Capital Intensity, Leverage, Profitability and Tax Aggressiveness: The Moderating Role of Firm Size

Taufiqurrohman[1]
Baihaqi Fanani[2]
Budi Susetyo[3]
[1,2,3]Faculty of Economics and Business, Universitas Pancasakti Tegal, Indonesia
Correspondences* **: taufiqdc88@gmail.com, baihaqifanani35@gmail.com, budisetyoups@gmail.com

ABSTRACT

Tax aggressiveness remains an important concern in the mining sector because of its implications for corporate tax payments and government revenue. Understanding the financial characteristics associated with such practices is therefore important, particularly in industries with substantial capital investment and financing requirements. This study examines the associations of capital intensity, leverage, and profitability with tax aggressiveness and investigates whether firm size moderates these relationships among mining companies listed on the Indonesia Stock Exchange over the 2020–2024 period. Secondary data were obtained from corporate financial statements, yielding 306 firm-year observations. The hypotheses were tested using multiple linear regression and Moderated Regression Analysis (MRA). The findings show that capital intensity is positively associated with tax aggressiveness, whereas profitability is negatively associated with tax aggressiveness. Leverage is not significantly associated with tax aggressiveness. Firm size does not moderate the relationships of capital intensity or leverage with tax aggressiveness, but weakens the relationship between profitability and tax aggressiveness. These findings suggest that firms' investment and profitability characteristics are associated with differences in tax aggressiveness, while the moderating role of firm size is confined to the profitability–tax aggressiveness relationship.

Keywords: Capital Intensity; Leverage; Profitability; Tax Aggressiveness; Firm Size

Capital Intensity, Leverage, Profitabilitas, dan Agresivitas Pajak: Peran Moderasi Ukuran Perusahaan

ABSTRAK

Agresivitas pajak tetap menjadi isu penting di sektor pertambangan karena implikasinya terhadap pembayaran pajak perusahaan dan penerimaan negara. Oleh karena itu, pemahaman mengenai karakteristik keuangan yang berkaitan dengan praktik tersebut menjadi penting, khususnya pada industri dengan kebutuhan investasi modal dan pendanaan yang besar. Penelitian ini menguji hubungan capital intensity, leverage, dan profitabilitas dengan agresivitas pajak serta menyelidiki apakah ukuran perusahaan memoderasi hubungan-hubungan tersebut pada perusahaan pertambangan yang terdaftar di Bursa Efek Indonesia periode 2020–2024. Data sekunder diperoleh dari laporan keuangan perusahaan dan menghasilkan 306 observasi tahun-perusahaan (firm-year). Hipotesis diuji menggunakan regresi linier berganda dan Moderated Regression Analysis (MRA). Hasil penelitian menunjukkan bahwa capital intensity berhubungan positif dengan agresivitas pajak, sedangkan profitabilitas berhubungan negatif dengan agresivitas pajak. Leverage tidak berhubungan secara signifikan dengan agresivitas pajak. Ukuran perusahaan tidak memoderasi hubungan capital intensity maupun leverage dengan agresivitas pajak, tetapi memperlemah hubungan antara profitabilitas dan agresivitas pajak. Temuan ini mengindikasikan bahwa karakteristik investasi dan profitabilitas perusahaan berkaitan dengan perbedaan tingkat agresivitas pajak, sedangkan peran moderasi ukuran perusahaan hanya terbatas pada hubungan profitabilitas–agresivitas pajak.

Kata Kunci *Capital Intensity; Leverage; Profitabilitas; Agresivitas Pajak; Ukuran Perusahaan*

e-ISSN 2302-8556

Vol. 36 No. 7
Denpasar, 31 Juli 2026
Hal.1340-1353

DOI:
10.24843/EJA.2026.v36.i07.p01

PENGUTIPAN:
Taufiqurrohman, Fanani, B., & Susetyo, B. (2026). Capital Intensity, Leverage, Profitability and Tax Aggressiveness: The Moderating Role of Firm Size. *E-Jurnal Akuntansi*, 36(7), 1340-1353

RIWAYAT ARTIKEL:
Artikel Masuk:
22 Mei 2026
Artikel Diterima:
16 Juni 2026

Artikel dapat diakses : https://ejournal1.unud.ac.id/index.php/akuntansi/index

INTRODUCTION

Indonesia's large domestic market and abundant natural resources have supported substantial domestic and foreign investment and contributed to the expansion of its industrial sectors (Romadhina, 2023). Within this economic structure, taxation remains the principal source of government revenue relative to non-tax revenue and grants (Amini et al., 2025). Strengthening tax revenue is therefore important to fiscal independence and depends, in part, on taxpayers' willingness to comply with their statutory obligations (Darma & Imadah, 2023). Under Law No. 28 of 2007 concerning General Provisions and Tax Procedures (KUP), tax represents a compulsory contribution to the state imposed by law without direct compensation and used for the broader welfare of society (Pemerintah Republik Indonesia, 2007).

The mining sector is particularly important in this context because of its contribution to Indonesian tax revenue and its exposure to fluctuations in commodity prices and economic conditions. Tax revenue from the sector declined during 2020–2021 amid the COVID-19 pandemic, recovered in 2022 as economic conditions improved, and subsequently weakened during 2023–2024 as commodity prices normalised and global economic growth slowed (Directorate General of Taxes). In 2024, the extractive and mining sector contributed approximately Rp96.35 trillion, equivalent to 6.05% of national tax revenue (Dwijayanto & Kurniawan, 2025; Martha et al., 2024). These fluctuations increase the importance of understanding corporate tax behaviour within the sector.

One such behaviour is tax aggressiveness. Frank et al. (2009)describe tax aggressiveness as the deliberate reduction of taxable income through tax-planning activities. Such strategies may range from relatively conventional tax planning to positions that approach or cross regulatory boundaries. Although tax avoidance generally involves exploiting opportunities within the legal framework, tax evasion involves the unlawful concealment or misrepresentation of taxable activities (Tambunan et al., 2021; Ridwan & Sudrajat, 2022). The distinction is important because tax aggressiveness should not automatically be equated with illegal behaviour. Nevertheless, aggressive tax strategies may reduce government revenue and create tensions between firms' incentives to minimise tax costs and the government's objective of securing revenue for public expenditure (Mukaromah et al., 2022).

Recent Indonesian cases illustrate the fiscal consequences of non-compliance. PT CAS, for example, was alleged to have withheld but failed to remit Value Added Tax that had already been collected, resulting in reported state revenue losses of Rp21.46 billion (Pajak, 2024). Although such conduct represents a more severe form of tax non-compliance than conventional tax planning, the case illustrates the broader importance of effective corporate tax governance and regulatory oversight in economically significant sectors.

Agency theory provides one perspective from which to understand corporate tax decisions. Managers act on behalf of shareholders and may have incentives to reduce corporate tax payments where doing so increases after-tax cash flows or reported performance. However, aggressive tax strategies may also expose the firm to regulatory sanctions, reputational costs, and additional scrutiny. Tax aggressiveness therefore reflects managerial decisions concerning the trade-

off between potential tax savings and the associated costs and risks. Firm characteristics that affect taxable income, financing structures, and deductions may consequently influence these decisions.

Capital intensity is one such characteristic. It reflects the extent to which firms invest in fixed assets. Fixed assets generate depreciation expenses, which generally reduce accounting and taxable income and may therefore create opportunities for firms to lower their tax burden (Utomo & Fitria, 2020). Firms with greater investment in depreciable assets may consequently have stronger incentives or opportunities to use depreciation-related deductions as part of their tax-planning strategies.

Prior empirical evidence, however, remains mixed. Tambun and Sari (2024) and Dewi and Nustini (2024) report a positive association between capital intensity and tax aggressiveness, whereas Oktaviani et al. (2023) and Bachtiar et al. (2025)report different results. Similar inconsistencies arise for other financial characteristics. Leverage reflects the extent to which firms rely on debt financing and may affect taxable income through interest deductions (Dewi & Oktaviani, 2021). Dewi and Nustini (2024)and Pratiwi and Fauzan (2025)identify a positive relationship between leverage and tax aggressiveness, whereas Oktaviani et al. (2023)and Wirianata et al. (2024)find no significant association. Profitability likewise produces conflicting evidence, with Wirianata et al. (2024)and Chandra (2024) reporting a negative relationship, while Madyastuti (2022)and Martha et al. (2024) report different findings.

Firm size may provide an additional explanation for these inconsistent relationships. Larger firms generally possess greater resources, more complex transactions, and greater capacity to undertake tax planning, although they may simultaneously face stronger regulatory and public scrutiny (Ramdhania & Kinasih, 2021). Previous evidence regarding its moderating role is also inconclusive. Suyanto and Amiah (2021)indicate that firm size can condition relationships between firm characteristics and tax aggressiveness, whereas Suyanto and Sofiyanti (2022) report different results. These inconsistencies suggest that the effect of financial characteristics on tax aggressiveness may depend on organisational scale and institutional context.

Accordingly, this study re-examines the associations of capital intensity, leverage, and profitability with tax aggressiveness and investigates whether firm size moderates these relationships among mining companies listed on the Indonesia Stock Exchange. Building on Harnovinsah et al. (2025), the study differs by focusing specifically on the mining sector, replacing inventory intensity with capital intensity, and incorporating firm size as a moderating variable. In doing so, it seeks to provide additional evidence on the financial characteristics associated with tax aggressiveness in a sector of substantial fiscal importance to Indonesia.

From an agency perspective, managers may have incentives to employ available tax-planning opportunities where the resulting tax savings improve after-tax cash flows or reported corporate performance. Capital intensity provides one such opportunity because greater investment in fixed assets generates depreciation expenses that can reduce taxable income. Firms with larger proportions of depreciable assets may therefore have greater capacity to reduce

their tax burden through depreciation-related deductions (Hendayanaa et al., 2024).

Consistent with this argument, Dewi and Nustini (2024) and Maulana et al. (2022) report a positive relationship between capital intensity and tax aggressiveness. Greater capital intensity may therefore be associated with more aggressive tax positions because the tax deductions generated by fixed assets provide firms with additional opportunities to reduce taxable income. Accordingly, the following hypothesis is proposed:

H_1**:** Capital intensity is positively associated with tax aggressiveness.

Leverage reflects the extent to which a firm relies on debt to finance its activities. Debt financing generates interest expenses that are generally deductible in determining taxable income, thereby creating opportunities to reduce corporate tax liabilities. Firms with higher leverage may therefore have stronger incentives to use the tax benefits associated with debt as part of their tax-planning strategies (Fadhila & Andayani, 2022). Consistent with this argument, Maulana et al. (2022)and Pratiwi and Fauzan (2025)report a positive relationship between leverage and tax aggressiveness. Accordingly, the following hypothesis is proposed:

H_2**:** Leverage is positively associated with tax aggressiveness.

Profitability reflects a firm's ability to generate earnings from its resources and operating activities. More profitable firms generally face greater potential tax liabilities because higher taxable income increases the amount of tax payable. This may provide managers with stronger incentives to undertake tax-planning activities intended to reduce the firm's tax burden (Fadhila & Andayani, 2022). From an agency perspective, managers may pursue such strategies where the resulting tax savings increase after-tax earnings or cash flows, provided that the expected benefits exceed the associated regulatory and reputational costs. Consistent with this argument, Wirianata et al. (2024)and Gumelar et al. (2024)report a positive relationship between profitability and tax aggressiveness. Accordingly:

H_3**:** Profitability is positively associated with tax aggressiveness.

Firm size may condition the relationship between capital intensity and tax aggressiveness. Larger firms generally possess greater resources, more complex asset structures, and greater capacity to undertake sophisticated tax planning. Where a substantial proportion of their assets consists of depreciable fixed assets, these firms may have greater opportunities to utilise depreciation-related deductions in managing taxable income.

From an agency perspective, managers may use these opportunities where tax savings contribute to higher after-tax earnings and firm value. The relationship between capital intensity and tax aggressiveness may therefore become stronger as firm size increases. This argument is consistent with Wirianata et al. (2024)and Utomo and Fitria (2020), who provide evidence that firm size strengthens the relationship between capital intensity and tax aggressiveness. Accordingly:

H_4: Firm size strengthens the positive association between capital intensity and tax aggressiveness.

Firm size may also influence the extent to which leverage is associated with tax aggressiveness. Although larger firms typically have greater access to debt

financing and may benefit from interest-related tax deductions, they are also subject to greater scrutiny from regulators, creditors, investors, and other stakeholders. This heightened visibility may increase the potential reputational and regulatory costs associated with aggressive use of debt-related tax deductions.

Consequently, managers of larger firms may be more cautious in using leverage as a tax-planning mechanism. Consistent with this argument, Suyanto and Kurniawati (2022) find that firm size weakens the relationship between leverage and tax aggressiveness. Accordingly:

H_5**:** Firm size weakens the positive association between leverage and tax aggressiveness.

A similar argument applies to the relationship between profitability and tax aggressiveness. Highly profitable firms may have stronger incentives to reduce their tax liabilities because they face greater potential tax payments. However, larger and more profitable firms are also more visible to tax authorities, investors, the media, and the wider public. Greater visibility increases the potential regulatory, reputational, and political costs associated with aggressive tax strategies.

Agency theory suggests that managers must therefore balance the potential benefits of reducing tax payments against the costs arising from increased scrutiny and reputational exposure. As firm size increases, these costs may constrain managers' willingness to translate higher profitability into more aggressive tax positions. Consistent with this reasoning, Nugraha et al. (2023) report that the relationship between profitability and tax aggressiveness becomes weaker among larger firms. Accordingly:

H_6: Firm size weakens the positive association between profitability and tax aggressiveness.

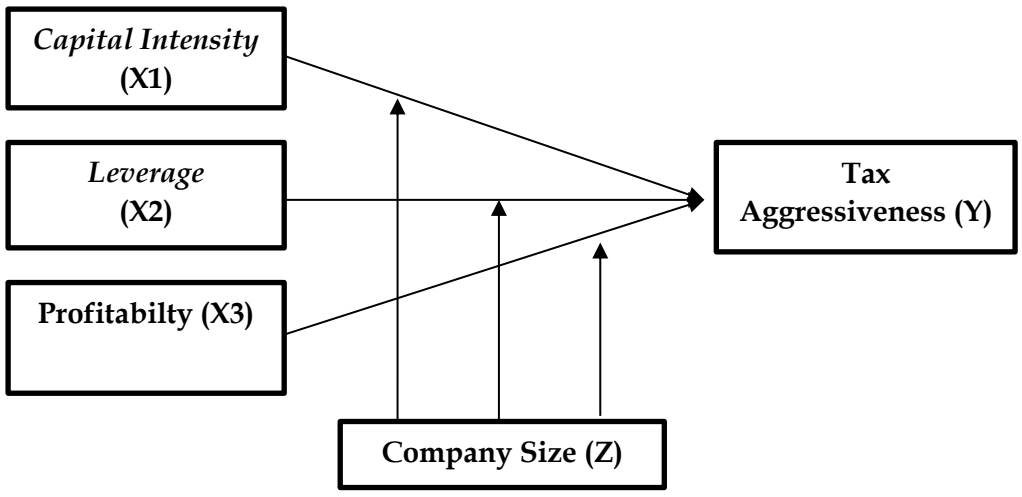


Figure 1. Research Model

Source: Research data, 2026

RESEARCH METHODS

This study adopts a quantitative approach to examine the associations of capital intensity, leverage, and profitability with tax aggressiveness and to investigate whether firm size moderates these relationships. The population comprises 63 mining companies listed on the Indonesia Stock Exchange (IDX) over the 2020–2024 period. As all eligible firms were included, a saturated sampling approach was employed (Sugiyono, 2022). This initially yielded 315 firm-year observations. Nine observations were excluded because the required data were unavailable, resulting in a final sample of 306 firm-year observations.

Tax aggressiveness is measured using the Effective Tax Rate (ETR), calculated as income tax expense divided by profit before tax (Wirianata et al., 2024). A lower ETR indicates greater tax aggressiveness because it reflects a lower effective tax burden relative to pre-tax income. Accordingly, the interpretation of the regression coefficients considers the inverse relationship between ETR and tax aggressiveness.

Capital intensity (CAPINT) is measured as net fixed assets divided by total assets (Tambun & Sari, 2024). Leverage (LEV) is proxied by the Debt-to-Asset Ratio (DAR), calculated as total liabilities divided by total assets (Soumokil & Yanti, 2024). Profitability is measured using Return on Assets (ROA), calculated as net income divided by total assets (Harnovinsah et al., 2025). Firm size (SIZE), which serves as the moderating variable, is measured as the natural logarithm of total assets (Gumelar et al., 2024).

The data were analysed using SPSS version 22. The analysis began with descriptive statistics and diagnostic tests of the regression assumptions. Multiple linear regression was subsequently used to examine the associations of capital intensity, leverage, and profitability with tax aggressiveness. Moderated Regression Analysis (MRA) was then employed to assess whether firm size moderates each of these relationships.

$$Y = \alpha + \beta_1 CI + \beta_2 DER + \beta_3 ROA + e \quad (1)$$

In this study, *capital intensity* (CI), *leverage* (DAR), and profitability (ROA) are used as independent factors, and tax aggressiveness (Y) is represented by the Effective Tax Rate (ETR). If all independent variables are set to zero, the value of tax aggressiveness is explained by a constant (α). The regression coefficients β_1, β_2, and β_3, on the other hand, indicate the strength and direction of the impact of each independent variable on tax aggressiveness. Furthermore, e displays the error component, which indicates the impact of additional variables not included in the research model. The level of feasibility and evidence of the hypothesis are then assessed using the model in Moderated Regression Analysis (MRA) using the F test, the coefficient of determination, and the partial t test (R^2) (Ghozali, 2018: 97–99, 227) .

RESULTS AND DISCUSSION

Descriptive statistics were used to summarise the characteristics of the study variables, including their minimum, maximum, mean, and standard deviation values. The results are reported in Table 1.

Table 1. Results of Descriptive Statistical Tests

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Standard Deviation
CI	306	0.00	0.91	0.305	0.251
DAR	306	0.00	3.49	0.508	0.442
PROF	306	-3.54	0.62	0.056	0.251
ETR	306	-2.88	2.52	-0.166	0.389
UK	306	22.08	38.71	28.987	2.338
Valid N (listwise)	306				

Source: Research data, 2026

Table 1 reports the descriptive statistics for the 306 firm-year observations. Capital intensity (CI) ranges from 0.00 to 0.91, with a mean of 0.305 and a standard deviation of 0.251. Thus, fixed assets represent approximately 30.45% of total assets for the average firm, although the relatively wide range indicates considerable variation in capital intensity across the sample.

Leverage (DAR) ranges from 0.00 to 3.49, with a mean of 0.5075 and a standard deviation of 0.442. On average, total liabilities therefore represent approximately 50.75% of total assets. The maximum value above one indicates that some firm-year observations report liabilities exceeding total assets. Firm size (SIZE) ranges from 22.08 to 38.71, with a mean of 28.9869 and a standard deviation of 2.33768, indicating comparatively less dispersion in firm size than in several of the financial-ratio variables.

Profitability (ROA) shows greater variation, ranging from −3.54 to 0.62, with a mean of 0.056 and a standard deviation of 0.25088. The negative minimum indicates that some firms experienced substantial losses during the observation period, while the positive mean suggests modest profitability on average.

Tax aggressiveness, measured using the Effective Tax Rate (ETR), ranges from −2.88 to 2.52, with a mean of −0.166 and a standard deviation of 0.389. The presence of negative and unusually large ETR values indicates considerable heterogeneity in firms' reported tax positions. These observations were retained in the initial descriptive analysis because the study employed saturated sampling and sought to reflect the tax characteristics of the sampled mining companies during the observation period.

Prior to estimating the regression model, diagnostic tests were conducted to assess the underlying regression assumptions. Casewise Diagnostics identified 110 observations as outliers, which were subsequently excluded from the regression analysis, reducing the estimation sample from 306 to 196 observations. Following their exclusion, the Kolmogorov–Smirnov test produced a significance value of 0.200, exceeding the 0.05 threshold and providing no evidence of a departure from normality.

The multicollinearity assessment indicates no serious collinearity among the explanatory variables. Tolerance values are 0.886 for capital intensity, 0.892 for leverage, 0.752 for profitability, and 0.863 for firm size, all exceeding the conventional threshold of 0.10. Corresponding Variance Inflation Factor (VIF) values are 1.129, 1.121, 1.330, and 1.159, respectively, and are therefore well below commonly applied thresholds. These results indicate that multicollinearity is unlikely to materially affect the regression estimates.

The initial Durbin–Watson statistic is 1.168. With four explanatory variables and 196 observations, this value falls outside the specified acceptance interval of dU < DW < 4 − dU (1.807 < DW < 2.192), indicating evidence of positive serial correlation under the applied diagnostic criterion. The Cochrane–Orcutt procedure was subsequently employed to address this issue. Following the adjustment, the Durbin–Watson statistic increased to 1.980, which falls within the specified interval (1.807 < 1.980 < 2.192). On this basis, the adjusted model does not indicate residual autocorrelation under the Durbin–Watson criterion.

Finally, heteroskedasticity was assessed through examination of the residual scatterplot. The residuals appear randomly dispersed above and below zero without an identifiable systematic pattern. This visual evidence provides no clear indication of heteroskedasticity in the estimated regression model.

Table 2. Multiple Linear Regression Test Results

Coefficients [a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-0.110	0.013		-8,549	0.000
	Lag_CI	0.150	0.032	0.323	4,632	0.000
	Lag_DAR	-0.030	0.031	-0.067	-0.966	0.335
	Lag_ROA	-0.121	0.052	-0.169	-2,350	0.020
a. Dependent Variable: Lag_ETR						

Source: Research data, 2026

Based on the regression results above the regression equation model can be written as follows:

Y = - 0.110 + 0.150 Lag_CI - 0.030 Lag_DAR - 0.121 Lag_ROA + e ..... (2)

The constant value of -0.110 indicates that when *capital intensity, leverage*, and profitability are constant, tax aggressiveness (ETR) is -0.110. *The capital intensity* (CI) variable has a coefficient of 0.150 and a significance value of 0.000 (<0.05), indicating that *capital intensity* has a positive effect on tax aggressiveness. *Leverage* (DAR) has a significance value of 0.335 (>0.05), so *leverage* has no effect on tax aggressiveness. Meanwhile, profitability (ROA) has a coefficient of -0.121 with a significance value of 0.020 (<0.05), indicating that profitability has a negative effect on tax aggressiveness.

Table 3. Results *of Moderated Regression Analysis* (MRA)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	0.411	0.121		3.389	0.001
	Lag_CI	-0.063	0.286	-0.135	-0.219	0.827
	Lag_DAR	-0.013	0.265	-0.030	-0.050	0.960
	Lag_ROA	-1.707	0.541	-2.388	-3.157	0.002
	Lag_UK	-0.031	0.007	-0.488	-4.237	0.000
	Lag_CI*UK	0.012	0.017	0.415	0.677	0.499
	Lag_DAR*UK	-0.001	0.016	-0.025	-0.042	0.966
	Lag_ROA*UK	0.099	0.032	2.381	3.108	0.002

a. Dependent Variable: Lag_ETR

Source: Research data, 2026

ETR = 0.411 – 0.063 Lag_CI – 0.013 Lag_DAR – 1.707 Lag_RO A + 0.012 Lag_CI*UK - 0.001 DAR*UK + 0.099 ROA*UK..... (3)

The Moderated Regression Analysis (MRA) indicates that firm size does not significantly moderate the relationships of capital intensity or leverage with tax aggressiveness. The interaction between capital intensity and firm size (Lag_CI × UK) is statistically insignificant (p = 0.499), as is the interaction between leverage and firm size (Lag_DAR × UK) (p = 0.966). By contrast, the interaction between profitability and firm size (Lag_ROA × UK) is statistically significant, with a coefficient of 0.099 (p = 0.002). The results therefore provide evidence that the moderating role of firm size is confined to the relationship between profitability and tax aggressiveness.

The overall regression model is statistically significant (F = 12.765, p < 0.001), indicating that the explanatory variables and interaction terms are jointly associated with the dependent variable. The adjusted R^2 of 0.297 indicates that the model explains approximately 29.7% of the variation in the Effective Tax Rate (ETR), with the remaining variation attributable to factors outside the model.

The results for the individual explanatory variables are reported in Table 2. Capital intensity is statistically significant (t = 4.632, p < 0.001), providing support for H1 under the interpretation adopted in the study. The finding suggests that firms with greater investment in fixed assets exhibit systematically different tax positions. One possible explanation is that greater capital intensity generates higher depreciation expenses, which may reduce taxable income and provide additional opportunities for tax planning. This result is consistent with Chandra (2024); Dewi & Nustini (2024); and Maulana et al. (2022)

Leverage is not statistically significant (t = −0.966, p = 0.335), and H2 is therefore not supported. The evidence provides no indication that differences in firms' debt levels are systematically associated with tax aggressiveness within the sample. Although debt financing can generate deductible interest expenses, the findings suggest that leverage alone does not explain variation in firms' tax positions. This result is consistent with Soumokil & Yanti (2024); Meldisthy et al.(2024); Nugraha et al. (2023).

Profitability is statistically significant (t = −2.350, p = 0.020), but the direction of the relationship is inconsistent with H3. The result therefore does not support the hypothesised positive relationship. One possible interpretation is that

more profitable firms face greater scrutiny from shareholders, regulators, and other stakeholders, increasing the potential costs associated with aggressive tax positions. This interpretation is consistent with Suyanto & Kurniawati (2022); Friskila & Jaeni (2022); and Bachtiar et al. (2025)

Table 3 reports the moderation results. The interaction between capital intensity and firm size is statistically insignificant ($\beta = 0.012$, $p = 0.499$), providing no support for H4. Firm size therefore does not appear to alter the relationship between capital intensity and the dependent variable. Similarly, the interaction between leverage and firm size is statistically insignificant ($\beta = -0.001$, $p = 0.966$), and H5 is not supported. These findings suggest that the relationships of capital intensity and leverage with firms' tax positions do not differ systematically according to organisational size. They are consistent with Sari et al (2024); Ramdhania & Kinasih (2021); Tuma & Supripo (2025); Aulia & Purwasih (2023).

A different pattern emerges for profitability. The interaction between profitability and firm size is positive and statistically significant ($\beta = 0.099$, $p = 0.002$), providing support for H6 under the proposed interpretation. The finding indicates that the relationship between profitability and the dependent variable changes as firm size increases. One possible explanation is that larger firms are subject to greater scrutiny from tax authorities, investors, and the wider public, increasing the reputational and regulatory costs associated with aggressive tax strategies. Firm size may therefore constrain the extent to which profitability is associated with tax aggressiveness. This interpretation is consistent with Prabowo & Sahlan (2021) and Putri & Maryati (2026).

CONCLUSION

This study examines the relationships of capital intensity, leverage, and profitability with tax aggressiveness and considers whether firm size moderates these relationships. The findings indicate that capital intensity is significantly associated with tax aggressiveness, while profitability exhibits a significant relationship in the opposite direction to that hypothesised. Leverage, by contrast, is not significantly associated with tax aggressiveness. Firm size does not moderate the relationships of capital intensity or leverage with tax aggressiveness, but it significantly moderates the relationship between profitability and tax aggressiveness.

The findings suggest that firms' investment in fixed assets may be relevant to their tax positions because depreciation expenses provide deductions that affect taxable income. The negative relationship between profitability and tax aggressiveness may indicate that more profitable firms adopt comparatively less aggressive tax positions, potentially because greater profitability increases their visibility and exposure to regulatory and stakeholder scrutiny. By contrast, the absence of a significant relationship for leverage suggests that differences in debt financing do not systematically explain tax aggressiveness among the sampled mining companies.

The moderation results further indicate that firm size does not alter the relationships of capital intensity or leverage with tax aggressiveness. However, firm size weakens the relationship between profitability and tax aggressiveness. This finding is consistent with the argument that larger and more profitable firms

face greater scrutiny from tax authorities, investors, and other stakeholders, potentially increasing the reputational and regulatory costs associated with aggressive tax strategies.

From a practical perspective, firms should ensure that fixed-asset investments and the associated depreciation deductions are managed transparently and in accordance with applicable tax regulations. Debt-financing decisions should similarly be supported by appropriate documentation and commercial considerations rather than being driven primarily by potential tax advantages. More generally, tax planning should balance legitimate opportunities to manage tax obligations with regulatory compliance and the potential reputational consequences of aggressive tax positions.

The study also provides several directions for future research. Alternative measures of leverage, such as the Debt-to-Equity Ratio (DER), and profitability, including Return on Equity (ROE) or Net Profit Margin (NPM), could be employed to assess whether the findings are sensitive to alternative operationalisations. Future studies could also examine additional organisational characteristics that may condition firms' tax behaviour, including corporate governance mechanisms, institutional ownership, and corporate social responsibility. Extending the analysis to other sectors and longer observation periods may further clarify whether the relationships identified in this study are specific to Indonesia's mining industry or apply more broadly.

REFERENCE

Amini, M., Darmansyah, & Rachbini, W. (2025). Pengaruh Profitabilitas, Leverage, Ukuran Perusahaan, dan Proposi Komisaris Independensi Terhadap Agresivitas Pajak Dengan Capital Intensity Sebagai Variabel Moderasi. *Jurnal Pajak & Bisnis*, *6*(1), 100–116. https://doi.org/https://doi.org/10.55336/jpb.v6i1.300

Aulia, N., & Purwasih, D. (2023). Pengaruh Kepemilikan Intitusional dan Capital Intensity Terhadap Tax Avoidance dengan Ukuran Perusahaan Sebagai Variabel Moderasi. *Jurnal Revenue*, *3*(2), 395–405. https://doi.org/10.46306/rev.v3i2.156

Bachtiar, A. Z., Indriasih, D., & Astutie, Y. P. (2025). Tata Kelola Perusahaaan Yang Baik, Intensitas Modal, Profitabilitas, dan Kesulitan keuangan : Mereka Pengaruh Terhadap Agresivitas Pajak. *Jurnal Keuangan Dan Bisnis*, *23*(2), 175–191. https://doi.org/https://doi.org/10.32524/jkb.v23i2.1546

Chandra, Y. (2024). Pengaruh Profitabilitas , Leverage , Capital Intensity dan Inventory Intensity Terhadap Agresivitas Pajak. *Jurnal Ilmia Akuntansi Dan Teknologi*, *1*, 1–16. https://doi.org/https://doi.org/10.31253/aktek.v16i1.3163

Darma, S. S., & Imadah, S. Al. (2023). Pengaruh Intensitas Aset Tetap , Financial Distress Dan Sales Growth Terhadap Tax Avoidance (Studi Empiris Pada Perusahaan Sektor Property Dan Real Estate Yang Terdaftar Di Bursa Efek Indonesia Tahun 2018-2022). *Jurnal Ilmia Akuntansi Dan Teknologi*, *2*, 1–21. https://doi.org/https://doi.org/10.31253/aktek.v15i2.2684

Dewi, M. A., & Nustini, Y. (2024). Corporate Social Responsibility , Leverage , Capital Intensity , dan Likuiditas terhadap Agresivitas Pajak : Good

Corporate Governance sebagai Pemoderasi. *Reviu Akuntansi Dan Bisnis Indonesia*, *8*(1). https://doi.org/10.18196/rabin.v8i1.20572

Dewi, S. L., & Oktaviani, R. M. (2021). Pengaruh Leverage, Capital Intensity, Komisaris Independen dan Kepemilikan Intitusional Terhadap Tax Avoidance. *Jurnal Studi Akuntansi Dan Keuangan*, *4*(2), 179–194. https://doi.org/https://doi.org/10.29303/akurasi.v4i2.122

Direktorat, J. P. (n.d.). *Laporan Kinerja Direktorat Jenderal Pajak*. https://www.pajak.go.id/id

Dwijayanto, A., & Kurniawan, H. (2025). *Sektor Penyumbang Pajak Terbesar Indonesia*. Mekari Klik Pajak. https://klikpajak.id/blog/sektor-penyumbang-pajak-terbesar-indonesia/#h-sektor-sektor-penyumbang-pajak-terbesar-di-indonesia

Fadhila, N., & Andayani, S. (2022). Pengaruh Financial Distress , Profitabilitas , dan Leverage terhadap Tax Avoidance. *Owner: Riset & Jurnal Akuntansi*, *6*, 3489–3500. https://doi.org/https://doi.org/10.33395/owner.v6i4.1211

Frank, M. M., Lynch, L. J., & Rego, S. O. (2009). Tax Reporting Aggressiveness and Its Relation to Aggressive Financial Reporting. *Journal of Accounting and Economics*. https://doi.org/10.1016/j.jacceco.2009.01.001

Friskila, T., & Jaeni. (2022). The Effect of Pro fi tability and Leverage on Tax Avoidance with Corporate Social Responsibility (CSR) as a Mediator Variable. *Jurnal Akuntansi Dan Perpajakan*, *8*(2), 201–224. http://jurnal.unmer.ac.id/index.php/ap%0AThe

Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan program IBM SPSS 25*.

Gumelar, A., Susanto, H., & Sukayat, H. (2024). Effect Of Profitability , Leverage , Firm Size On Tax Avoidance. *Jurnal Ilmiah Akuntansi*, *12*(3). https://doi.org/10.37641/jiakes.v12i2.1435

Harnovinsah, Amyulianthy, R., & Permana, E. (2025). Detecting Tax Aggressiveness through Profitability, Leverage, Inventory Intensity and Company Size. *AKRUAL: Jurnal Akuntansi*, *16*(2), 233–243. https://doi.org/10.26740/jaj.v16n2.p233-243

Hendayanaa, Y., Ramdhanyb, M. A., Pranowo, A. setyo, Rachmata, radhi A. halim, & Herdianad, E. (2024). Exploring impact of profitability , leverage and capital intensity on avoidance of tax , moderated by size of firm in LQ45 companies. *Cogent Business & Management*, *11*(1). https://doi.org/10.1080/23311975.2024.2371062

Madyastuti, N. (2022). Ukuran Perusahaan Memoderasi Pengaruh Good Corporate Governance , Capital Intensity , Leverage , dan Profitabilitas terhadap Agresivitas Pajak. *Jurnal Penelitian Dan Pengabdian Masyarakat*, *2*(4), 268–285. https://doi.org/10.36418/comserva.v2i4.2

Martha, S., Mahanani, S., & Komilova, I. (2024). Pengaruh Profitabilitas, Leverage, Good Corporate Governance dan Ukuran Perusahaan Terhadap Agresivitas Pajak. *Business and Accounting Education Journal*, *5*(19), 270–282. https://doi.org/10.15294/baej.v5i3.13786

Maulana, T., Putri, A. A., & Marlina, E. (2022). Pengaruh Capital Intensity, Inventory Intensity Dan Leverage Terhadap Agresivitas Pajak. *Jurnal Akuntansi*, *17*, 48–60. https://doi.org/https://doi.org/10.37058/jak.v17i1.6738

Meldisthy, F. F., Espa, V., & Ikhsan, S. (2024). Pengaruh Ukuran Perusahaan, Profitabilitas, dan Leverage terhadap Agresivitas Pajak. *Jurnal Ekobistek*, *13*, 54–61. https://doi.org/10.35134/ekobistek.v13i2.783

Mukaromah, R., Alfie, A. A., & Mahanani, S. (2022). Insentif Pajak dalam Memoderasi Pengaruh Pengungkapan Corporate Social Responsibility Terhadap Agresivitas Pajak. *Jurnal Ekonomi Dan Bisnis*, *17*, 54–65. https://doi.org/10.31942/akses.v17i1.6511.

Nugraha, D. B., Utaminingtyas, T. H., & Respati, D. K. (2023). Pengaruh Profitabilitas dan Leverage Terhadap Tax Avoidance Dengan Ukuran Perusahaan Sebagai Moderasi Pada Sektor Energi Yang Terdaftar Di Bursa Efek Indonesia Tahun 2018-2022. *Jurnal Akuntansi, Perpajakan Dan Auditing*, *4*(3), 802–821. https://doi.org/https://doi.org/10.21009/japa.0403.12

Oktaviani, R. M., Dewi, S. L., Wulandari, S., & Sunarto. (2023). Penghindaran Pajak : Tinjauan Umum Perusahaan di Indonesia. *Jurnal Keuangan Dan Perbankan*, *27*, 112–126. https://doi.org/10.26905/jkdp.v27i1.9028

Pajak, K. K. D. J. (2024). *Rugikan Negara 21,4 Miliar, Tersangka JAP Terancam Dibui Enam Tahun*. https://www.pajak.go.id/id/siaran-pers/rugikan-negara-214-miliar-tersangka-jap-terancam-dibui-enam-tahun

Pemerintah Republik Indonesia. (2007). *Undang-Undang Republik Indonesia Nomor 28 Tahun 2007 Tentang Perubahan Ketiga Atas Undang-Undang Nomor 6 Tahun 1983 Tentang Ketentuan Umum Dan Tata Cara Perpajakan*. https://pajak.go.id/id/undang-undang-nomor-28-tahun-2007

Prabowo, A. A., & Sahlan, R. N. (2021). Pengaruh Profitabilitas, Leverage, dan Capital Intensity Terhadap Penghidaran Pajak dengan Ukuran Perusahaan Sebagai Variabel (Moderating). *Media Akuntansi Perpajakan*, *6*(2), 55–74. https://doi.org/https://doi.org/10.52447/map.v6i2.5126

Pratiwi, S. A. D., & Fauzan. (2025). Pengaruh Leverage, Financial Distress, dan Tranfer Penentuan Harga Pada Penghindaran Pajak. *Jurnal Ekonomi Syariah Interdisipliner Indonesia (IIJSE)*, *1*, 1594–1612. https://doi.org/https://doi.org/10.31538/iijse.v8i1.6073

Putri, V. D., & Maryati. (2026). Pengaruh Leverage, Profitabilitas Dan Pertumbuhan Penjualan Terhadap Penghindaran Pajak Dengan Ukuran Perusahaan Sebagai Variabel Moderasi. *Jurnal Analisa Akuntansi Dan Perpajakan*, *10*, 58–73. file:///C:/Users/User/Downloads/11545-Article Text-52671-1-10-20260430.pdf

Ramdhania, D. Z., & Kinasih, H. W. (2021). Pengaruh Likuiditas, Leverage, dan Intensitas Modal Terhadap Agresivitas Pajak dengan Ukuran Perusahaaan Sebagai Variabel Moderasi. *Dinamika Akuntansi, Keuangan Dan Perbankan*, *10*(November), 93–106. https://doi.org/10.35315/dakp.v10i2.8876

Ridwan, M., & Sudrajat, A. (2022). Analisis Faktor-Faktor Yang Mempengaruhi Wajib Pajak Mengenai Penggelapan Pajak (Tax Evasion). *Jurnal Ilmu Administrasi Publik*, *2*(4), 379–389. https://doi.org/https://doi.org/10.31334/jiap.v2i4.2943

Romadhina, A. P. (2023). Pengaruh Kepemilikan Institusional , Intensitas Aset Tetap , Dan Financial Distress Terhadap Agresivitas Pajak. *Gorontalo Accounting Journal*, *6*(2), 272–282. https://doi.org/10.32662/gaj.v6i2.3171

Sari, S. P., Arief, M., & Ika, D. (2024). Pengaruh Likuiditas , Profitabilitas dan

Leverage Terhadap Tax Avoidance Dengan Ukuran Perusahaan Sebagai Variabel Moderasi. *Jurnal Ekonomi Bisnis, Manajemen Dan Akuntansi (Jebma)*, *4*, 1858–1875. https://doi.org/doi.org/jebma.v4n3.4738

Soumokil, F. R., & Yanti, H. B. (2024). Pengaruh Profitabilitas , Leverage dan Intensitas Modal Terhadap Agresivitas Pajak. *Journal of Accaounting and Finance Management*, *5*(5), 1119–1126. https://doi.org/https://doi.org/10.38035/jafm.v5i5

Sugiyono. (2022). *Metode Penelitian Kuantitatif, Kualitatif dan R&D* (Edisi 2). ALFABETA CV.

Suyanto, & Amiah, N. (2021). Profitabilitas, Intensitas Modal Dan Penghindaran Pajak : Ukuran Perusahaan Sebagai Variabel Pemoderasi. *Jurnal Literasi Akuntansi*, 63–73. https://doi.org/https://doi.org/10.55587/jla.v2i1.13

Suyanto, & Kurniawati, T. (2022). Profitabilitas, Perutumbuhan Penjualan, Leverage, Penghindaran Pajak : Ukuran Perushaaan Sebagai Variabel Moderasi. *Jurnal Manajemen Terapan Dan Keuangan (Mankeu)*, *11*(04), 820–832. https://doi.org/https://doi.org/10.22437/jmk.v11i04.16725

Suyanto, & Sofiyanti, U. O. (2022). Intensitas Modal, Profitabilitas, Agresivitas Pajak: Ukuran Perusahaan Sebagai Variabel Moderasi. *ECOBISMA (Jurnal Ekonomi, Bisnis Dan Manajemen)*, *2022*, 117–128. https://doi.org/https://doi.org/10.36987/ecobi.v9i1.2283

Tambun, S., & Sari, K. T. (2024). Pengaruh Profitabilitas dan Leverage terhadap Penghindaran Pajak dengan Capital Intensity sebagai Pemoderasi. *Journal Akuntansi Manajerial*, *9*(2), 75–84. https://doi.org/https://doi.org/10.52447/jam.v9i2.8003

Tambunan, S., Anindya, D. A., & Habibie, M. (2021). *Penghindaran Pajak (Tax Avoidance)* (Y. Anisa & A. Zuhaira (eds.)). https://kepegawaian.uma.ac.id/wp-content/uploads/e-book-Penghindaran-Pajak-Monogra-SB-Tambunan-UMA.pdf

Tuma, A., & Supripo. (2025). Ukuran Perusahaan Memoderasi Hubungan Corporate Sosial Responsibility dan Capital Intensity dengan Agresivitas Pajak. *Neraca Manajemen, Ekonomi*, *24*(2). https://doi.org/10.8734/mnmae.v1i2.359

Utomo, A. B., & Fitria, G. N. (2020). Ukuran Perusahaan Memoderasi Pengaruh Capital Intensity dan Profitabilitas Terhadap Agresivitas Pajak. *Jurnal Bisnis Dan Manajemen*, *10*(2), 231–246. https://doi.org/10.15408/ess.v10i2.18800

Wirianata, H., Viriany, & Hauw-sen, T. (2024). Moderasi Ukuran Perusahaan Terhadap Pengaruh Keuangan Kinerja Penghindaran Pajak. *Jurnal Akuntansi*, *28*(03), 400–419. https://doi.org/10.24912/ja.v28i2.2068