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INFLUENCE OF FINANCIAL LEVERAGE, CAPITAL INTENCITY, AND INVENTORY INTENSITY, ON TAX AGGRESSIVITY

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ABSTRACT

This study aims to determine effect of financial leverage, capital intensity, and inventory intensity on tax aggressiveness in coal mining companies on the Indonesia Stock Exchange for the 2017-2021 period. The data analysis method uses panel data regression. The results of the study show that simultaneously financial leverage, capital intensity and inventory intensity affect tax aggressiveness,this is evidenced by a probability value of 0.020531<0.05. The financial leverage variable has a negative effect on tax aggressiveness, this is evidenced by the probability value of 0.0088<0.05 and the coefficient value of -2.735938. The capital intensity variable has no effect, this is evidenced by the probability value of 0.8621>0.05. The inventory intensity variable has no effect on tax aggressiveness. This is evidenced by the probability value of 0.4244>0.05

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1. INTRODUCTION

Every taxpayer is required to participate in paying taxes, so that the rate of growth and implementation of national development can run well for the welfare of the country. Tax is a sector that plays an important role in the economy, because in the revenue post of the State Revenue and Expenditure Budget (APBN) tax revenue has greater income compared to other sources of revenue (non-tax). Coal is used as an ingredient in paper, fertilizer, plastics, steel and ceramics. In addition, coal is also used as a heat source for the production of cement and natural gas. However, in 2015, out of 8,003 coal industry taxpayers, there were 4,532 taxpayers who did not report their SPT. This figure does not include small scale coal companies that are not registered as taxpayers.

PT. Adaro Energy which is one of the largest coal companies that has shifted its profits in large numbers to its network of companies overseas. This helps PT. Adaro Energy to avoid or minimize the amount of tax that should be paid in Indonesia. Cases of tax evasion committed by PT. Adaro Energy, namely by getting a large profit from trading the coal they mine in Indonesia through its subsidiaries which are in countries with low tax obligations. Singapore is the country chosen by PT. Adaro Energy to set up its subsidiary, in which Singapore has an average tax rate of 10%. In contrast to Indonesia, where the average level of tax payments is 50%. The government's efforts to optimize the tax sector are not without obstacles. One of the government's obstacles in optimizing the tax sector is tax avoidance and tax evasion, with various policies implemented by companies to reduce the amount of corporate tax paid, one of which is companies that choose the right accounting method to reduce effective tax rate (ETR). Tax avoidance (tax avoidance) is interpreted as an effort to ease the tax burden which can affect the reduction of corporate taxes and in practice does not violate the law (Barli, 2018).

This research is a development of Desi Natalya's research (2018) regarding corporate tax aggressiveness. Where in this study leverage and capital intensity have a significant effect on corporate tax aggressiveness. However, here the author adds a different independent variable, namely inventory intensity which refers to Suripto's research (2021) where the research says inventory intensity has a significant effect on tax aggressiveness. The author conducted research in different periods and the objects used in this study were companies in the coal mining sub-sector on the Indonesia Stock Exchange (IDX) in 2017-2021.

Financial leverage can describe the financial risk of a company, if the level of leverage is high, the company is very dependent on external loans and if the level of leverage is low, the company is very dependent on paid company capital (Dhian and Ita, 2017). Therefore the amount of debt can affect the amount of tax that will be paid by the company due to interest costs that must be paid.

The capital intensity ratio can reduce the tax burden incurred by the company, because in fixed assets there is an economic age which creates a depreciation expense on fixed assets every period, when a company has a high fixed asset value it will cause a high depreciation expense on fixed assets as well, thing This will certainly reduce company profits which will reduce the tax burden that must be paid by the company (Oktaviani and Sofie, 2018)

According to Anindyka et al (2018) in Hidayat and Eta (2018) If the inventory owned by a company is high, the expenses incurred to manage inventory will also be high. Companies that invest in inventory in warehouses will cause the formation of maintenance and inventory storage costs resulting in an increase in the company's expenses so that it will reduce company profits (Suripto, 2021). Based on the background description above, the author intends to conduct further research with the title Effect of Financial Leverage, Capital Intensity, and Inventory Intensity, on Tax Aggressiveness.

2. METHODS

Types of research

The type of research used in this research is quantitative research. According to Sugiyono (2015: 7) in Donny (2018) "quantitative research method can be interpreted as a research method based on the philosophy of positivism, used to research on certain populations or samples, sampling techniques are generally carried out randomly, collecting data using research instruments , data analysis is quantitative or statistical in nature with the aim of testing the established hypotheses".

Data collection technique

In this study, the data used is secondary data derived from the financial statements of mining companies listed on the Indonesia Stock Exchange. The data is taken from annual reports published on the website of the Indonesia Stock Exchange with research observation times of 2017 - 2021. The data collection method used in this research is to conduct documentation where researchers seek data directly from records or financial reports on the Stock Exchange. Indonesian Securities.

Data analysis technique

The data analysis technique in this study is panel data using statistical calculations. The research data will be calculated using the EViews series 10 (ten) statistical software program.

3. RESULTS AND DISCUSSION

Statistik Deskriptif

The dependent variable in this study is tax aggressiveness (Y). From the results of descriptive statistics, the average value (mean) is 0.233892 with a standard deviation of 0.063353. The highest (maximum) value of tax aggressiveness of 0.353800 is owned by the Golden Energy Mines Tbk company in 2019, while the lowest (minimum) value of tax aggressiveness is 0.006300, namely the Petrosea Tbk company in 2017.

The first independent variable in this study is financial leverage (X1). From the results of descriptive statistics, the average value (mean) is 0.077450 with a standard deviation of 0.141295. The highest value (maximum) of financial leverage of 0.623100 is owned by the company Toba Bara Sejahtra Tbk in 2020, while the lowest (minimum) value of financial leverage is 0.012700, namely in the company Harum Energy Tbk in 2017.

The second independent variable in this study is capital intensity (X2). From the results of descriptive statistics, the average value (mean) is 0.213148 with a standard deviation of 0.128884. The highest (maximum) value of capital intensity of 0.603600 is owned by the company Petrosea Tbk in 2017, while the lowest (minimum) value of capital intensity is 0.031100, namely in the company Toba Bara Sejahtra Tbk in 2021.

The third independent variable in this study is inventory intensity (X3). From the results of descriptive statistics, the average value (mean) is 0.059458 with a standard deviation of 0.039317. The highest (maximum) value of inventory intensity of 0.163900 is owned by Bayan Resources Tbk in 2019, while the lowest (minimum) value of inventory intensity is 0.008000, namely Petrosea Tbk in 2020.

Table 1. Panel Data Regression Model Selection

No	Uji Pemilihan Model	Keterangan	Yang Terpilih
1	Uji *Chow*	CEM vs FEM	FEM
2	Uji *Hausman*	FEM vs REM	REM
3	Uji *Lagrange Multiplier*	CEM vs REM	REM

Source: Data Processed Using E-views Version 10 (2022)

From the Chow test, Hausman test and Larange multiplier test that have been carried out, the researchers decided that the best model to use in this study was the random effect model (REM).

Classic assumption test

In this study, four classical assumption tests were carried out, namely normality, multicollinearity, heteroscedasticity and autocorrelation.

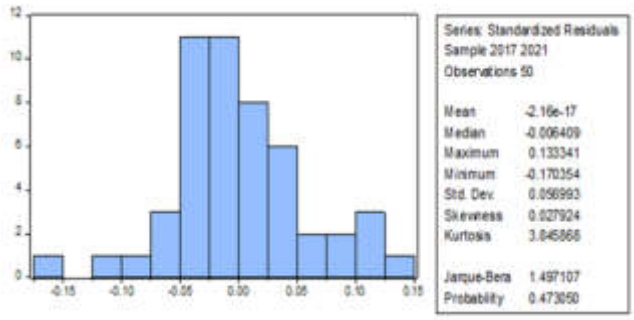

Figure 1. Normality Test

Based on Figure 1 it can be seen that the probability value indicates a value of 0.473050. The probability value is > 0.05 so it can be concluded that the data is normally distributed, thus the assumption of normality has been fulfilled.

Table 2. Multicollinearity Test

	Y	X1	X2	X3
Y	1.000000	-0.434982	-0.101403	0.226459
X1	-0.434982	1.000000	0.111715	-0.388610
X2	-0.101403	0.111715	1.000000	-0.084621
X3	0.226459	-0.388610	-0.084621	1.000000

Based on table 2, it explains that the coefficient value between the independent variables in this study has a value of less than 0.80, which means it can be concluded that the data used in this study is free from elements of multicollinearity problems.

Table 3. Heteroscedasticity Test

Heteroskedasticity Test: ARCH			
F-statistic	1.019618	Prob. F(1,47)	0.3178
Obs*R-squared	1.040435	Prob. Chi-Square(1)	0.3077

Based on table 3 it can be seen that the Chi-Square probability value indicates a value of 0.3077. The probability value is > 0.05 so it can be concluded that there is no heteroscedasticity in this study.

Table 4. Autocorrelation Test

Weighted Statistics			
R-squared	0.189727	Mean dependent var	0.189134
Adjusted R-squared	0.136883	S.D. dependent var	0.060530
S.E. of regression	0.056235	Sum squared resid	0.145470
F-statistic	3.590331	Durbin-Watson stat	1.590710
Prob(F-statistic)	0.020531		

Based on table 4, the value of Durbin Watson in this study has a value of 1.590710. The Durbin Watson value is between -2 and +2 or -2 < 1.590710 < +2, which means that it can be concluded that the model does not have autocorrelation problems.

Table 5 Multiple Linear Regression Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	-0.191952	0.070159	-2.735938	0.0088
X2	-0.012601	0.072153	-0.174640	0.8621
X3	0.193863	0.240510	0.806049	0.4244
C	0.251737	0.026488	9.503734	0.0000

From the results of hypothesis testing, it can be stated that the three independent variables financial leverage (X1), capital intensity (X2) and inventory intensity (X3) have an influence on the dependent variable, namely Tax Aggressiveness (Y). The results of the multiple linear regression analysis equation are as follows:

ETR = 0.251737 - 0.191952X1 - 0.012601X1 + 0.193863 + ε

Table 6 Test of the Coefficient of Determination

Weighted Statistics			
R-squared	0.189727	Mean dependent var	0.189134
Adjusted R-squared	0.136883	S.D. dependent var	0.060530
S.E. of regression	0.056235	Sum squared resid	0.145470
F-statistic	3.590331	Durbin-Watson stat	1.590710
Prob(F-statistic)	0.020531		

The results of the calculation of the regression analysis obtained adjusted R square (R2) of 0.136883. Thus it can be concluded that tax aggressiveness can be explained by the factors of financial leverage, capital intensity, and inventory intensity of 13.6883%, while the remaining 86.3117% is explained by other variables outside this study.

Table 7 Simultaneous Test (Test F)

Weighted Statistics			
R-squared	0.189727	Mean dependent var	0.189134
Adjusted R-squared	0.136883	S.D. dependent var	0.060530
S.E. of regression	0.056235	Sum squared resid	0.145470
F-statistic	3.590331	Durbin-Watson stat	1.590710
Prob(F-statistic)	0.020531		

Based on table 7 it can be seen that the F-statistic value which is a calculated f value is 3.590331 > from f table 2.81 and the probability value (F-statistic) is 0.020531 < from a significance value of 0.05. So it can be concluded that the variables financial leverage, capital intensity, and inventory intensity simultaneously affect tax aggressiveness.

Table 8 Partial Test (t test)

Weighted Statistics			
R-squared	0.189727	Mean dependent var	0.189134
Adjusted R-squared	0.136883	S.D. dependent var	0.060530
S.E. of regression	0.056235	Sum squared resid	0.145470
F-statistic	3.590331	Durbin-Watson stat	1.590710
Prob(F-statistic)	0.020531		

Based on table 8 it can be concluded as follows:

1. Financial leverage has a t value of -2.735938 and a t table value of 1.67866 with a significant level of α used is 0.05. From this it can be seen where the value is -2.735938 < 1.67866 and a significant value of 0.0088 where the value is 0.0088 < 0.05. So it can be concluded that financial leverage has a negative effect on tax aggressiveness.
2. Capital intensity has a t value of -0.174640 and a t table value of 1.67866 with a significant level of α used is 0.05. From this it can be seen where the value is -0.174640 < 1.67866 and a significant value of 0.8621 where the value is 0.8621 > 0.05. So it can be concluded that capital intensity has no significant effect on tax aggressiveness.
3. Inventory Intensity has a t value of -0.806049 and a t table value of 1.67866 with a significant level of α used is 0.05. From this it can be seen where the value is -0.806049 < 1.67866 and a significant value of 0.4244 where the value is 0.4244 > 0.05. So it can be concluded that Inventory Intensity has no significant effect on tax aggressiveness.

4. CONCLUSION

The independent variables financial leverage, capital intensity, and inventory intensity simultaneously affect the dependent variable, namely tax aggressiveness. The independent variable financial leverage partially has a negative effect on tax aggressiveness. The independent variable capital intensity partially has no effect on tax aggressiveness. The independent variable inventory intensity partially has no effect on tax aggressiveness.

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