



Proceeding – ICOBIS

INTERNATIONAL CONFERENCE ON GLOBAL INNOVATION AND TRENDS IN ECONOMICS
(ICOBIS)

The Effect Of Environmental Social Governance, Transfer Pricing, Capital Intensity, And Tax Incentives On Tax Avoidance

(Study of Manufacturing Companies in the Consumer Non-Cyclical Sector Listed on the Indonesia Stock Exchange in
2020–2024)

1st Syafiqoh Mulyanti

*Accounting Study Program, Faculty of Economics and Business
Pancasakti University Tegal*
syafiqohmulyanti34@gmail.com

2nd Teguh Budi Raharjo

*Accounting Study Program, Faculty of Economics and Business
Pancasakti University Tegal*
teguhbudiraharjo@gmail.com

3rd Fahmi Firmansyah

*Accounting Study Program, Faculty of Economics and Business
Pancasakti University Tegal*
fahmifirmansyah@gmail.com

Abstract –

This study aims to test the influence of Environmental Social Governance (ESG), transfer pricing, capital intensity, and tax incentives on tax avoidance in manufacturing sector companies consumer non-cyclical listed on the IDX for the 2020–2024 period. A quantitative method was used with secondary data from annual reports and financial statements, analyzed through multiple linear regression using SPSS 25 after the classical assumption test was met. The results showed that all four variables simultaneously had a significant effect on tax avoidance (Sig. F = 0.003). Partially, only capital intensity which has a significant positive influence, while ESG, transfer pricing, and tax incentives are insignificant. The Adjusted R² value of 0.147 indicates that the model only explains 14.7% of the variation in tax avoidance.

Keywords – *tax avoidance, environmental social governance, transfer pricing, capital intensity, tax incentives*

I. INTRODUCTION

Taxes are the most dominant source of state revenue in the Indonesian State Budget (APBN), making corporate taxpayer compliance a strategic issue in maintaining the country's fiscal sustainability. On the other hand, for companies, the tax burden is viewed as a cost component that directly reduces net profit, thus encouraging management to implement various tax planning strategies, including tax avoidance. Tax avoidance is done by exploiting loopholes in tax regulations so that legally and formally it does not violate the law, but still causes controversy because it has the potential to significantly reduce state revenue.

Phenomenon tax avoidance increasingly relevant to discuss as demands for corporate transparency through disclosure increase Environmental Social Governance (ESG). ESG reflects a company's commitment to environmental sustainability, social responsibility, and good governance, which is theoretically expected to help reduce opportunistic management behavior, including in tax management. In addition to ESG, transfer pricing also in the spotlight because

transactions between related companies have the potential to be used to shift profits to jurisdictions with lower tax burdens. Capital intensity This is also a concern because large investments in fixed assets generate depreciation charges that can legally reduce taxable profits. Finally, tax incentives provided by the government as investment incentives are also suspected of influencing corporate tax behavior, although the direction of this influence remains debated in the literature.

Previous research has shown inconsistent results regarding the determinant tax avoidance Mitroulia et al. (2025) and Lee (2024) found that high ESG tends to reduce tax avoidance practices through strengthening governance and transparency, while Reka Mayangsari et al. (2024) did not find a significant effect between ESG and tax avoidance. Likewise on the variable transfer pricing Pohan (2019) and Tampubolon and Farizi (2018) emphasized the potential of transfer pricing as a means of profit shifting, but the empirical findings of Reka Mayangsari et al. (2024) do not support this relationship. Regarding the capital intensity variable, Rifai (2019), Alghifari et al. (2020), and Wijaya and Rochmatullah (2025) consistently found a significant positive effect on tax avoidance, while for tax incentives, Anjelina's (2022) results showed no significant influence, in contrast to predictions Incentive Theory and the findings of Alstadsæter et al. (2013). This inconsistency creates a research gap that encourages re-examining these four variables simultaneously in a more recent sector and period context.

This research gap lies in three aspects. First, in terms of results, there are still differences in conclusions between researchers regarding the direction and significance of ESG's influence transfer pricing, capital intensity, and tax incentives for tax avoidance. Second, from the object side, the majority of previous research focused on the manufacturing sector in general or the financial sector, while specific studies on sub-sectors consumer non-cyclicals which have relatively inelastic demand characteristics and unique asset structures are still limited. Third, in terms of timeframe, this study uses the 2020–2024 period, which encompasses the post-COVID-19 economic recovery period as well as the period in which various government tax incentives were implemented. Therefore, it is relevant to re-examine the effectiveness of these incentives in a more current context.

Based on this description, this study aims to analyze the influence Environmental Social Governance, transfer pricing, capital intensity, and tax incentives both simultaneously and partially toward tax avoidance in manufacturing sector companies consumer non-cyclicals listed on the Indonesia Stock Exchange for the 2020–2024 period. The results of this study are expected to provide theoretical contributions to the development of tax accounting literature, as well as practical contributions for regulators, investors, and company management in formulating more targeted policies related to tax governance and compliance.

2.1 Agency Theory and Legitimacy Theory

This research is grounded in agency theory, which explains the potential conflict of interest between principals (shareholders) and agents (management). Management, as the party managing the company's operations, has an incentive to maximize reported profits, one of which is through strategies to minimize tax burdens. On the other hand, legitimacy theory explains the company's incentive to align its activities with social norms and expectations, including through ESG disclosure, to gain legitimacy from stakeholders. These two theories are used complementary to explain how governance pressures and social legitimacy pressures can influence management decisions in managing the company's tax obligations.

2.2 Tax Avoidance

Tax avoidance Tax evasion is a legal effort to minimize the tax burden by exploiting loopholes in existing tax regulations, unlike tax evasion, which is illegal. Although legally valid, this practice remains a concern because it has the potential to erode the country's tax base and raise issues of fairness among taxpayers. In this study, tax avoidance proxied through an approach commonly used in tax accounting literature, which reflects the difference between the tax burden reported in accounting and the tax burden that should be paid based on the applicable tax rate.

2.3 Environmental Social Governance And Tax Avoidance

ESG is a framework for measuring corporate sustainability performance across three dimensions: environmental, social, and governance. Mitroulia et al. (2025) argue that sound ESG implementation can increase transparency and reduce agency conflicts, thereby reducing the tendency for corporate governance to be corrupt. tax avoidance This is in line with Lee's (2024) findings, which emphasize the role of corporate governance in this mechanism. However, Reka Mayangsari et al. (2024) show that ESG disclosure and tax policy can operate as two relatively independent managerial decisions, as ESG is more oriented toward meeting stakeholder expectations, while tax decisions are more driven by internal financial considerations. Based on this description, the following hypothesis is formulated:

H1: Environmental Social Governance has an effect on tax avoidance.

2.4 Transfer Pricing And Tax Avoidance

Transfer pricing is the pricing of transactions between companies with special relationships. Pohan (2019) explains that transfer pricing potentially used to shift profits from entities with high tax rates to entities with lower tax rates if the set price deviates from the arm's length principle. Tampubolon and Farizi (2018) added the importance of tax authority oversight of affiliated transactions to prevent such practices. However, transactions with related parties are also common as part of operational efficiency within a business group, so they are not always motivated by tax avoidance, as found in the study by Reka Mayangsari et al. (2024). Based on this description, the following hypothesis is formulated:

H2: Transfer pricing has an effect on tax avoidance.

2.5 Capital Intensity And Tax Avoidance

Capital intensity reflects the proportion of a company's investment in fixed assets. Rifai (2019) explains that large fixed assets generate depreciation expenses that can be recognized as a reduction in taxable profit, potentially reducing the legal tax burden. Alghifari et al. (2020) strengthen this argument by showing that capital-intensive companies tend to utilize depreciation expenses to optimize their tax position. Empirical findings by Wijaya and Rochmatullah (2025) also confirm the positive and significant influence of capital intensity on tax avoidance. Based on this description, the following hypothesis is formulated:

H3: Capital intensity has a positive effect on tax avoidance.

2.6 Tax Incentives and Tax Avoidance

Tax incentives are tax facilities provided by the government to encourage investment and economic activity (Suandy, 2003). Theoretically, Incentive Theory predicts that providing incentives will influence taxpayer behavior, and Alstadsæter et al. (2013) found that companies receiving incentives tend to have lower effective tax rates. However, officially obtained tax incentives have the potential to reduce the need for companies to pursue additional tax avoidance strategies, as found by Anjelina (2022) who found no significant effect of tax incentives on tax avoidance. Based on this description, the following hypothesis is formulated:

H4: Tax incentives have an effect on tax avoidance.

II. METHOD

3.1 Types and Sources of Data

This research uses a quantitative approach with secondary data sourced from annual reports and audited financial reports of manufacturing sector companies (consumer non-cyclicals) listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period, published on the official IDX website (www.idx.co.id) and the official websites of each company.

3.2 Population and Sample

The research population includes all manufacturing sector companies (consumer non-cyclicals) listed on the IDX during the observation period. The sample was selected using a purposive sampling technique based on certain criteria, including companies that consistently published annual reports and sustainability reports during the 2020–2024 period, did not experience losses that caused the value of tax avoidance cannot be calculated, and presents complete data on all research variables. The dependent variable is tax avoidance (Y); the independent variables consist of Environmental Social Governance (X1), transfer pricing (X2), capital intensity (X3), and tax incentives (X4); company age is used as a control variable.

TABLE I. SAMPLE RESEARCH CRITERIA

No	Criteria	Passed
1	Sector companies (consumer non-cyclicals) listed on the IDX during 2020–2024.	132
2	Sector companies (consumer non-cyclicals) which did not publish financial reports consistently from 2020–2024.	(41)
Number of research samples		91
Year of research		5
Total		455

3.3 Data Analysis Techniques

Data analysis was conducted using SPSS version 25 through the following stages: (1) descriptive statistics to describe data characteristics (minimum, maximum, average, and standard deviation values); (2) classical assumption tests including normality tests (Kolmogorov-Smirnov), multicollinearity tests (tolerance and VIF), heteroscedasticity tests (scatterplot graphs and Glejser tests), and autocorrelation tests (Durbin-Watson); (3) multiple linear regression analysis to estimate the influence of independent variables on dependent variables; and (4) hypothesis testing consisting of model feasibility tests (F tests), partial significance tests (t tests), and coefficient of determination tests (Adjusted R Square). Initial data that were not normally distributed were transformed using natural logarithms (Ln) before estimating the regression model.

III. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Descriptive statistics on 455 panel data observations show a picture of the data distribution as presented in Table 2.

TABLE II. DESCRIPTIVE STATISTICS RESULTS

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Tax Avoidance	455	-5,318	4,958	-0,668	1,643
ESG	455	-0,058	0,054	-0,007	0,018
Transfer Pricing	455	0,001	0,998	0,183	0,267
Capital Intensity	455	0,107	0,855	0,379	0,193
Tax Incentives	455	-0,020	0,499	0,119	0,096

Source: Secondary data processed using SPSS 25 (2026).

Table 2 shows that the average tax avoidance has a negative value (-0.668) with relatively large inter-company variation (standard deviation 1.643 exceeds the absolute average value), indicating heterogeneity in tax avoidance practices in the sector consumer non-cyclicals. The ESG variable has a very narrow range of values (-0.058 to 0.054), indicating a relatively uniform level of ESG disclosure across the study sample. Meanwhile, capital intensity averaged 0.379, indicating that approximately 37.9 percent of the sample companies' total assets were allocated to fixed assets.

4.2 Classical Assumption Test

Prior to estimation, the data were transformed using natural logarithms because the initial normality test results showed a significance value of 0.000 (the data was not normally distributed). After transformation, the Kolmogorov-Smirnov test results showed an Asymp. Sig. (2-tailed) value of 0.200, which is above the 0.05 threshold, so the model residuals are declared normally distributed. A summary of the results of the four classical assumption tests is presented in Table 3.

TABLE III. SUMMARY OF CLASSICAL ASSUMPTION TEST RESULTS

Test Type	Indicator	Mark	Criteria	Information
Normality	Asymp. Sig. (2-tailed)	0,200	> 0,05	Normally distributed data
Multicollinearity	Highest tolerance / VIF	0,622 / 1,609	Tol. > 0.10; VIF < 10	There is no multicollinearity
Heteroscedasticity	Scatterplot distribution pattern	Random, no pattern	Does not form a pattern	There is no heteroscedasticity
Autocorrelation	Durbin-Watson (d)	2,016	dU < d < 4-dU (1.801-2.199)	No autocorrelation occurs

Source: Secondary data processed using SPSS 25 (2026).

4.3 Multiple Linear Regression Analysis

The results of the multiple linear regression estimation are presented in Table 4, with the regression equation as follows:

$$Y = -0,482 - 0,540(X_1) - 1,206(X_2) + 0,165(X_3) + 0,193(X_4) + e$$

TABLE IV. RESULTS OF MULTIPLE LINEAR REGRESSION ANALYSIS

Variables	B	Std. Error	Beta	t	Say.
(Constant)	-0,482	0,657	-	-0,733	0,464

Variables	B	Std. Error	Beta	t	Sig.
ESG	-0,540	0,920	-0,037	-0,587	0,558
Transfer Pricing	-1,206	1,226	-0,068	-0,984	0,326
Capital Intensity	0,165	0,055	0,248	2,976	0,003
Tax Incentives	0,193	0,461	0,032	0,418	0,676

Source: Secondary data processed using SPSS 25 (2026). Dependent variable: Tax Avoidance.

4.4 Hypothesis Testing

4.4.1 Model Feasibility Test (F Test)

TABLE V. F TEST RESULTS

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.081,924	4	270,481	4,159	0,003
Residual	16.258,907	250	65,036	-	-
Total	17.340,830	254	-	-	-

Source: Secondary data processed using SPSS 25 (2026). Predictors: (Constant), Tax Incentives, Transfer Pricing, ESG, Capital Intensity.

The F-value of 0.003 (<0.05) indicates that the regression model is suitable for use, and that all four independent variables—ESG, transfer pricing, capital intensity, and tax incentives—simultaneously significantly influence tax avoidance. It should be noted that the final model estimation uses 255 observations (after transformation and incomplete data handling), compared to the 455 observations in the initial descriptive statistics stage; readers are advised to confirm this final number of observations in the research data.

4.4.2 Partial Significance Test (t-Test)

TABLE VI. T-TEST RESULTS

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.482	.657		-.733	.464
	ESG	-.540	.920	-.037	-.587	.558
	Transfer Pricing	-1.206	1.226	-.068	-.984	.326
	Capital Intensity	.165	.055	.248	2.976	.003
	Tax Incentives	.193	.461	.032	.418	.676

a. Dependent Variable: Tax Avoidance

With a t-table of 1.965 at a significance level of 5%, Figure 3 shows that only the capital intensity variable has a |t-count| value (2.976) exceeding the t-table, while ESG (0.587), transfer pricing (0.984), and tax incentives (0.418) are below the t-table value. This result is consistent with the significance value in Table 3, where only capital intensity has a Sig. <0.05 (0.003).

H1 is rejected: ESG does not have a significant effect on tax avoidance (Sig. 0.558 >0.05).

H2 is rejected: Transfer pricing does not have a significant effect on tax avoidance (Sig. 0.326 >0.05).

H3 is accepted: Capital intensity has a positive and significant effect on tax avoidance (Sig. 0.003 <0.05).

H4 is rejected: Tax incentives do not have a significant effect on tax avoidance (Sig. 0.676 >0.05).

4.4.3 Coefficient of Determination (Adjusted R Square)

TABLE V. RESULTS OF THE DETERMINATION COEFFICIENT TEST

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
0,250	0,239	0,147	8,064	2,016

Source: Secondary data processed using SPSS 25 (2026).

The Adjusted R Square value of 0.147 in Figure 4 indicates that the four independent variables together can only explain 14.7 percent of the variation in tax avoidance, while the remaining 85.3 percent is explained by other factors

outside the model, such as ownership structure, information asymmetry, audit quality, profitability, and leverage. This relatively small Adjusted R Square value is common in secondary data-based financial accounting research, given the complexity of the factors influencing corporate tax decisions.

4.5 Discussion

4.5.1 The Impact of ESG on Tax Avoidance

The test results show that ESG does not have a significant effect on tax avoidance (Sig. 0.558). This finding indicates that the level of ESG disclosure has not directly changed management decisions in managing tax burdens. This result does not support the arguments of Mitroulia et al. (2025) and Lee (2024) who emphasize the role of ESG in suppressing tax avoidance through strengthening governance, but in line with the findings of Reka Mayangsari et al. (2024). Conceptually, this can be explained because ESG disclosure is driven more by the motive of meeting investor and regulatory expectations (external legitimacy), while tax decisions are more influenced by considerations of cash flow, tax burden, and internal financial strategy—so that these two aspects can operate relatively independently, especially if ESG disclosure is not accompanied by tangible changes in business practices.

4.5.2 The Effect of Transfer Pricing on Tax Avoidance

Transfer pricing was not proven to have a significant effect on tax avoidance (Sig. 0.326). This finding does not support the views of Pohan (2019) and Tampubolon and Farizi (2018) who emphasized the potential of transfer pricing as a means of transferring profits between related entities, but is consistent with the results of Reka Mayangsari et al. (2024). This condition can be explained because transactions with related parties in the non-cyclical consumer sector are most likely driven by operational needs within a business group—such as raw material procurement and product distribution—and have followed the arm's length principle, so they are not systematically used as an instrument of tax avoidance.

4.5.3 Influence Capital Intensity to Tax Avoidance

Capital intensity is shown to have a positive and significant effect on tax avoidance (coefficient 0.165; Sig. 0.003), making it the only significant independent variable in this model. This finding supports Rifai (2019) and Alghifari et al. (2020) who explain that large investments in fixed assets generate depreciation expenses that can legally reduce taxable profits, and is consistent with the empirical results of Wijaya and Rochmatullah (2025). Practically, this finding confirms that capital-intensive companies in the non-cyclical consumer sector have greater room to manage their tax burden through fixed asset depreciation mechanisms compared to companies with low capital intensity—a relevant insight for investors and tax authorities in assessing the tax risks of asset-intensive companies.

4.5.4 The Effect of Tax Incentives on Tax Avoidance

Tax incentives were not shown to have a significant effect on tax avoidance (Sig. 0.676). This finding does not support Incentive Theory or the results of Alstadsæter et al. (2013), but is consistent with Anjelina (2022). This condition can be interpreted as meaning that the tax incentives officially obtained by companies through government policies already provide sufficient relief, thus preventing companies from pursuing additional tax avoidance strategies. In other words, tax incentives function as their original purpose as an investment stimulus, not as an additional loophole for tax profit management.

4.5.5 Research Contribution

Theoretically, this study enriches the literature by demonstrating that ESG-based governance mechanisms and government fiscal incentives are not always effective in suppressing tax avoidance if not accompanied by strengthened substantive oversight, while structural factors such as capital intensity more consistently influence corporate tax behavior. Practically, these findings recommend that investors and tax authorities pay greater attention to capital intensity levels as an early indicator of potential tax avoidance, rather than solely relying on ESG scores or tax incentive status as a proxy for compliance.

IV. CONCLUSIONS

5.1 Conclusion

Based on the analysis and discussion, it can be concluded that simultaneously, Environmental Social Governance, transfer pricing, capital intensity, and tax incentives have a significant effect on tax avoidance in non-cyclical consumer manufacturing companies listed on the IDX for the 2020–2024 period (Sig. $F = 0.003$). Partially, only capital intensity is proven to have a positive and significant effect on tax avoidance, while ESG, transfer pricing, and tax incentives have

no significant effect. This research model is able to explain 14.7 percent of the variation in tax avoidance (Adjusted R Square = 0.147), so that most of the variation is explained by other factors outside the tested model.

5.2 Suggestions

For companies, it is recommended to increase the integration of ESG into business and tax strategies in a substantive manner, beyond simply fulfilling regulatory obligations, to strengthen transparency and accountability.

Regulators and the Directorate General of Taxes are advised to tighten oversight of transfer pricing transactions and review fixed asset depreciation policies to prevent excessive use as a means of tax avoidance, as well as to design more selective and sector-based tax incentives.

For investors, it is recommended to use the level of capital intensity as an important indicator in assessing the potential tax risks of a company.

For further researchers, it is recommended to add other variables such as profitability, leverage, company size, ownership structure, or audit quality, as well as expanding the research object to other sectors and a longer observation period to obtain more comprehensive results.

REFERENCES

- Alghifari, E. S., Suryana, & Wardhana, A. (2020). The influence of capital intensity and asset structure on depreciation policy and its implications for tax avoidance. [Journal details need to be completed].
- Alstadsæter, A., Barrios, S., Nicodème, G., Skonieczna, A. M., & Vezzani, A. (2013). Patent boxes design, patents location and local R&D. European Commission, Taxation Papers. [Journal details need to be completed/verified].
- Anjelina, A. (2022). The effect of tax incentives on tax avoidance in companies listed on the Indonesia Stock Exchange. [Journal details need to be completed].
- Ghozali, I. (2018). Multivariate analysis application with IBM SPSS 25 program (9th ed.). Diponegoro University Publishing Agency.
- Ghozali, I. (2021). Multivariate analysis application with IBM SPSS 26 program (10th ed.). Diponegoro University Publishing Agency.
- Lee, J. (2024). Environmental, social, and governance performance and corporate tax avoidance. [Detail jurnal perlu dilengkapi].
- Mitroulia, D., Kounadeas, T., & Eriotis, N. (2025). ESG performance, agency conflict, and corporate tax avoidance. [Journal details need to be completed].
- Pohan, C. A. (2019). Tax management: Tax and business planning strategies (Revised edition). Gramedia Pustaka Utama.
- Reka Mayangsari, D., et al. (2024). The influence of ESG and transfer pricing on tax avoidance in manufacturing companies. [Journal details need to be completed].
- Rifai, A. (2019). Capital intensity, fixed asset depreciation, and tax avoidance. [Journal details need to be completed].
- Suandy, E. (2003). Tax planning. Salemba Empat.
- Tampubolon, K., & Farizi, Z. Al. (2018). Transfer pricing and tax risks in multinational companies. [Journal details need to be completed].
- Wijaya, R., & Rochmatullah, M. R. (2025). The effect of capital intensity on tax avoidance in manufacturing companies. [Journal details need to be completed].
- Indonesia Stock Exchange. (2026). Annual reports and financial statements of listed companies. www.idx.co.id.