DETERMINANTS OF TAX AGGRESSIVENESS IN THE BASIC MATERIALS SECTOR

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Abstract
The goal of this research is to ascertain whether the variable of tax aggressiveness is impacted by variables like corporate risk, political connections, and fixed asset intensity. Purposive sampling was used to choose 102 basic raw materials corporates that were listed on the Indonesia Stock Exchange between 2017 until 2023. Companies yearly financial reports provided the data. SPSS 27 was used to process the data. The findings indicated that tax aggressiveness was significantly impacted by fixed asset intensity. Tax aggressiveness was not much impacted by political connections and corporate risk. At the same time, corporate risk, political connections, and fixed asset intensity all significantly impacted tax aggressiveness. The study's independent variables can account for 10,6%of tax aggressiveness, according to the adjusted R^2 value of 0,106. Other variables not included in the research model, such as inventory intensity, profitability, leverage, liquidity, and corporate size, account for 89,4% of the total. Researchers in the future can prolong the study time and include more independent factors. To get better study results, it is also intended that studies on different businesses in different industries might be carried out.
Keywords: Fixed Asset Intensity; Political Connection; Corporate Risk; Tax Aggressiveness

1. Introduction

The basic raw materials industry in Indonesia is very important to the country's economy. This industry plays a significant role in the gross domestic product (GDP). This sector includes various industries that are important for everyday life. However, this sector faces major problems due to taxation issues. These taxation issues are a major concern in the management of state finances. Aggressive taxation practices occur when companies try to pay less tax by using certain strategies. These strategies may exceed the limits permitted by law. This is a major problem in Indonesia, as it affects state revenue and the amount of tax paid by the public. From 2017 to 2023, the government has made several changes to improve tax laws and reduce tax avoidance. One major change was the 2020 tax reform, which aimed to improve the tax system and prevent companies from avoiding taxes in harmful ways. An example of this occurred in 2024 when the Director of PT SDR violated the Taxation Harmonization Law. This caused the state to lose Rp 3.9 million due to the use of false invoices and incorrectly completed tax forms. This case shows how important it is to have strict rules and supervision to prevent such losses. Aggressive tax practices are a way for

companies to reduce their tax payments without breaking the law. They do this by carefully planning their taxes, sometimes using loopholes or weaknesses in the system to reduce the amount they have to pay. The main goal is to increase the company's profits. While this may help the business in the short term, it can hurt the state's revenue and damage the company's image if it becomes public knowledge. The latest data from Statistics Indonesia shows that the amount of tax collected by the state has undergone significant changes. In 2017, there was a 4.55% increase in revenue, followed by a 13.04% increase in 2018, but in 2019 and 2020 there was a sharp decline due to the pandemic, amounting to 1.8% and 16.88% respectively. In 2021, there was a drastic increase of 20.44%, followed by 31.44% in 2022, and a decline of 4.11% in 2023. The intensity of fixed assets, political connections, and company risk are some of the many variables that influence companies' reluctance to pay taxes. Oktarini et al., (2022) state that fixed asset intensity increases tax aggressiveness. Compared to using depreciation expenses, companies that use fixed assets can increase their net profit more. Kaawoan & Nugrahanti, (2023) state that political connections have a negative effect on tax aggressiveness. Reza & Asqolani, (2022) found that corporate risk affects tax aggressiveness. These results differ from (Amalia, 2021) , which states that fixed asset intensity does not affect tax aggressiveness. Paembonan et al., (2023) states that political connections do not affect tax aggressiveness. Sugeng et al., (2020) found that company risk does not affect tax aggressiveness. Based on the background described above, the objectives of this study are as follows:

1) Understanding the effect of fixed asset intensity on tax aggressiveness.
2) To determine the effect of political connections on tax aggressiveness.
3) To determine the effect of corporate risk on tax aggressiveness.
4) To determine the effect of fixed asset intensity, political connections, and corporate risk on tax aggressiveness.

2. Theoretical Framework

2.1 Agency Theory

The agency theory introduced by Jensen & Meckling (1976) is an important theory for understanding the internal dynamics of a company, particularly regarding the relationship between shareholders as owners and management as agents. This theory relies on the possibility of conflicts of interest where agents, who are given the responsibility of running the company, have better knowledge of the company's operations than shareholders. This condition may encourage agents to make decisions that benefit themselves, even though they may potentially conflict with the interests of shareholders who are oriented towards wealth maximization. To minimize these conflicts of interest and align the objectives of principals and agents, principals need to incur agency costs, which include monitoring costs, bonding costs, and residual losses (Rahayu & Wibowo, 2023) . In this context, various strategic corporate decisions, including those related to asset structure, external networks, risk management, and taxation strategies, can be analyzed through the agency problem.

2.2 Tax Aggressiveness

Tax aggressiveness is a significant phenomenon in the realm of finance and modern corporate governance. This phenomenon refers to businesses' efforts to reduce their tax liabilities by using more extreme taxation approaches. These efforts may include actions that are legally valid or those that are in a legal grey area, often involving more complex tax planning and the exploitation of loopholes in existing tax regulations (Lanis & Richardson, 2012). In essence, tax aggressiveness is when companies attempt to reduce the amount of tax they have to pay, either legally or illegally, by exploiting loopholes in tax regulations. Tax itself is an important part of business decisions, because the greater the possibility for a company to reduce its tax burden, the more aggressive the company is towards tax. As a result, some companies take measures to minimize their tax payments. According to Hanlon & Heitzman, (2010) tax aggressiveness is the highest level of various types of tax planning behavior. Companies take aggressive tax measures because they seek to increase the value of the company by undertaking various tax planning efforts to reduce their tax burden. Although tax aggressiveness can result in short-term tax savings and potential increases in company value, this strategy often carries significant risks. These risks include reputational and legal risks for the company. In addition, tax aggressiveness can also harm the economy and state finances by reducing the tax base available for development and public services. Because it is considered to fall short of public expectations and harm the state, the purpose of these actions often attracts public attention**.**

2.3 Fixed Asset Intensity

In financial statements, fixed assets are the components with the highest value, because there are depreciation costs, and ownership of company assets can reduce tax payments. Company management will invest unused funds in fixed assets, which will generate high depreciation costs that can reduce the company's tax liabilities. This is in line with agency theory, where managers are authorized to manage unused funds to reduce the tax payable (Amalia, 2021). Companies with many fixed assets need assistance to maximize depreciation expenses to reduce net income. Corporate taxation can be influenced by depreciation caused by fixed asset ownership. One of the costs that can be tax-deductible is depreciation. A high percentage of fixed assets results in lower taxes. The cost of devaluation of a company's cost structure is implied by the amount of investment made in fixed assets. In addition, there are a number of approaches available in accounting principles for calculating the depreciation of invested fixed assets. Fixed asset intensity is a measure of a company's fixed assets compared to its ownership intensity. Companies with low fixed asset levels will have higher tax burdens, as tax aggressiveness is influenced by fixed asset intensity. These fixed assets are purchased for use in company operations and cannot be sold.

2.4 Political Connections

Political connections are a significant phenomenon in the business world, where companies establish unique relationships with governments or political parties. These relationships are believed to facilitate business operations and even reduce the detection of tax avoidance practices. Companies with political connections often feel advantaged because they can receive special treatment, such as faster loan approvals and the possibility of lower tax audits. Most businesses consider political connections to be a useful tool for achieving their goals, and in general, businesses with political connections are more likely to engage in aggressive taxation. This is because these businesses are assumed to be more "protected" by the government, thereby reducing the likelihood of tax aggression being detected. Research shows that there is a beneficial impact of directors' political affiliations on aggressive taxation. The relationship between tax aggressiveness and political connections can be viewed from two sides: the impact of bureaucratic incentives and the effects of political favouritism. According to (Anggraini & Widarjo, 2020) the effects of political favouritism are the most accurate perspective for analysing the relationship between directors' political affiliations and tax aggressiveness. This implies that a director's tax aggressiveness tends to increase in line with the strength of their political ties.

2.5 Corporate Risk

Corporate risk is a fundamental aspect of business performance and stability analysis. The possibility of a discrepancy between wealth and expected estimates is known as corporate risk (Ananta & Machdar, 2023) . Furthermore, corporate risk can also be understood as the level of income fluctuation determined by the standard deviation formula, whereby the more a company's results deviate from the norm, the riskier the business is. Company leaders who adopt risky policies tend to expose the company to high risk, regardless of whether they are born risk-takers or risk-averse. Corporate risk encompasses several interrelated categories that can affect overall business operations and sustainability, such as (Suandy, 2017) : Financial Risk, Operational Risk, Market Risk, Reputational Risk, and Political Risk.

3. Research Method

3.1 Population and Sample

Secondary data was used in this study, which employed a quantitative approach. Data was collected from the IDX annual financial reports and company websites. This study utilized SPSS version 27 software. For this study, purposive sampling was used. The following criteria were used for sampling:

1) Basic raw material companies listed on the IDX consecutively from 2017 to 2023.
2) Basic raw material companies that did not have financial reports from 2017 to 2023 or
3) Basic raw material companies that do not use the Rupiah in their financial reports from 2017 to 2023.

3.2 Operational Variables

- Tax Aggressiveness (Y)

$$CETR = \frac{pajak\ kini}{laba\ sebelum\ pajak} x\ 100\%$$

- Fixed Assets Intensity (X_1)

$$IAT = \frac{total\ aset\ tetap}{total\ aset} X\ 100\%$$

- Political Connections (X_2)

  This dummy variable has a value of 1 if the company has political connections and 0 if it does not. Companies are considered to have political connections in this study if they meet the following criteria:

1. The directors or commissioners are members of the council, members of the cabinet, government officials (including military officials), or members of a political party.

2. Directors or commissioners are former members of parliament, former cabinet members, and former government officials (including military officials).
3. One of the shareholders holding more than 10% of the shares is a member of a political party that has ties to members of the board.

- Company Risk (X_3)

$$DER = \frac{total\ liabilitas}{total\ ekuitas}\ x\ 100\%$$

4. Results and Discussion

4.1 Descriptive Statistics

The following table shows the mean, standard deviation, maximum, and minimum values for each variable, providing a descriptive statistical overview of the data (Setiyawami, 2022).

Table 1. Descriptive Statistics

Variables	N	Mean	Standard Deviation	Minimum	Maximum
Y	147	(0,0721)	0,18877	(0,61)	0,39
X_1	147	0,4048	0,21216	0,01	0,74
X_2	147	0,08	0,275	0	1
X_3	147	1,032	0,90779	0,12	4,1

Source: Processed secondary data, 2025

4.2 Normality Test

One of the objectives of this test is to determine whether the independent and dependent variables in the regression model have a normal distribution. This study uses the Kolmogorov-Smirnov method.

Tabel 2. Uji Normalitas

Unstandardized Residual		
N		147
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	,17660398
Most Extreme Differences	Absolute	,089
	Positive	,089
	Negative	-,066
Test Statistic		,089
Asymp. Sig. (2-tailed)		,006[c]

a. Test distribution is Normal
b. Calculated from data.
c. Lilliefors Significance Correction.

Sumber:Data sekunder yang diolah, 2025

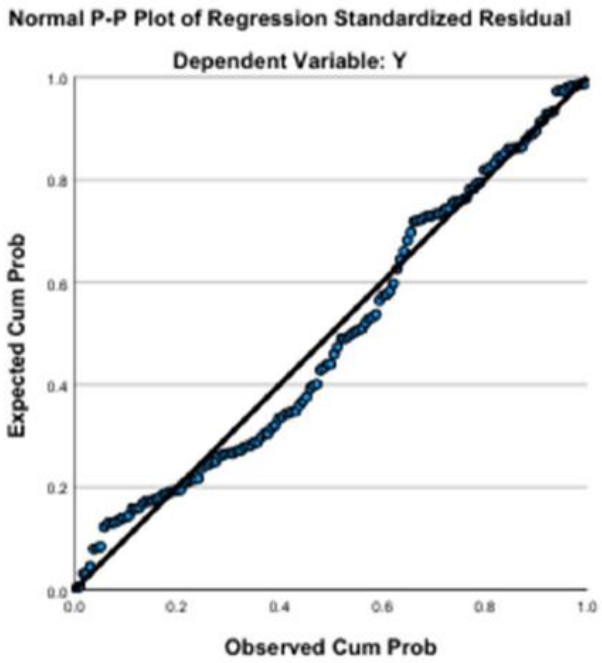

Figure 1 Normality Test

The graph above shows that the points follow the diagonal line axis, indicating that the regression model has met the normality assumption.

4.3 Multicollinearity Test

The purpose of this test is to determine whether there is a correlation between the independent variables in the regression model. If the tolerance value is > 0.1 or the VIF is < 10, then there is no multicollinearity in the regression model.

Tabel 3. Uji Multikolinearitas

Model		Collineary Statistics	
		Tolerance	VIF
1	(constant)		
	X_1	0,941	1,063
	X_2	0,967	1,034
	X_3	0,957	1,045

a. Dependent Variable : CETR

Sumber : Data sekunder yang diolah, 2025

The results of the table above show that X_1, X_2, and X_3 have tolerance values > 0.1 and VIF < 10. This indicates that multicollinearity does not occur in this study.

4.4 Autocorrelation Test

The test process was conducted to determine whether the residuals in period t are correlated with the correlations in the previous period (t-1). There are no signs of autocorrelation in a good regression model.

Tabel 4. Uji Autokorelasi

Model	Durbin - Watson
1	1,943

Sumber : Data sekunder yang diolah, 2025

With a significance level of 0.05, the number of data points (n) = 147, the number of independent variables (k) = 3, and the DW table values dL = 1.689 and dU = 1.7722, obtained from the table above. Consequently, 4-dU = 2.2278 and 4-dL = 2.311. In this study, it was found that 1.7722 < 1.943 < 2.2278, which is the condition for data to be declared free of autocorrelation if dU < d < 4-dU.

4.5 Heteroscedasticity Test

This is a test to determine whether there is a difference in the variance of the residuals between observations in the regression model. Researchers use scatterplots to determine the results.

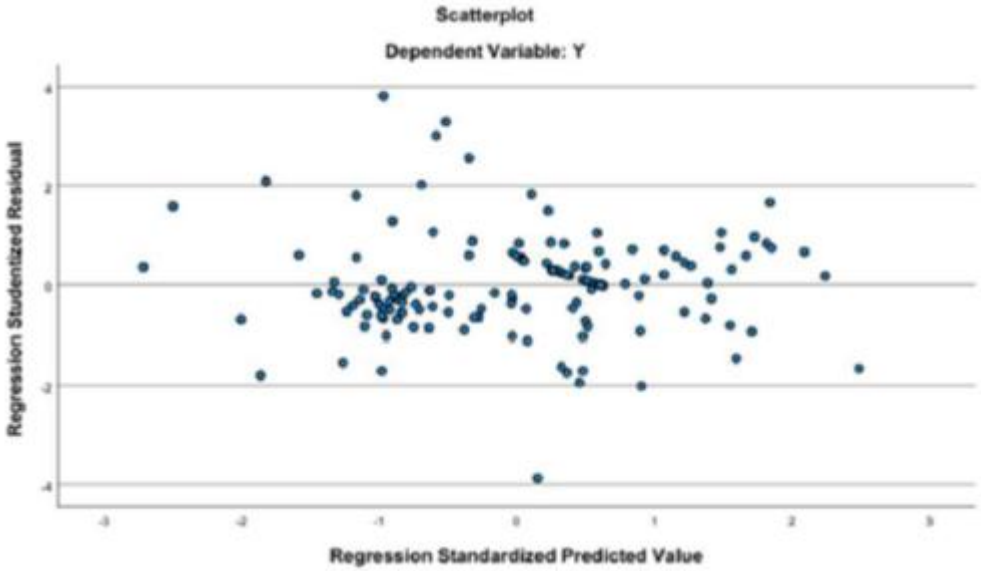

Figure 2 Heteroscedasticity Test

Based on the figure above, the research data does not exhibit heteroscedasticity, where the points are scattered.

4.6 Multiple Regression Analysis

Tabel 5. Analisis Regresi Linier Berganda

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(constant)	(0,194)	0,039	
	X_1	0,251	0,072	0,282
	X_2	0,122	0,055	0,177
	X_3	0,010	0,017	0,049

a. Dependent Variable : CETR

Sumber : Data sekunder yang diolah, 2025

From the table above, the following regression equation is obtained:

$CETR = (0.194) + 0.251.X_1 + 0.122.X_2 + 0.01.X_3 + e$

4.7 Coefficient of Determination

A test was conducted to determine how well the dependent variable is explained by the variation in the independent variables. To overcome the limitations of using the coefficient of determination, this study utilized the Adjusted R Square.

Table 6. Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	0,353	0,125	0,106	0,17845

a. Predictors : (Constant), X_1, X_2, X_3
b. Dependent Variable : CETR

Source: Processed secondary data, 2025

The table above shows an Adjusted R Square value of 0.106. This indicates that the intensity of fixed assets, political connections, and corporate risk explain 10.6% of tax aggressiveness. Other variables not included in this study account for 89.4% of the total.

5. Conclusion

Based on the research conducted using SPSS version 27, the following conclusions can be drawn:

1) The hypothesis test on fixed asset intensity affecting tax aggressiveness is supported, as companies that use fixed assets for their operational activities are able to increase their net profit more than companies that use depreciation expenses.
2) Testing the hypothesis that political connections do not affect tax aggressiveness.
3) The hypothesis that corporate risk does not affect tax aggressiveness is tested, because the size of a company is associated with a higher level of government scrutiny, increasing the risk of corporate tax planning.

6. Recommendations

1) Management should review overly aggressive tax planning approaches, even if aided by political connections. Given the significant risks associated with reputation and legal consequences, companies are advised to consistently adopt tax planning practices that prioritize sustainability principles.
2) Investors are expected to look at the company's financial performance and compliance with applicable tax regulations before making investment decisions.
3) It is recommended that further research examine additional factors not discussed in this study, such as leverage, liquidity, company size, profitability, and inventory intensity. It is also expected that a larger sample size would be useful for improving the generalization of the findings.

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(Suandy, 2017)

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