

CSR Disclosure, Foreign Ownership, and Tax Aggressiveness: Evidence from Indonesian Mining Companies toward SDG 16

Abidah Dwi Rahmi Satiti^{*1,2}, Doddy Setiawan¹, Djoko Suhardjanto¹, Wahyu Widarjo¹,
Setianingtyas Honggowati¹

¹Universitas Sebelas Maret, Surakarta, Indonesia

²Universitas Islam Lamongan, Lamongan, Indonesia



DOI : <https://doi.org/10.63230/jocsis.3.1.298>

Sections Info

Article history:

Submitted: February 15, 2026

Final Revised: April 12, 2026

Accepted: June 2, 2026

First Available Online: July 26, 2026

Publication Date: March 27, 2027

Keywords:

Corporate Social Responsibility

Disclosure;

Foreign Ownership;

Mining Companies;

SDG 16;

Tax Aggressiveness.

ABSTRACT

Objective: To examine the effect of corporate social responsibility disclosure on tax aggressiveness and investigates whether foreign ownership moderates this relationship among mining companies listed on the Indonesia Stock Exchange. This study contributes to Sustainable Development Goal (SDG) 16 by highlighting the importance of transparency, accountability, and responsible corporate governance in taxation practices. **Method:** The quantitative study uses secondary data from annual reports and financial statements of mining companies listed on the Indonesia Stock Exchange during 2015–2019. Using purposive sampling, this study obtained 135 firm-year observations. Tax aggressiveness was measured using the effective tax rate (ETR), CSR disclosure was measured using the GRI-G4 based CSR Disclosure Index, and foreign ownership was measured based on the proportion of shares owned by foreign investors. Moderated regression analysis was conducted using STATA. **Results:** The results indicate that CSR disclosure has a significant effect on tax aggressiveness. Companies with higher CSR disclosure tend to demonstrate greater tax aggressiveness. However, foreign ownership does not significantly moderate the relationship between CSR disclosure and tax aggressiveness. **Novelty:** Providing new evidence regarding the role of foreign ownership as a moderating mechanism between CSR disclosure and tax aggressiveness in an emerging market mining sector. The findings emphasize that CSR disclosure should reflect genuine corporate accountability rather than merely symbolic legitimacy, supporting SDG 16.6 through improved transparency and responsible institutional practices.

INTRODUCTION

Taxation sector is the largest source of revenue contribution nationally. The 2019 contribution from the taxation aspect reached 82.5% of total national revenue. It means the government is highly dependent on tax revenue in carrying out government activities and providing services for the community. Nevertheless, the current Indonesia problem is the low tax ratio. Tax revenue has never again reached the target since 2008. 2020 is the 12th year of Indonesia has experienced a tax shortfall.

Some Indonesia tax-related problems include the tax case of PT Adaro Energy Tbk. The case was carried out through transfer pricing in one of its subsidiaries in Singapore. Recorded in Global Witness from 2009 to 2017, coal in Indonesia has been sold by PT Adaro (more than 70%) in a low price to Coaltrade, then resold by the subsidiary at a high price. This opportunity was taken by Coaltrade to make a profit and book it in Singapore, which has a lower tax rate than Indonesia. Then, some profits were transferred to Mauritius, a country with no tax rate. Another mining tax case that occurred was the Directorate General of Taxes' lawsuit against the company PT Multi Sarana Avindo as the transfer of mining power through a decrease in the value of Value Added Tax (VAT) that must be paid. DGT sued as much as 3 times with a nominal value of 7.7 billion. A

close case was also carried out by PT Asian Agri for tax evasion efforts carried out in 2007.

Tax aggressiveness is the cause of the low tax ratio in Indonesia. Tax aggressiveness causes a loophole for company management in seeking opportunities for short-term profits, and does not match the expectations of shareholders in the long term.

Tax aggressiveness looks for weaknesses of tax legislation that are not against the law. The term tax aggressiveness can be used interchangeably with the term tax avoidance (Chen et al., 2010). The tax aggressiveness scheme on the gray area, predisposed look for opportunities on the tax law. The weaknesses of the legislation in reducing amount of tax paid. The act of taking advantage of this choice has no criminal element and does not violate the rules. However, tax aggressiveness is a risk action that results in the payment of fines and threatens the company's reputation (Chen et al., 2010).

Tax aggressiveness is related to Corporate Social Responsibility (CSR) disclosure. Companies consider CSR disclosure to play important role in success and survival of the company (Lanis & Richardson, 2012). CSR disclosure as a company responsibility for the surrounding environment (Sari & Adiwibowo, 2017). There were many studies related to tax aggressiveness and CSR disclosure in developed and developing countries. However, it still has mixed results. Companies with high CSR disclosure will also conduct high tax aggressiveness. Research has been conducted in Australia (Lanis & Richardson, 2012), in the United States (Davis et al., 2016), in China (Lin et al., 2017) and in 35 countries in the Canadian region (Zeng, 2019) provides results that CSR disclosure has a positive impact on tax aggressiveness. If the company wants to create a good reputation, the company will be more aggressive with its taxes.

Research that conducted in Malaysia using community, environment, market, and workplace themes shows different results. Community-related CSR disclosure make a negative effect on tax aggressiveness (Mohanadas et al., 2020). The higher of CSR disclosure, the less of company engages in tax aggressiveness (Zeng, 2016). The higher CSR disclosure in areas with strong institutions in China, cause lower tax aggressiveness (Lin et al., 2017).

Indonesian research has various results. Maraya and Yendrawati (2016) and Kurniawan et al. (2020) found that the higher of CSR disclosure, means the higher of aggressiveness. In contrast to Sari and Tjen (2016) and Simorangkir et al. (2018) found the lower of CSR disclosure, is the lower the tax aggressiveness.

One variable that is thought to moderate the effect of CSR disclosure on tax aggressiveness is foreign ownership. Foreign ownership is currently increasing around the world in order to provide the best performance. Rewarding prospect by providing the company with cross-industry experience and an additional filter to monitor the company. In US research, the presence of foreign ownership is able to contribute for improving company performance (Gu et al., 2019). Foreign ownership promises to reduce agency costs and increase creditor confidence (Hamdan, 2018). On the Russian research, foreign ownership positively influences CSR activities, performances, and disclosure as transcending national borders increases responsiveness to the stakeholder demands (Garanina & Aray, 2021). International experience stakeholders and board members from developed countries can be urgent for emerging markets (Garanina & Aray, 2021). The presence of foreign ownership in Jordan limits management's ability to maximize self-interest and reduce their incentives to engage in tax avoidance strategies (Alkurdi & Mardini, 2020). Foreign ownership is able to divide knowledge and expertise so that the company has good performance that can increase the value of the company and have a positive impact in a sustainable manner, such as increasing CSR (Aguilera-Caracuel & Guerrero-Villegas, 2018).

Research at Malaysia, foreign ownership is linked with tax avoidance. Foreign investors do not always comply with international best practices. Tax aggressiveness benefits companies and shareholders in the form of tax savings (Annuar et al., 2014). Non-financial companies research listed on the Philippine Stock Exchange in 2009-2015 found that foreign ownership has a positive effect on corporate tax avoidance, positive on tax aggressiveness. Companies with foreign directors tend to be more involved in tax aggressiveness due to greater opportunities as tax planning brought about by foreign influence. In this case, companies emphasize more benefits of aggressiveness tax than they do on costs (Shi et al., 2020).

On the contrary, Badertscher et al. (2013), Hasan et al. (2022), and Suranta et al. (2020) found that foreign ownership had a negative effect on tax avoidance. Research on 69 companies listed on the Egyptian Stock Exchange showed foreign ownership has no effect on tax aggressiveness (Deef & Mohammed, 2021). This foreign ownership will not avoid taxes that conflict with applicable laws (Suranta et al., 2020).

The research aims are to find out whether CSR disclosure affects tax aggressiveness and to determine whether foreign ownership moderates the effect of CSR on tax aggressiveness. This study is different from previous studies because it uses foreign ownership as a moderating variable to determine the effect of CSR on tax aggressiveness.

This research accounted for theoretically and practically. Theoretically, it provides empirical evidence about the effect of disclosure CSR on tax aggressiveness and moderation of foreign ownership on the effect of CSR disclosure. CSR on tax aggressiveness prepare an overview for companies related to the impact of tax aggressiveness carried out by CSR disclosure practices and become a consideration for company decisions related to taxation activities and CSR disclosure practices and foreign investment policies. Furthermore, provide contribution policy direction for the government in the preparation of tax aggressiveness regulation through considering CSR disclosure practices and foreign ownership investment.

Legitimacy theory

Legitimacy indicates existence of a dependency in an effort to maintain the survival of the organization. When an organization's activities differ from the social contract, the organization will correct the condition. Legitimacy theory assumes that organizations will always try to ensure that their activities are within the limits and norms adopted by society (Dowling & Pfeffer, 1975). This important theory as an information disclosure of companies. Legitimacy is considered as the activities of an entity in line with socially fostered norms, values, faith, and definitions (Suchman, 1995). This theory describes the entity's correlation with society, which is a benchmark like how the entity's management will react to society's expectations. If the entity wishes to be accepted by society, entities must provide information the entity's social activities in order to ensure the sustainability of an entity's life.

Tax aggressiveness was generally frowned upon by society, which can threaten a company's position. They CSR disclosure used to divert attention from undesirable tax planning activities. Legitimacy theory views CSR disclosure as a way to acquire public legitimacy (Sari & Adiwibowo, 2017). Tax aggressiveness as an unethical practice and inconsistent with the company's obligations to society, in order to companies develop legitimization strategies to maintain their reputation (Whait et al., 2018).

Tax aggressiveness

Tax is defined as a significant corporate expense imposed on corporate income, by reducing the net income received by the entity and shareholders (Chen et al., 2010). Taxes

become important contribution from companies to society (Preuss, 2010). Hanlon and Heitzman (2010) define tax aggressiveness as explicitly decreasing the value of taxes carried out by legal to illegal tax saving techniques by those authorized to do so. The legal and illegal classification of tax aggressiveness is not yet clearly separated, so the determination is determined through the tax authority after the act of tax aggressiveness occurs (Lee et al., 2015). Tax aggressiveness terms is used interchangeably the term tax avoidance (Chen et al., 2010).

Tax aggressiveness strategy according to Deef and Mohammed (2021) can be carried out in 3 ways, namely first, by moving tax topics and/or tax objects to countries that provide good tax treatment. Treatment discriminatory tax treatment or tax exemption on a type of income. Second, tax avoidance is used to maintain the economic roots of the transaction through official selection that provides the lowest tax burden. Third, the supply of anti-avoidance transactions, such as transfer pricing and controlled foreign companies.

The strategy of tax aggressiveness is in the gray area, which is the tendency for looking for loopholes in the weaknesses of tax laws and regulations means reduce the tax must be paid. In fact, there is no criminal element of tax aggressiveness because the entity has carried out transaction actions correctly and submitted accurate evidence and did not violate the stipulated provisions or rules. However, the company concern is too aggressive to avoid taxes, then, there is company potential but an illegal way that is contrary to the law (Deef & Mohammed, 2021). If the company is proven to have committed illegal acts, the tax authority can impose severe sanctions on the company. Sanction have potential to black name of the company, especially in front of stakeholders (Kurniawan et al., 2020).

Tax aggressiveness and CSR disclosure are inseparable. CSR disclosure becomes a smokescreen when entities try to ignore the contribution of economic aspects to the surrounding community (Preuss, 2010). CSR disclosure actions is used as an indication of tax aggressiveness by the company. Most busy company is to develop a profile or reputation in order to indicate that the company cover up the tax aggressiveness that has been done (Kurniawan et al., 2020).

CSR is a manifestation of the entity's responsibility to the environment or the surrounding community (Sari & Adiwibowo, 2017). Government regulates some obligations at CSR legislation of disclosure. The disclosure is in the form of publication of information about the entity's activities and their impact on social conditions and the surrounding environment (Udayana, 2017). CSR disclosure is an important aspect of the company's success and survival, although this level of contribution is not mandatory for companies (Lanis & Richardson, 2012). The focus of corporate CSR disclosure as stated in the Global Reporting Initiative (GRI), which involves several things, such as the environment, economic, social, human rights, labor and decent work, community, and the product responsibility. There are several advantages for companies if they try to implement CSR disclosure, namely mandatory CSR can be complementary, not substitute, other repair mechanisms (Waagstein, 2011).

CSR disclosure research is conducted on various developed and developing countries. Research in Australia shows that companies that disclose more CSR disclosure are significantly accused of tax aggressiveness (Lanis & Richardson, 2012). Public companies in the United States that have high CSR disclosure ratings are significantly more tax aggressive (Davis et al., 2016). The economic dimension of CSR disclosure has positive influence on tax aggressiveness (Laguir et al., 2015).

The Chinese research is using moderation of institutional characteristics, shows that regions with weaker institutional quality, firms that report more substantive CSR

disclosure, do not pay their fair share of taxes on profits to the government. The Chinese research explains that the absence of appropriate institutions, CSR disclosure is likely to be a form of window dressing (Lin et al., 2017). Research on 35 countries using international regulatory moderation shows that CSR disclosure is positively related to tax avoidance. It was also found that in some bad governance countries, firms engage higher CSR disclosure but less tax avoidance. This implies that CSR and country-level governance are substitutes (Zeng, 2019).

Malaysian research shows that there is a significant positive relationship between CSR performance in the workplace dimension and tax aggressiveness and there is a negative relationship between overall CSR performance and tax aggressiveness (Mohanadas et al., 2020). Samples taken from the Vigeo database Companies in France show the economic dimension of CSR disclosure has a positive effect on tax aggressiveness (Laguir et al., 2015). Gulzar et al. (2018) analyzed 3481 firm-year observations from 2009 to 2015 on companies listed in China found CSR disclosure to be positively associated with tax avoidance. Tax payments and corporate social responsibility in China has a substitute role.

Some Indonesian researches show that the broader the CSR disclosure index, the more tax aggressiveness increases. Entities will do various ways in the implementation of "sustainability report", one of which is tax avoidance. The aggressive implementation of the "sustainability report" requires a number of costs (Maraya & Yendrawati, 2016). Companies always try to maintain their good reputation. CSR disclosure is used as a way to hide an entity's tax aggressiveness. The more busy entity develops a good profile or reputation, it indicates the entity covering up its tax aggressiveness (Kurniawan et al., 2020).

H1: CSR disclosure has a positive effect on tax aggressiveness

Foreign ownership

Foreign ownership research has been conducted in several countries. However, it has not been found that foreign ownership moderating the effect of disclosure CSR on tax aggressiveness. US Foreign ownership research shows that foreign ownership contributes for improving company performance (Gu et al., 2019). Foreign ownership promises to reduce agency costs and increase creditor confidence (Hamdan, 2018). In Russian research, foreign ownership positively affects CSR activities, performance and disclosures as going beyond national borders increases responsiveness to stakeholder demands (Garanina & Aray, 2021).

The international experience shareholders and board members from developed countries can be very important for emerging markets (Garanina & Aray, 2021). Foreign ownership share knowledge and expertise so that the company has good performance that can increase the value of the company and have a positive impact on the sustainability of the company sustainable impact, such as increasing CSR (Aguilera-Caracuel & Guerrero-Villegas, 2018). Research in Malaysia, ownership is associated with corporate tax avoidance among other companies listed in Malaysia. Foreign investors do not always conform to international best practices. Tax aggressiveness benefits companies and shareholders in the form of tax savings (Annuar et al., 2014).

On the contrary, Hasan et al. (2022) observe on 32 countries from 2000 to 2008 show that foreign ownership has a negative effect on tax avoidance. Strong foreign shareholder protection prevents corporate tax avoidance activities. Strong foreign shareholder protection limits the ability of people to obtain private control benefits, which reduces their incentive to mask company performance through earnings management. Companies with a greater concentration of foreign ownership, create more managers risk

averse, avoid less income tax than companies with less concentrated foreign ownership and control (Badertscher et al., 2013).

The foreign ownership existence allows for the transfer of knowledge and skills, and expertise. Foreign ownership provides strong supervision and control to manage over the company's activities in order to maximize profits. The corporate social responsibility literature also emphasizes the importance of foreign ownership in monitoring top management behavior. Foreign investors should actively support greater corporate responsiveness to society's needs by paying higher tax rates (Lanis & Richardson, 2012). Foreign ownership weakens the positive effect of CSR on tax aggressiveness.

H2: Foreign ownership weakens the positive effect of CSR disclosure on tax aggressiveness.

RESEARCH METHOD

Samples and data

This is a type of quantitative research which uses data secondary data. This research analyzes the company at the mining sector on the IDX in 2015-2019. The selection of the mining sector was carried out because in the last 5 years, the mining sector has still been a excellent sector where mining commodity prices have experienced a continuous increase in prices.

The research sample was taken through purposive sampling, using the criteria: (1) mining sector companies listed on the IDX in 2015- 2019; (2) not delisted at the time of research observation; (3) publish annual reports and periodic financial reports for 2015-2019 and have published financial reports on the company's website and or IDX website; (4) companies that report profits and income tax expenses in 2015-2019; and (5) companies that experienced profits in 2015-2019.

Variable measurement

Tax aggressiveness

The dependent variable of this study is tax aggressiveness. Tax aggressiveness is a decrease in explicit tax value through legal to illegal tax saving techniques with the determination of the aggressiveness degree itself by the party who controls it (Hanlon & Heitzman, 2010). Tax aggressiveness is measured through the effective tax rate (ETR). ETR is obtained through tax expense divided by pretax income. ETR measures the current year's tax expense payment, which includes current and deferred tax expenses (Hanlon & Heitzman, 2010; Mohanadas et al., 2020; Lin et al., 2017; Landry et al., 2013).

CSR disclosure

CSR disclosure is the independent variable of this study. CSR is defined as a company's ongoing commitment in contribute to the development of the economy, community, and society at large and behave ethically together with improving the welfare of employees and families (Hanlon & Heitzman, 2010). CSR disclosure refers to the extent to which a company has up to date information related to CSR. CSR disclosure (CSR D) is measured by the CSR Disclosure Index. The information elements that have been disclosed are compared with applicable CSR disclosure indicator standards. The indicator standard using the GRI-G4 standard. This standard is published by the Global Reporting Initiative which contains 91 indicators of CSR related items that are recommended to be presented by companies. CSR disclosure is assessed with a dummy model, i.e. if the disclosure criteria are available, it is given a value of 1, and given a value of 0 if the criteria are not present in the CSR disclosure.

Foreign ownership

Foreign ownership is defined as the share of shares owned by foreign investors. Foreign ownership is measured as the proportion of company shares owned by foreign investors (Alkurdi & Mardini, 2020; Annuar et al., 2014; Hamdan, 2018).

Control variables

There are several factors that have a direct relationship with tax aggressiveness. The control variables in this study are company size, ROA, and capital intensity.

Company size can be used as a motivation for companies to carry out tax aggressiveness. The higher the number of assets, the more complex the company's business activities. Large companies certainly have a more complicated level of business complexity than small companies. Company size is measured by the total natural logarithm of assets equal to book value (Davis et al., 2016; Lin et al., 2017; Mohanadas et al., 2020; Zeng, 2016).

ROA is a ratio to measure the entity's profit obtained through asset utilization. ROA is obtained by dividing profit net with total assets (Lanis & Richardson, 2012; Lin et al., 2017; Mohanadas et al., 2020; Zeng, 2016).

Capital intensity refers to how large the proportion of fixed assets is in the company's total assets. The measurement of capital intensity is total fixed assets divided by total assets. Capital intensity has a relationship with tax. When the proportion of fixed assets is high enough, the company will be faced with a high depreciation burden as well (Landry et al., 2013; Lanis & Richardson, 2012; Ortas & Gallego-Álvarez, 2020; Zeng, 2016).

Research model

This research model uses Moderation Regression Analysis. The data is processed using STATA software. According to Sharma (1981), moderating variables are defined as independent variables that will be able to strengthen or weaken the correlation of other independent variables to the dependent variable. This research model is as follows.

$$TAG = a_0 + \beta_1 CSR_{Di,t} + \beta_2 SIZE_{i,t} + \beta_3 ROA_{i,t} + \beta_4 CI_{i,t} + e_{i,t} \quad (1)$$

$$TAG = a_0 + \beta_5 CSR_{Di,t} + \beta_6 ForOwn_{i,t} + \beta_7 SIZE_{i,t} + \beta_8 ROA_{i,t} + \beta_9 CI_{i,t} + e_{i,t} \quad (2)$$

$$TAG = a_0 + \beta_{10} CSR_{Di,t} + \beta_{11} ForOwn_{i,t} + \beta_{12} CSR_{Di,t} * ForOwn_{i,t} + \beta_{13} SIZE_{i,t} + \beta_{14} ROA_{i,t} + \beta_{15} CI_{i,t} + e_{i,t} \quad (3)$$

Description:

TAG: Tax aggressiveness;

CSR_D: CSR Disclosure;

ForOwn: Foreign Ownership;

SIZE: Company size;

ROA: Return on Asset; and

CI: Capital Intensity

Table 1. Operational and measurement of research variables

Variable	Operational Definition	Measurement
Dependent Variable: Tax Aggressiveness	Tax aggressiveness is a decrease in explicit tax value through legal to illegal tax saving techniques with the determination of the aggressive	$ETR = \frac{\text{tax expense}}{\text{pretax income}}$

	degree itself by the party who controls it.	
Independent Variable: CSR Disclosure (CSRSD)	CSR is a corporate commitment that is sustainable for contribute to the development of the economy, community, and society at large and acting ethically together through improving the welfare of employees and families (GRI-G4, 2016).	CSR disclosure is assessed with a dummy model, i.e. if disclosure criteria are available, a value of 1 is given, and 0 is given if the criteria are not available in the CSR disclosure. Information items disclosed will compared with standard GRI-G4 CSR information disclosure indicators consisting of 91 CSR-related indicator items.
Moderating Variable: Foreign Ownership (ForOwn)	Foreign ownership is defined as the share of shares owned by foreign investors.	Measured as the proportion of the company's shares owned by foreign investors.
Control Variable: 1. Company Size (SIZE)	Measurement of company size is done by means of the natural logarithm of total assets at book value.	$SIZE = \ln(\text{Total Assets})$
2. Return On Asset (ROA)	ROA is a ratio for measuring company profits through asset utilization.	$ROA = \frac{\text{Net income}}{\text{Total Assets}}$
3. Capital Intensity (CI)	<i>Capital Intensity</i> refers to the proportion of fixed assets to the company's total assets as measured by total fixed assets divided by total assets.	$\text{Capital Intensity} = \frac{\text{Total Fixed Assets}}{\text{Total Assets}}$

RESULTS AND DISCUSSION

Results

Descriptive statistical analysis

Based on Table 2, it is known that the dependent variable in this study, namely Tax Aggressiveness, has an average value of 0.340. This range is quite low in this variable, seen from the difference between the maximum and minimum values.

The independent variable based on the study is CSR disclosure measured by a dummy model, then the information items that have been disclosed will be compared with the standardized CSR disclosure. standard GRI-G4 CSR disclosure indicators, which consist of 91 CSR- related indicator items. CSR disclosure has an average value of 0.249, which is a fairly low range when viewed based on he difference between the maximum and minimum values.

The moderating variable in this study is foreign ownership as measured by the ratio of company shares owned by foreign investors to total shares. The average value

obtained is 0.312. The results show the average foreign ownership in the company sample is 31.2%.

The first control variable is company size which is measured using the natural logarithm of assets. The average value obtained is 29,404. The range is quite low on this variable, judging by the difference between the maximum and minimum values. The second control variable is capital intensity which is measured using total fixed assets of total assets. The average value obtained is 0.628. This range is quite low on this variable, judging by the difference between the maximum value and the minimum value. The third control variable is profitability as measured using ROA. The average value obtained is 0.068 range. This is quite low at this variable, judging by the difference between the maximum and minimum values.

Table 2. Descriptive statistical analysis

	Mean	Median	Minimum	Maximum
CSRD	0.249	0.198	0.033	0.934
ForOwn	0.312	0.195	0.000	0.990
TAG	0.340	0.319	0.000	0.914
SIZE	29.404	29.456	24.096	39.224
CI	0.628	0.645	0.136	0.967
ROA	0.068	0.042	0.001	0.456

Table 3. Person correlation

	CSRD	ForOwn	TAG	SIZE	CI	ROA
CSRD	1.000					
ForOwn	0.144* (0.096)	1.000				
TAG	-0.532** (0.000)	-0.299** (0.000)	1.000			
SIZE	-0.090 (0.297)	0.119 (0.168)	-0.017 (0.848)	1.000		
CI	-0.207* (0.016)	0.018 (0.837)	0.156* (0.071)	0.054 (0.537)	1.000	
ROA	0.077	0.278**	-0.227**	0.123	-0.175*	1.000

p-values in parentheses

* $p < 0.1$, * $p < 0.05$, ** $p < 0.01$

Source: Processed Secondary Data (2021)

Moderation regression analysis results

This research hypothesis was tested with moderation regression analysis. Before the moderation regression test was carried out, the researchers conducted a classic assumption test, namely the data normality test, heteroscedasticity test, and multicollinearity test. The classic assumption test is carried out to find out the data research that normally distributed and the data is free from heteroscedasticity and multicollinearity. This research model is suitable for moderation regression test because it has passed the classical assumption test. The adjusted R² value is 0.3270, which means that the independent variable is able to explain the dependent variable by 32.7%. Meanwhile, the remaining 67.3% is influenced by other factors out of the research model.

The results of research conducted research model shows the consistent with the first hypothesis which stated that the disclosure of CSR has a significant positive effect on tax aggressiveness. The significance level is 1% ($0.000 < 0.010$), so H1 is accepted.

Variable interaction between CSR disclosure and foreign ownership amounted to 0,503 which meaning cannot moderate. Effect of ownership foreignownership on tax aggressiveness is 0.012, which means that foreign ownership if acts as a moderating factor. As independent variable, it affects tax aggressiveness. Based on results, the moderating variable of foreign ownership cannot weaken the effect of CSR disclosure on tax aggressiveness, so H2 is rejected. The results of the moderation regression analysis are shown in Table 4.

Table 4. Moderate regression analysis

	(1) TAG	(2) TAG	(3) TAG
CSRD	-0.565** (-6.97)	-0.534** (-6.64)	-0.601** (-4.68)
SIZE	-0.004 (-0.58)	-0.002 (-0.34)	-0.000 (-0.01)
CI	0.021 (0.26)	0.041 (0.50)	0.028 (0.33)
ROA	-0.431* (-2.40)	-0.307* (-1.68)	-0.298 (-1.63)
ForOwn		-0.118* (-2.54)	-0.165* (-1.97)
CSRDForOwn			0.173 (0.67)
_cons	0.609** (3.03)	0.569** (2.88)	0.531* (2.58)
R2	0.3197	0.3521	0.3544
Adj-R2	0.2988	0.3270	0.3241
F	0.0000	0.0000	0.0000

t statistics in parentheses

* p < 0.1, * p < 0.05, ** p < 0.01

Sumber: Data sekunder yang diolah (2021)

Robust test results

Table 5 as the result of the robust test. In the regression test, there are things that are violated in classical assumption testing. This test can be done to reduce the bias of the research results. It is important to analyze data affected by outliers and minimize the influence of outliers on a model so that it will be the best model was obtained. The findings are also robust with almost no difference with the moderation regression with significant levels.

Table 5. Robust test result

Variabel	Coef.	Robust Std. Err.	t	P> t	95% Confidence Interval
ForOwn	0.0096973	0.0513732	0.19	0.851	-0.0919458 ; 0.1113404
TAG	-0.4776457	0.0880269	-5.43	0.000	-0.6518090 ; -0.3034823
SIZE	-0.0071444	0.0072664	-0.98	0.327	-0.0215210 ; 0.0072323
CI	-0.1326672	0.0658316	-2.02	0.046	-0.2629167 ; -0.0024178
ROA	-0.1291218	0.1604297	-0.80	0.422	-0.4465358 ; 0.1882922
_cons	0.7104251	0.2117403	3.36	0.001	0.2914917 ; 1.1293590
Number of observations			135		
F-statistic (5,129)			8.68		

Variabel	Coef.	Robust Std. Err.	t	P> t	95% Confidence Interval
Prob > F				0.0000	
R-squared				0.3101	
Root MSE				0.15042	

Effect of CSR disclosure on tax aggressiveness

The results showed a significance level of 1% ($0.000 < 0.010$), so H1 is accepted. CSR disclosure has a positive effect on tax aggressiveness. Companies are required to report sustainability reports which require a lot of money. Companies are also required to be able to contribute to society and company is also required to be able to contribute to society and obtain legitimacy from the community to maintain the company's survival. Therefore, the company tries to reduce the tax burden paid and reduce the tax burden paid. Transferring it into the form of CSR. CSR is used as a way by companies to cover up their tax aggressiveness. Although this action is very risk, companies may have their own way of doing it. This is because the act of tax aggressiveness falls into a gray area, which is still within the limit legal by utilizing the weaknesses in the tax law. The results of this study are in line with research by Zeng (2019), Lin et al. (2017), Davis et al. (2016), Gulzar et al. (2018), Laguir et al. (2015), Mao (2019), and Maraya and Yendrawati (2016), which states CSR disclosure effect positive on tax aggressiveness.

CSR Payment and tax aggressiveness act as substitutes because the companies view tax as a reduction in welfare (Davis et al., 2016). CSR is done by companies to obscure tax avoidance. Managers hide risk and opportunistic tax activities and reduce reputation and image damage due to tax avoidance (Zeng, 2016). CSR can be window dressing and compensation for companies to pursue personal interests or economic egoism, polish their image, and reduce public concern arising from socially irresponsible actions. CSR is used as a camouflage in aggressive taxation (Maraya & Yendrawati, 2016), the more occupied company develops a good reputation through CSR activities, then indicate that the company is doing tax aggressiveness (Kurniawan et al., 2020; Maraya & Yendrawati, 2016).

The results of this study are not in line with Mohanadas et al. (2020), Lanis and Richardson (2012), Landry et al. (2013), Mindzak and Zeng (2020), Ortas and Gallego-Álvarez (2020), López-González et al. (2019), Sari and Tjen (2016), Mao (2019), and Park (2017), which state that CSR disclosure has a negative effect on tax aggressiveness.

Moderation of foreign ownership on the effect of CSR disclosure on tax aggressiveness

Based on the results of the interaction between the CSR disclosure variable and foreign ownership, the moderating variable of foreign ownership cannot moderate the effect of CSR disclosure on tax aggressiveness. The results of this study explain that foreign ownership has a direct significant negative effect on tax aggressiveness. It means foreign ownership acts as an independent variable. The initial hypothesis development based on research logic and previous empirical studies does not match the research results.

According to Badertscher et al. (2013), Hasan et al. (2022), and Suranta et al. (2020), foreign ownership has a negative effect. Negative directly on tax aggressiveness. Company with ownership structure foreign able to provide benefits for the community that can be done by carrying out tax payments in compliance with applicable laws and regulations because the tax law in Indonesia has provide special tax treatment or relief on corporate income tax for companies with foreign ownership structures (Suranta et al., 2020). Foreign investors transfer their home country's tax norms and usual governance

practices to their corporate investees, and thus impact high tax payment decisions (Hasan et al., 2022).

Discussion

The findings demonstrate that CSR disclosure significantly influences tax aggressiveness among Indonesian mining companies. This result indicates that extensive CSR disclosure does not always represent responsible corporate behaviour, as companies may simultaneously engage in aggressive tax practices while maintaining a positive social image. From the perspective of legitimacy theory, CSR disclosure can become a mechanism used by companies to obtain social acceptance and maintain legitimacy among stakeholders. This finding is consistent with Davis et al. (2016), Lin et al. (2017), and Gulzar et al. (2018), who found that companies with higher CSR performance may also exhibit greater tax avoidance behaviour. Therefore, CSR disclosure should not only be evaluated based on the quantity of information provided but also based on whether it reflects genuine accountability and ethical business practices.

The absence of a moderating effect of foreign ownership suggests that foreign shareholders do not automatically strengthen corporate tax responsibility. Although foreign ownership is frequently associated with better governance mechanisms and stronger monitoring systems, the results indicate that foreign investors may have different priorities and levels of involvement in corporate decision-making. Hasan et al. (2022) and Suranta et al. (2020) explained that foreign ownership can influence tax behaviour through governance transfer and international practices; however, such effects depend on institutional conditions and shareholder engagement. In this context, the findings highlight the importance of strengthening corporate governance mechanisms beyond ownership structures to achieve transparent and accountable business practices in accordance with SDG 16.6.

The findings provide important implications for regulators, companies, and stakeholders in promoting accountable institutions. Tax revenue represents a critical contribution to public welfare; therefore, aggressive tax practices may reduce corporate social contributions despite extensive CSR activities. Consistent with Kurniawan et al. (2020) and Maraya and Yendrawati (2016), CSR disclosure may function as reputational management when companies attempt to reduce negative perceptions associated with tax aggressiveness. Consequently, regulators should integrate sustainability reporting evaluation with tax governance monitoring to ensure that CSR disclosure reflects actual corporate responsibility. This approach supports SDG 16.6 by encouraging transparent, accountable, and ethical institutional practices.

CONCLUSION

Fundamental Finding: This study finds that CSR disclosure significantly affects tax aggressiveness among mining companies listed on the Indonesia Stock Exchange. The findings indicate that higher CSR disclosure may coexist with aggressive tax behaviour, suggesting that CSR activities do not always represent comprehensive corporate responsibility. Foreign ownership does not moderate the relationship between CSR disclosure and tax aggressiveness. **Implication:** This study contributes to the understanding of corporate accountability by demonstrating the importance of evaluating CSR disclosure together with tax practices. The findings provide implications for regulators and stakeholders to strengthen transparency and accountability mechanisms in corporate reporting. These efforts support SDG 16.6 by promoting effective, accountable, and transparent institutions. **Limitation:** This study is limited to mining companies listed on the Indonesia Stock Exchange during 2015–2019.

Additionally, tax aggressiveness is measured only using ETR, and foreign ownership is represented only by ownership proportion without considering investor characteristics. **Future Research:** Future research may expand the sample across industries and countries, apply alternative tax aggressiveness measurements, and examine other governance mechanisms such as institutional ownership, managerial ownership, board independence, and audit quality to provide deeper insights into corporate accountability.

AUTHOR CONTRIBUTIONS

Abidah Dwi Rahmi Satiti contributed to the conceptualisation, data curation, formal analysis, investigation, methodology, and preparation of the original manuscript. **Doddy Setiawan** contributed to the conceptualisation, methodology, supervision, validation, and review and editing of the manuscript. **Djoko Suhardjanto** contributed to theoretical development, supervision, validation, and review and editing of the manuscript. **Wahyu Widarjo** contributed to methodology, interpretation of the findings, validation, and review and editing of the manuscript. **Setianingtyas Honggowati** contributed to supervision, validation, and review and editing of the manuscript. All authors read and approved the final version of the manuscript.

CONFLICT OF INTEREST STATEMENT

The authors declare that there is no conflict of interest regarding the publication of this research. The research was conducted independently, and there were no financial, institutional, or personal relationships that could influence the findings and interpretation presented in this article.

ETHICAL COMPLIANCE STATEMENT

This research complied with ethical principles in qualitative research. The identities of participants and organizations were anonymized to maintain confidentiality. Data collection was conducted through voluntary participation, and participants provided informed consent before interviews and observations were conducted.

STATEMENT ON THE USE OF AI OR DIGITAL TOOLS IN WRITING

The authors declare that artificial intelligence (AI)-based tools were not used to generate research data, conduct analysis, or replace academic judgment in the research process. AI tools, if utilized, were only applied as supporting instruments for language improvement, proofreading, and enhancing manuscript readability. The authors remain fully responsible for the accuracy, originality, and integrity of the research content.

REFERENCES

- Aguilera-Caracuel, J., & Guerrero-Villegas, J. (2017). How corporate social responsibility helps MNEs to improve their reputation. The moderating effects of geographical diversification and operating in developing regions. *Corporate Social Responsibility and Environmental Management*, 25(4), 355-372. <https://doi.org/10.1002/csr.1465>
- Alkurdi, A., & Mardini, G. H. (2020). The impact of ownership structure and the board of directors' composition on tax avoidance strategies: Empirical evidence from Jordan. *Journal of Financial Reporting and Accounting*, 18(4), 795-812. <https://doi.org/10.1108/jfra-01-2020-0001>
- Annuar, H. A., Salihu, I. A., & Obid, S. N. (2014). Corporate ownership, governance and tax avoidance: An interactive effects. *Procedia - Social and Behavioral Sciences*, 164, 150-160. <https://doi.org/10.1016/j.sbspro.2014.11.063>

- Badertscher, B. A., Katz, S. P., & Rego, S. O. (2013). The separation of ownership and control and corporate tax avoidance. *Journal of Accounting and Economics*, 56(2-3), 228-250. <https://doi.org/10.1016/j.jacceco.2013.08.005>
- Chen, S., Chen, X., Cheng, Q., & Shevlin, T. (2010). Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics*, 95(1), 41-61. <https://doi.org/10.1016/j.jfineco.2009.02.003>
- Davis, A. K., Guenther, D. A., Krull, L. K., & Williams, B. M. (2015). Do socially responsible firms pay more taxes? *The Accounting Review*, 91(1), 47-68. <https://doi.org/10.2308/accr-51224>
- Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. *The Pacific Sociological Review*, 18(1), 122-136. <https://doi.org/10.2307/1388226>
- Garanina, T., & Aray, Y. (2021). Enhancing CSR disclosure through foreign ownership, foreign board members, and cross-listing: Does it work in Russian context? *Emerging Markets Review*, 46, 100754. <https://doi.org/10.1016/j.ememar.2020.100754>
- Gu, V. C., Cao, R. Q., & Wang, J. (2019). Foreign ownership and performance: Mediating and moderating effects. *Review of International Business and Strategy*, 29(2), 86-102. <https://doi.org/10.1108/ribs-08-2018-0068>
- Gu, Y., Zhang, H., Zhou, W., & Zhong, W. (2019). Regional culture, top executive values, and corporate donation behaviors. *Technological Forecasting and Social Change*, 140, 1-13. <https://doi.org/10.1016/j.techfore.2018.11.024>
- Gulzar, M., Cherian, J., Sial, M. S., Badulescu, A., Thu, P. A., Badulescu, D., & Khuong, N. V. (2018). Does corporate social responsibility influence corporate tax avoidance of Chinese listed companies? *Sustainability*, 10(12), 4549. <https://doi.org/10.3390/su10124549>
- Hamdan, A. (2018). Board interlocking and firm performance: The role of foreign ownership in Saudi Arabia. *International Journal of Managerial Finance*, 14(3), 266-281. <https://doi.org/10.1108/ijmf-09-2017-0192>
- Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, 50(2-3), 127-178. <https://doi.org/10.1016/j.jacceco.2010.09.002>
- Hasan, I., Kim, I., Teng, H., & Wu, Q. (2022). The effect of foreign institutional ownership on corporate tax avoidance: International evidence. *Journal of International Accounting, Auditing and Taxation*, 46, 100440. <https://doi.org/10.1016/j.intaccaudtax.2021.100440>
- Kurniawan, M. A., Lasmana, M. S., & Novita, S. (2020). Corporate social responsibility disclosure: Tax Agresiveness indication? *Jurnal Reviu Akuntansi dan Keuangan*, 10(2), 359-370. <https://doi.org/10.22219/jrak.v10i2.12496>
- Laguir, I., Staglianò, R., & Elbaz, J. (2015). Does corporate social responsibility affect corporate tax aggressiveness? *Journal of Cleaner Production*, 107, 662-675. <https://doi.org/10.1016/j.jclepro.2015.05.059>
- Landry, S., Deslandes, M., & Fortin, A. (2013). Tax aggressiveness, corporate social responsibility, and ownership structure. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2304653>
- Lanis, R., & Richardson, G. (2012). Corporate social responsibility and tax aggressiveness: An empirical analysis. *Journal of Accounting and Public Policy*, 31(1), 86-108. <https://doi.org/10.1016/j.jaccpubpol.2011.10.006>
- Lanis, R., & Richardson, G. (2012). Corporate social responsibility and tax aggressiveness: A test of legitimacy theory. *Accounting, Auditing & Accountability Journal*, 26(1), 75-100. <https://doi.org/10.1108/09513571311285621>

- Lee, B. B., Dobiyanski, A., Sviland, M., & Zhu, L. " (2020). Accruals, earnings quality and research methodology. *Journal of Applied Business and Economics*, 22(1). <https://doi.org/10.33423/jabe.v22i1.2717>
- Lin, K. Z., Cheng, S., & Zhang, F. (2017). Corporate social responsibility, institutional environments, and tax avoidance: Evidence from a Subnational comparison in China. *The International Journal of Accounting*, 52(4), 303-318. <https://doi.org/10.1016/j.intacc.2017.11.002>
- López-González, E., Martínez-Ferrero, J., & García-Meca, E. (2019). Does corporate social responsibility affect tax avoidance: Evidence from family firms. *Corporate Social Responsibility and Environmental Management*, 26(4), 819-831. <https://doi.org/10.1002/csr.1723>
- Mao, C. (2018). Effect of corporate social responsibility on corporate tax avoidance: Evidence from a matching approach. *Quality & Quantity*, 53(1), 49-67. <https://doi.org/10.1007/s11135-018-0722-9>
- Maraya, A. D., & Yendrawati, R. (2016). Pengaruh corporate governance Dan corporate social responsibility disclosure terhadap tax avoidance: Studi empiris pada perusahaan tambang Dan CPO. *Jurnal Akuntansi & Auditing Indonesia*, 20(2), 147-159. <https://doi.org/10.20885/jaai.vol20.iss2.art7>
- Mindzak, J., & Zeng, T. (2019). Pyramid ownership structure and tax avoidance among Canadian firms. *Accounting Research Journal*, 33(1), 16-33. <https://doi.org/10.1108/arj-02-2017-0036>
- Mohanadas, N. D., Abdullah Salim, A. S., & Pheng, L. K. (2019). CSR and tax aggressiveness of Malaysian listed companies: Evidence from an emerging economy. *Social Responsibility Journal*, 16(5), 597-612. <https://doi.org/10.1108/srj-01-2019-0021>
- Ortas, E., & Gallego-Álvarez, I. (2020). Bridging the gap between corporate social responsibility performance and tax aggressiveness. *Accounting, Auditing & Accountability Journal*, 33(4), 825-855. <https://doi.org/10.1108/aaaj-03-2017-2896>
- Park, S. (2017). Corporate social responsibility and tax avoidance: Evidence from Korean firms. *Journal of Applied Business Research (JABR)*, 33(6), 1059-1068. <https://doi.org/10.19030/jabr.v33i6.10045>
- Preuss, L. (2010). Tax avoidance and corporate social responsibility: You can't do both, or can you? *Corporate Governance: The international journal of business in society*, 10(4), 365-374. <https://doi.org/10.1108/14720701011069605>
- Sari, D., & Tjen, C. (2016). Corporate social responsibility disclosure, environmental performance, and tax aggressiveness. *International Research Journal of Business Studies*, 9(2), 93-104. <https://doi.org/10.21632/irjbs.9.2.93-104>
- Sari, H. M., Sa'adah, N., & Juliani, H. (2017). Implementasi pemberlakuan tax amnesty Di Kantor pelayanan Pajak pratama Semarang tengah satu. *Diponegoro Law Journal*, 6(4), 1-10. <https://doi.org/10.14710/dlj.2017.19776>
- Shi, A. A., Li Liao, E. L., Unite, A. A., & Sullivan, M. J. (2022). Grey directors on Philippine corporate boards. *DLSU Business & Economics Review*, 31(2). <https://doi.org/10.59588/2243-786x.1185>
- Simorangkir, Y. N., Subroto, B., & Andayani, W. (2018). Pengaruh corporate social responsibility Dan Komisaris Independen terhadap Agresivitas Pajak. *JURNAL MANAJEMEN KEWIRAUSAHAAN*, 6(2). <https://doi.org/10.26905/jmdk.v6i2.2277>
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *The Academy of Management Review*, 20(3), 571. <https://doi.org/10.2307/258788>

- Suranta, E., Midiastuty, P., & Hasibuan, H. R. (2020). The effect of foreign ownership and foreign board commissioners on tax avoidance. *Journal of Economics, Business, & Accountancy Ventura*, 22(3), 309-318. <https://doi.org/10.14414/jebav.v22i3.2143>
- Waagstein, P. R. (2010). The mandatory corporate social responsibility in Indonesia: Problems and implications. *Journal of Business Ethics*, 98(3), 455-466. <https://doi.org/10.1007/s10551-010-0587-x>
- Whait, R. B., Christ, K. L., Ortas, E., & Burritt, R. L. (2018). What do we know about tax aggressiveness and corporate social responsibility? An integrative review. *Journal of Cleaner Production*, 204, 542-552. <https://doi.org/10.1016/j.jclepro.2018.08.334>
- Zeng, T. (2019). Relationship between corporate social responsibility and tax avoidance: International evidence. *Social Responsibility Journal*, 15(2), 244-257. <https://doi.org/10.1108/srj-03-2018-0056>

***Abidah Dwi Rahmi Satiti (Corresponding Author)**

Department of Accounting, Faculty of Economics and Business,
Universitas Sebelas Maret

Jl. Ir. Sutami No. 36A, Kentingan, Jebres, Surakarta 57126, Central Java, Indonesia

Email: abidahdwirahmi@student.uns.ac.id

Department of Accounting, Faculty of Economics and Business,
Universitas Islam Lamongan

Jl. Veteran No. 53A, Jetis, Lamongan 62211, East Java, Indonesia

Email: abidahdwirahmi@unisla.ac.id

Doddy Setiawan

Department of Accounting, Faculty of Economics and Business,
Universitas Sebelas Maret

Jl. Ir. Sutami No. 36A, Kentingan, Jebres, Surakarta 57126, Central Java, Indonesia

Email: doddy.setiawan@staff.uns.ac.id

Djoko Suhardjanto

Department of Accounting, Faculty of Economics and Business,
Universitas Sebelas Maret

Jl. Ir. Sutami No. 36A, Kentingan, Jebres, Surakarta 57126, Central Java, Indonesia

Email: djokosuhardjanto.feb@staff.uns.ac.id

Wahyu Widarjo

Department of Accounting, Faculty of Economics and Business,
Universitas Sebelas Maret

Jl. Ir. Sutami No. 36A, Kentingan, Jebres, Surakarta 57126, Central Java, Indonesia

Email: wahyuwidarjo@staff.uns.ac.id

Setianingtyas Honggowati

Department of Accounting, Faculty of Economics and Business,
Universitas Sebelas Maret

Jl. Ir. Sutami No. 36A, Kentingan, Jebres, Surakarta 57126, Central Java, Indonesia

Email: setianingtyas.honggowati@staff.uns.ac.id
