Tax Aggressiveness by 0.090.
6. The coefficient of the moderator variable (X2M) of 0.003 means that each increase of 1 unit in the Inventory Intensity of Independent Commissioners will increase Tax Aggressiveness by 0.003.

Partial Test (t-test)

The t-statistic test aims to determine the influence of independent variables individually on the dependent variable with a significance level of 0.05. If the t probability value < 0.05 or the calculated $t > \text{the table } t$, then the hypothesis is accepted; conversely, if the t probability > 0.05 or the calculated $t < \text{the table } t$, then the hypothesis is rejected. Here are the results of the t-statistic test:

1. Capital Intensity (X1): the regression coefficient value of the Capital Intensity variable is 1.548 and the t-value is 1.762 with a significance of 0.011. This indicates that the Capital Intensity variable (X1) has a positive and significant effect on Tax Aggressiveness.
2. Inventory Intensity (X2): the regression coefficient value of the Inventory Intensity variable is 1.233 and the t-value is 1.755 with a significance of 0.040. The Inventory Intensity variable (X2) also has a positive and significant effect on Tax Aggressiveness.
3. Capital Intensity-Independent Commissioner (X1-M): a coefficient value of 0.090 and a t-value of 1.052 with a significance of 0.298. This indicates that Independent Commissioners cannot moderate the influence of Capital Intensity on Tax Aggressiveness.
4. Inventory Intensity-Independent Commissioner (X2-M): the coefficient value is 0.003 and the t-value is 0.005 with a significance of 0.996. Independent Commissioners do not moderate the effect of Inventory Intensity on Tax Aggressiveness.

Coefficient of Determination Test (R2)

The Coefficient of Determination (R2) test shows how well the independent variable explains the dependent variable.

Table 4. Test of Determination Coefficient (R2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684	.468	.412	2.207

*Data processed by the author, 2024

The results of the coefficient of determination test above show an R Square value of 0.468 or 46.8%. This indicates that the Tax Aggressiveness variable (Y) can be explained by 46.8% by the independent variables, namely Capital Intensity, Inventory Intensity, and the moderating variable of Independent Commissioners. Meanwhile, the remaining 53.2% is explained by other variables.

V. CONCLUSION

The Influence of Capital Intensity on Tax Aggressiveness

Based on the results of the partial test, Capital Intensity has a positive and significant effect on tax aggressiveness in mining companies listed on the IDX for the period 2020-2023. This is indicated by the significance value of capital intensity of 0.011 (< 0.05), thus the first hypothesis (H1) is accepted.

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This means that the higher the capital intensity, the higher the level of tax aggressiveness, and vice versa.

Companies that seek to achieve tax savings or tax aggressiveness tend to increase their ownership of fixed assets (capital) to enhance depreciation expenses, which can suppress the company's profits, thereby reducing the tax burden (Lemmuel & Sukadana, 2022). According to agency theory, the company (agent) has an interest in suppressing profits, which affects the reduction of tax burden, ultimately decreasing the state's tax revenue (principal).

Capital Intensity in this study is measured by comparing the total fixed assets of the company with the total overall assets. The average capital intensity ratio of the mining companies studied is 0.3199 or about 32% of total assets. This indicates that these companies are trying to increase the depreciation costs of fixed assets in order to reduce profits and lower income tax expenses. The results of this study are in line with Maulana (2020), Yuliana and Wahyudi (2018), as well as Grace and Vidyarto (2020), who also found a positive influence between capital intensity and tax aggressiveness.

The Influence of Inventory Intensity on Tax Aggressiveness

Based on the partial test results in Table 4.5, Inventory Intensity has a positive and significant effect on tax aggressiveness in mining companies listed on the IDX for the period 2020-2023, with a significance value of 0.040 (< 0.05). This means that the second hypothesis (H2) is accepted; the higher the inventory intensity, the higher the tax aggressiveness, and vice versa. Companies that seek to save on taxes tend to invest in inventory, which results in increased carrying costs and company profits (Sari & Ajimat, 2023). According to agency theory, companies have an interest in suppressing profits by increasing carrying costs, thereby reducing the tax burden.

Inventory Intensity is measured by the ratio of total inventory to total assets. The average inventory intensity ratio of the companies studied is 0.2025, which indicates that approximately 20.25% of the total assets of the companies are inventory. The company strives to maintain the inventory of raw materials and finished goods to anticipate low storage costs and income tax burdens. The results of this study are in line with Lemmuel and Sukadana (2022), Anindyka et al. (2018), and Maulana et al. (2022), who also found the influence of inventory intensity on tax aggressiveness.

The Influence of Capital Intensity on Tax Aggressiveness with Independent Commissioners as a Moderating Variable

The results of the moderation test in Table 4.6 show that independent commissioners as a moderating variable do not moderate the effect of capital intensity on tax aggressiveness in mining companies on the IDX for the period 2020-2023, with a significance value of 0.298 (> 0.05), thus the third hypothesis (H3) is rejected. This means that the number of independent commissioners in the company does not affect the level of tax aggressiveness due to capital intensity.

Independent commissioners are members of the board of commissioners who come from outside the company's management. They are tasked with overseeing the organization within the company and can act as mediators between the commissioners and shareholders in case of conflicts. However, according to Tiaras & Wijaya (2017), independent commissioners do not proactively encourage management to comply with tax regulations, thus not minimizing tax evasion.

In this study, independent commissioners are measured by the ratio of the number of independent commissioners to the total number of board members. The average ratio of independent commissioners in the companies studied is 0.7216 or 72.16%. Ideally, this ratio should indicate a high level of oversight. However, independent commissioners usually receive incentives in the form of company stock ownership, so they tend to support policies that minimize the tax burden in favor of sufficient dividend payments.

According to agency theory, management (agent) and shareholders (principal) have interests that are prone to conflict. However, when the interests of the agent and principal align, conflicts and agency costs decrease. Independent commissioners are not optimal in minimizing the tax burden when the goals of management and shareholders are the same.

The Influence of Inventory Intensity on Tax Aggressiveness with Independent Commissioners as a Moderating Variable

The results of the moderation test in Table 4.6 show that independent commissioners as a moderating variable do not moderate the effect of inventory intensity on tax aggressiveness in mining companies listed on the IDX for the period 2020-2023, with a significance value of 0.996 (> 0.05). This leads to the rejection of the fourth hypothesis (H4). This means that the number of independent commissioners does not affect tax aggressiveness due to inventory intensity. Like capital intensity, independent commissioners are measured based on the ratio of the number of independent commissioners to the total number of board members. Although a high ratio is expected to enhance supervision, stock ownership incentives for independent commissioners might lead them to approve inventory intensity investment policies to minimize tax burdens.

CONCLUSION

Based on the research results and discussions presented in the previous chapter, the conclusion that can be drawn is as follows: Capital Intensity has a positive and significant effect on tax aggressiveness, which means that the higher the capital intensity, the higher the level of tax aggressiveness, and conversely, the lower the capital intensity, the lower the level of tax aggressiveness conducted by the company. Similarly, Inventory Intensity also has a positive and significant effect on tax aggressiveness, meaning that the higher the inventory intensity, the higher the level of tax aggressiveness, and the lower the inventory intensity, the lower the level of tax aggressiveness conducted by the company. However, Independent Commissioners cannot moderate the influence of Capital Intensity and Inventory Intensity on tax aggressiveness, which means that the number of independent commissioners cannot strengthen or weaken the level of tax aggressiveness influenced by capital intensity and inventory intensity.

REFERENCE

- Andhari, P. S., & Sukartha, I. M. (2017). Pengaruh Pengungkapan Corporate Social Responsibility, Profitabilitas, Inventory Intensity, Capital Intensity dan Leverage Pada Agresivitas Pajak. *E-Jurnal Akuntansi Universitas Udayana*, 2115-2142.
- Arianti, B. F. (2021). Komisaris Independen Sebagai Pemoderasi Pengaruh Intensitas Modal dan Biaya Utang Terhadap Agresivitas Pajak. *JRAP (Jurnal Riset Akuntansi dan Perpajakan)*, 196-205.
- Artinasari, N., & Mildawati, T. (2018). Pengaruh Profitabilitas, Leverage, Likuiditas, Capital Intensity dan Inventory Intensity Terhadap Tax Avoidance. *Jurnal Ilmu dan Riset Akuntansi*, 7(8), 1-18.
- Chen, S., Qjang, C., & Shevlin, T. (2010). Are Family Firms more Tax Aggressive than Non-Family Firms? *Journal of Financial Economics*, 95(1), 41-61.
- Darmadi, I. N., & Zulaikha. (2013). Analisis Faktor yang Mempengaruhi Manajemen Pajak dengan Indikator Tarif Pajak Efektif. *Diponegoro Journal of Accounting*, 2(1), 1-12.
- Dwiyanti, I. I., & Jati, I. K. (2019). Pengaruh Profitabilitas, Capital Intensity dan Inventory Intensity pada Penghindaran Pajak. *E-Jurnal Akuntansi Universitas Udayana*, 27(3), 2293-2321. doi:<https://doi.org/https://doi.org/10.24843/EJA.2019.v27.i03.p24>
- Fahrani, M., Nurlaela, S., & Chomsatu, Y. (2018). Pengaruh Kepemilikan Terkonsentrasi, Ukuran Perusahaan, Leverage, Capital Intensity dan Inventory Intensity Terhadap Agresivitas Pajak. *Jurnal Ekonomi Paradigma*, 52-60.
- Frank, M. M., Lynch, L. J., & Rego, S. O. (2009). Tax Reporting Aggressiveness and its Relation to Aggressive Financial Reporting. *Social Science Research Network*, 84(2), 467-496.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25*. Semarang: Badan Penerbit Universitas Diponegoro.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25 (Edisi 9)*. Badan Penerbit Universitas Diponegoro.
- Hama, A. (2020). *Analisis Kecenderungan Penghindaran Pajak Penghasilan*. Surabaya: Mitra Abisatya.
- Hanim, H., & Fatahurrazak. (2018). Pengaruh Dewan Komisaris, Komisaris Independen dan Kompensasi Dewan Komisaris Independen dan Direksi Terhadap Tindakan Agresivitas Pajak. *Jurnal Ilmiah Akuntansi dan Finansial Indonesia*, 37-50.

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- Hendriksen, E. S., & Breda, M. F. (1992). *Accounting Theory*. 5th Edition : Richard D. Irwin.
- Hery. (2017). *Analisis Laporan Keuangan*. Yogyakarta: CAPS (Central Academic Publishing Service).
- Jensen, M. C., & Meckling, W. H. (1976). Theory of The Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics, Vol. 3, No.4*, 305-360.
- Khatijah, S. (2019). Pengaruh Good Corporate Governance dan Manajemen Laba Terhadap Integritas Laporan Keuangan Pada Perusahaan Manufaktur Yang Terdaftar Pada Bursa Efek Indonesia Tahun 2013-2016. 6.
- Khumairoh, F., Solikhah, B., & Yulianto, A. (2017). Praktik Penghindaran Pajak Perusahaan Manufaktur di Indonesia. *Simposium Nasional Akuntansi XX*, 1-20.
- Lanis, R., & Richardson, G. (2012). Corporate Social Responsibility and Tax Aggressiveness : a Test of Legitimacy Theory. *Accounting, Auditing & Accountability Journal*, 75-100.
- Linda, G. (2021). Pengaruh Capital Intensity, Inventory Intensity dan Leverage Terhadap Agresivitas Pajak Dengan Kepemilikan Institusional Sebagai Variabel Moderasi. *Skripsi Universitas Muhammadiyah Palembang*, 1-36.
- Maulana, T., Putri, A. A., & Marlina, E. (2022). Pengaruh Capital Intensity, Inventory Intensity dan Leverage Terhadap Agresivitas Pajak. *JAK (Jurnal Akuntansi) Volume 17, Nomor 1*, 48-60.
- Muliasari, R., & Hidayat, A. (2020). Pengaruh Likuiditas, Leverage dan Komisaris Independen Terhadap Agresivitas Pajak Perusahaan. *Jurnal Manajemen dan Keuangan*, 28-36.
- Muliawati, I. P., & Karyada, I. F. (2020). Pengaruh Leverage dan Capital Intensity Terhadap Agresivitas Pajak Dengan Komisaris Independen Sebagai Variabel Pemoderasi (Studi Pada Perusahaan Manufaktur Sektor Industri Barang dan Konsumsi Yang Terdaftar di Bursa Efek Indonesia Periode 2016-2018). *Hita Akuntansi dan Keuangan*, 495-524.
- Musyaroffah, E., & Amanah, L. (2017). Pengaruh Kepemilikan Manajerial, Leverage dan Size Terhadap Cash Effective Tax Rate. *Jurnal Ilmu dan Riset Akuntansi*, 6(9), 1-16.
- Muzaimi, E. N., & Parinduri, A. Z. (2022). Faktor-Faktor Yang Mempengaruhi Agresivitas Pajak Pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia Tahun 2018-2021. *Jurnal Ekonomi Trisaksti*, 581-594.
- Oktaviani, N., Pambelum, Y. . J., Amelia, V. R., Hendrayati, S. L. ., Husnatarina, F. ., & Umbing, G. B. . (2024). THE EFFECT OF COMPANY GROWTH AND FREE CASH FLOW ON DEBT POLICY WITH PROFITABILITY AS A MODERATING VARIABLE. *Sustainability Accounting Journal*, 1(1), 51–67. <https://doi.org/10.52300/saj.v1i1.17151>
- Pratama, I. (2020). Pengaruh Capital Intensity, Inventory Intensity dan Profitabilitas Terhadap Agresivitas Pajak Dengan Komisaris Independen Sebagai Variabel Moderating. *Skripsi Universitas Negeri Semarang*, 1-88.
- Prihastanti, R., & Kiswanto. (2015). Tingkat Kepatuhan Wajib Pajak Badan Terhadap Penerimaan Pajak Dimoderasi oleh Penerimaan Pajak. *Accounting Analysis Journal*, 4(1), 1-9.
- Priskila, N., Yuni, S., Fransiska, C., Asi, O. Y., Diarsyad, I., & Christian, I. (2023). Pengaruh Capital Intensity dan Institusional Ownership Terhadap Tax Avoidance Dengan Profitabilitas Sebagai Pemoderasi (Studi Pada Perusahaan Sektor Industri Barang Konsumsi yang Terdaftar di BEI Periode 2019-2022). *Jurnal Manajemen Riset Inovasi (MRI)*, 172-190.
- Resmi, S. (2016). *Perpajakan : Teori dan Kasus*. Jakarta: Salemba Empat.
- Ria, D. (2017). Pengaruh Profitability, Komisaris Independen, Komite Audit, Leverage dan Capital Intensity Ratio Terhadap Tarif Pajak Efektif (ETR). *Journal of Chemical Information and Modeling*, 4(2), 4441-4455.
- Rochmadi, R. (2022). Pengaruh Capital Intensity dan Inventory Intensity Terhadap Penghindaran Pajak (Studi Pada Perusahaan LQ-45 yang Terdaftar di Bursa Efek Indonesia (BEI) Tahun 2018-2020). *Skripsi Universitas Islam Sultan Agung*, 7-10.
- Rodriguez, E. F., & Arias, A. M. (2012). Do Business Characteristics Determine an Effective Tax Rate? *Chinese Economy*, 45(6), 60-83.
- Saputro, D. A., Pratomo, D., & Kurnia, S. A. (2018). Pengaruh Leverage, Capital Intensity dan Inventory Intensity Terhadap Tax Avoidance. *E-Proceeding of Management*, 5(1), 713-719.

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- Sari, D. K., & Martani, D. (2010). Ownership Characteristic, Corporate Governance and Tax Aggressiveness. *The 3rd Accounting & The 2nd Doctoral Colloquium*.
- Scott, W. R. (2015). *Financial Accounting Theory, 7th Edition*. Canada: Pearson Education Limited.
- Siregar, R., & Widyawati, D. (2016). Pengaruh Karakteristik Perusahaan Terhadap Penghindaran Pajak Perusahaan Manufaktur Di BEI. *Jurnal Ilmu dan Riset Akuntansi*.
- Sitorus, R. R., & Bowo, A. T. (2018). Pengaruh Capital Intensity dan Inventory Intensity Terhadap Agresivitas Pajak Yang Dimoderasi Oleh GCG (Good Corporate Governance). *Media Akuntansi Perpajakan*, 17-29.
- Suandy, E. (2017). *Perencanaan Pajak (6th ed)*. Jakarta: Salemba Empat.
- Sugiyarti, L., & Ramadhani, P. (2019). Agresivitas Pajak, Keputusan Pendanaan dan Kebijakan Dividen Terhadap Pengukuran Nilai Perusahaan. *Jurnal Akuntansi Trisakti*, 233. doi:<https://doi.org/10.25105/jat.v6i2.5477>
- Sugiyono. (2018). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
- Syamsuddin, M., & Suryarini, T. (2020). Analisis Pengaruh Intensitas Modal, Intensitas Persediaan, Komisaris Independen dan Kepemilikan Manajerial Terhadap ETR. *Jurnal Penelitian Ekonomi dan Bisnis*, 5(1), 52-65. doi:<https://doi.org/10.33633/jpeb.v5i1.2707>
- Wijayanti, D. (2020). Pengaruh Debt to Equity, Return on Assets dan Capital Intensity Terhadap Tax Avoidance (Studi Empiris Pada Perusahaan Industri Barang Konsumsi yang Terdaftar di Bursa Efek Indonesia). *Skripsi*, 65-66.
- Wulansari, R. (2020). Faktor-Faktor Yang Mempengaruhi Effective Tax Rate (ETR) Pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia Selama Periode 2016-2018. *Jurnal Akuntansi*, 1-10.