The Influence of Corporate Social Responsibility, Leverage, and Capital Intensity on Tax Avoidance With Institutional Ownership as a Moderating Variable (A Study on Consumer Non-Cyclicals Sector Companies Listed on the Indonesia Stock Exchange for the 2020 – 2022)

SALSABILA, LIN OKTRIS
Faculty of Economics and Business
Universitas Mercu Buana
Jakarta, INDONESIA

Abstract: This study aims to examine the influence of corporate social responsibility, leverage, and capital intensity on tax avoidance, with institutional ownership as a moderating variable (a study on consumer non-cyclical sector companies listed on the Indonesia Stock Exchange for the period 2020 – 2022). The study population consist of all consumer non-cyclical sector companies listed on the IDX during the 2020 – 2022 period, totaling 125 companies. The analytical method used in this research is panel data regression with the assistance of the EViews 12 application. The results of this study indicate that corporate social responsibility, leverage, and institutional ownership do not influence tax avoidance. Capital intensity has a positive effect on tax avoidance. Institutional ownership does not moderate the influence of corporate social responsibility and leverage on tax avoidance. However, institutional ownership weakens the influence of capital intensity on tax avoidance.

Key-Words: Capital Intensity, Corporate Social Responsibility, Institutional Ownership, Leverage, Tax Avoidance

Received: March 18, 2025. Revised: April 29, 2025. Accepted: May 19, 2025. Published: July 29, 2025.

1. Introduction

On March 11, 2020, the World Health Organization (WHO) declared the COVID-19 pandemic a global health emergency. The economy was just one of many sectors that experienced profound impacts. The spread of the virus forced many countries to face severe economic challenges, leading to a contraction in global growth. The initial economic recovery projection, which was expected to grow by 3.3% in 2020 according to the International Monetary Fund (IMF), underwent a significant shift, turning into a recession due to restrictions on economic and social activities.

As an effort to mitigate the impact of the pandemic, the Indonesian government formulated fiscal policies through various taxation measures, such as providing incentives and reducing corporate tax rates. These strategies can help alleviate financial pressure but may also encourage tax avoidance. Although sometimes violating applicable tax regulations, companies engage in these strategies to legally reduce their tax obligations.

The practice of tax avoidance has a significant impact on state revenue. According to the Tax Justice Network in 2020, Indonesia faced a potential tax revenue loss of IDR 68.7 trillion due to such practices. A similar phenomenon also occurs in companies within the consumer non-cyclicals sector, such as PT Indofood Sukses Makmur Tbk, PT Bentoel Internasional Investama, and PT Unilever Indonesia Tbk. These companies are suspected of engaging in various tax avoidance schemes, including transfer pricing mechanisms and the use of intra-group financing structures [1].

Several studies have shown that characteristics such as capital intensity, leverage, and corporate social responsibility play a role in tax avoidance. Corporate social responsibility is often used to improve a company's reputation while also serving as a tool for reducing tax burdens [2]. Meanwhile, leverage allows companies to reduce taxable income through interest expenses [3], and capital intensity provides opportunities for tax reduction through fixed asset depreciation expenses [4]. Among corporate governance components, institutional ownership is believed to have the potential to mitigate the correlation between these factors and tax avoidance.

Based on discussion above, the hypothesis in this research include:

H1: Does corporate social responsibility have an influence on tax avoidance?

H2: Does leverage have an influence on tax avoidance?
H3: Does capital intensity have an influence on tax avoidance?
H4: Does institutional ownership have an influence on tax avoidance?
H5: Can institutional ownership moderate the relationship between corporate social responsibility and tax avoidance?
H6: Can institutional ownership moderate the relationship between leverage and tax avoidance?
H7: Can institutional ownership moderate the relationship between capital intensity and tax avoidance?

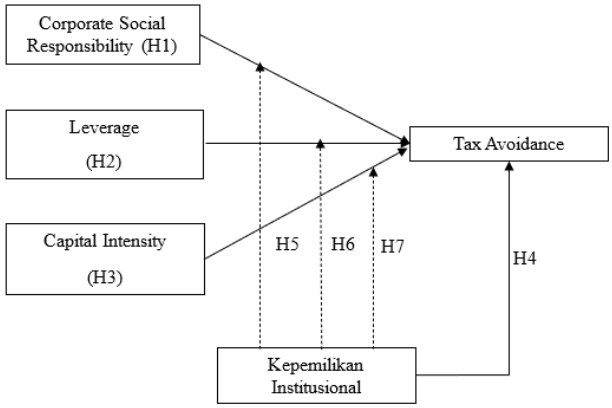

Figure 1. Research Model

2. Literature Review

2.1 Agency Theory

Agency theory provides a framework for understanding potential conflicts between administrators (as agents) and owners (as principals). In this relationship, agents report business performance to principals through financial statements. In the context of decentralization, agents have greater access to information than principals because they are granted broader authority to make strategic decisions regarding corporate policies [5]. Within agency theory, agents tend to exploit their authority for personal gain, including through tax avoidance, to reduce tax burdens and enhance company value. Meanwhile, the government, as the principal, seeks to maximize tax revenues. Tax avoidance practices are often accompanied by financial statement manipulation, which can hinder principals' decision-making due to inaccurate information [6]

2.2 Theory of Planned Behavior

The Theory of Planned Behavior (TPB) explains that an individual's actions are based on intentions, which are influenced by internal and external factors. Intention reflects an individual's plan to act in order to achieve a specific goal. An individual's desire represents the motivation that influences behavior, where the stronger the drive and effort, the higher the likelihood of carrying out the action [7]. The intention to act arises when an individual perceives positive benefits from the action, supported by confidence in their ability to execute it. In the context of tax avoidance, TPB is relevant as it explains the planned behavior of companies in managing their tax obligations [8]. TPB helps in understanding how intention and belief influence taxpayers' behavior in fulfilling their tax responsibilities.

2.3 Corporate Social Responsibility

In the pursuit of sustainable development goals, it is essential for corporations to actively participate in achieving these objectives. This commitment is mandated by the Indonesian Company Law No. 40 of 2007, Article 1 Paragraph 3, which stipulates that business entities bear social responsibility toward their surrounding environment. This legal requirement aligns with the concept of corporate social responsibility (CSR). CSR refers to a framework in which companies are held accountable to all stakeholders across various dimensions of business operations, including economic, social, and environmental aspects [9].

The Global Reporting Initiative (GRI) Standards of 2019 emphasize that companies bear the responsibility to comply with tax regulations and fulfill their obligations to stakeholders, in accordance with the expectations of sound tax practices. These standards highlight the significance of public tax reporting as a means to enhance transparency, trust, and integrity within corporate tax practices and systems. Moreover, such disclosure enables stakeholders to assess a company's tax position and behavior based on accessible and reliable information.

Corporate Social Responsibility (CSR) is an initiative that not only generates economic impact but also influences society and the environment [10]. As noted by [11], the implementation of CSR by companies can contribute to the reduction of tax avoidance practices. CSR represents a company’s accountability toward its stakeholders and the broader community. In this context, tax obligations fall within the scope of such responsibilities, thereby linking CSR initiatives to corporate tax avoidance behavior. As environmental awareness increases, well-designed CSR programs can discourage aggressive tax avoidance. Enhanced CSR performance may foster greater public acceptance and legitimacy. Consequently, the more effectively a

company implements CSR, the lower its tendency to engage in tax avoidance.

2.4 Leverage

According to [12], leverage reflects the extent to which a company utilizes borrowed funds to finance its operations. Essentially, leverage indicates the proportion of a company's assets that are financed through debt. Excessive levels of debt may pose significant risks to firms, potentially classifying them as highly leveraged entities. This condition implies that the company is burdened with substantial debt obligations, making it challenging to reduce its financial liabilities. However, when managed effectively, leverage can also serve as a critical mechanism for preventing business failure. Therefore, it is recommended that companies carefully evaluate the extent of debt they can sustain and identify appropriate financial resources to meet these obligations [13].

Leverage arises when a company utilizes its assets and financial resources in operational activities, resulting in fixed expenses such as depreciation and interest on debt. Firms employing leverage aim to generate returns that exceed these fixed costs. A higher leverage ratio indicates greater reliance on third-party debt to finance operations, which in turn increases the interest burden associated with such debt [12]. This elevated financial cost reduces the firm's net profit, thereby affecting the amount of taxable income. Consequently, companies with higher leverage ratios may have less incentive to engage in tax avoidance practices, as their tax liabilities are already diminished by the interest expenses. Therefore, the higher a company's leverage ratio, the lower the likelihood of engaging in tax avoidance strategies.

2.5 Capital Intensity

Capital intensity refers to the continuous investment process undertaken by companies, which involves the allocation of funds toward fixed assets or capital-intensive resources. The capital intensity ratio represents the proportion of fixed asset investment made by a company, in accordance with the guidelines set out in PSAK 16 [14]. This ratio reflects how effectively a company utilizes its fixed assets to generate revenue from sales. According to [15], capital intensity also indicates the extent to which a company allocates financial resources toward the operation and financing of assets to enhance its profitability.

According to [16], fixed assets owned by a company can contribute to reducing tax burdens through annual depreciation. The higher the depreciation expense, the lower the taxable income, as depreciation is treated as a deductible expense [17]. Consequently, companies with a large proportion of fixed assets tend to pay less tax. This suggests that a higher capital intensity ratio may encourage tax avoidance practices. Firms with a greater proportion of fixed assets are more likely to engage in tax planning. As capital intensity increases, so does depreciation expense, which can be strategically used to lower pre-tax earnings. Therefore, a higher level of capital intensity can motivate firms to engage in tax avoidance activities.

2.6 Tax Avoidance

Tax avoidance refers to the rational effort to reduce tax liabilities by legally circumventing tax obligations and taking advantage of non-taxable transactions. According to a study by [18], tax avoidance is defined as the use of legal tax provisions for personal or corporate benefit, aimed at minimizing the amount of taxes payable in accordance with prevailing regulations. Dyreng, Hanlon, and Maydew (2010), as cited by [19], describe tax avoidance as "any activity that reduces a firm's tax liability in relation to its pre-tax accounting income."

[20] argue that firms consistently strive to maximize benefits and enhance profitability, which can be achieved either by increasing revenue or reducing expenses. Among these expenses, corporate tax is a significant component that directly impacts net profit. As tax avoidance practices remain within legal boundaries, companies are incentivized to minimize their tax burden through such strategies. By reducing tax obligations, firms can free up cash flow that may be reinvested to expand production capacity, ultimately contributing to higher firm value. From the lens of agency theory, tax minimization also serves as a means to increase employee compensation and bonuses, providing further motivation for management to engage in tax avoidance [21].

Decisions made by a company's stakeholders play a critical role in driving the implementation of tax avoidance practices. According to [22], firms adopt a range of strategies aimed at reducing their tax liabilities. One such strategy involves the deliberate structuring of accounting procedures to lower the effective tax rate paid by the company.

2.7 Institutional Ownership

Institutional ownership refers to the ownership of company shares by entities that hold significant investment interests, such as insurance companies, banks, investment firms, mutual funds, securities

companies, pension funds, and other financial institutions. Institutional ownership serves as a mechanism to mitigate agency conflicts. When institutions hold a substantial proportion of a company's shares, they possess the capacity to influence managerial decisions, including the enforcement of conservative accounting practices. The primary objective of such influence is to prevent managerial opportunism that could distort the firm's performance. A higher proportion of institutional ownership enhances monitoring effectiveness, thereby reducing managerial opportunistic behavior and potentially improving the firm's return on assets.

Indonesian companies, as corporate taxpayers, aim to maximize their profits in order to increase the firm's stock value, thereby attracting more investors to invest in the company [23]. According to [24], the presence of institutional ownership in a company contributes to more effective monitoring of managerial performance. From the perspective of agency theory, there is a tendency for managers to act in their own self-interest, potentially disregarding the welfare of the firm's owners or shareholders.

3. Research Method

3.1 Population

Population refers to the domain of generalization that includes objects or subjects possessing specific qualities and characteristics, which are examined by the researcher in order to draw conclusions [25]. Thus, population can be defined as the entirety of characteristics or units of measurement that constitute the main focus of the study.

The population in this study consists of companies listed on the Indonesia Stock Exchange (IDX). Specifically, the research focuses on all manufacturing firms within the consumer non-cyclicals sector that were listed on the IDX during the 2020–2022 period. As of 2023, a total of 125 companies were categorized under the consumer non-cyclicals sector on the IDX. The data used in this study were obtained by downloading financial reports from the official IDX website.

3.2 Sample

A sample refers to a subset of the population that possesses specific quantities and characteristics [25]. The selected sample must be representative of the entire population. A representative sample reflects the traits of the population, even though its size may not always allow for precise generalization regarding the population's characteristics. This study employs a purposive random sampling technique. According to [25], purposive random sampling is a method of sample selection based on specific considerations or criteria. The criteria used to determine the sample from the population are as follows:

1. Companies that published audited financial statements consecutively on the Indonesia Stock Exchange (IDX) during the 2020–2022 period.
2. Companies with an effective tax rate (ETR) of less than 1 consistently over the 2020–2022 period.

Out of a total population of 125 companies in the consumer non-cyclicals sector, only 93 companies met the specified criteria.

3.3 Research Design

This study adopts a quantitative research design using secondary data obtained from the financial statements and sustainability reports of 93 companies in the consumer non-cyclicals sector listed on the Indonesia Stock Exchange (IDX) for the period 2020–2022. The data were collected from the official IDX website as well as the respective companies' official websites. All data were compiled into structured tabulations and subsequently processed for empirical analysis. The data processing includes the calculation and analysis of research model variables. Statistical analysis was conducted using the EViews software. Based on the processed data, conclusions were drawn to address the objectives of this study.

4. Result and Discussion

4.1 Descriptive Statical Test

Each variable in this analysis exhibits significant differences, as reflected in the descriptive results. CSR shows a relatively low mean value (17.93%) with a substantial standard deviation (23.79%), indicating high variation among companies regarding CSR disclosure. With a median value of 0%, it is evident that some companies either do not have or do not provide relevant sustainability reports. In contrast, PT FAP Agri Tbk demonstrates a very high level of CSR transparency, as indicated by a score of 91.45%.

The standard deviation of leverage is 795.41%, with a mean of 194.32%, both of which are considerably high. This indicates that while most companies have lower leverage (median 90.64%), a small number of firms, such as PT Estika Tata Tiara Tbk (9250.03%) and PT Cilacap Samudera Fishing Industry Tbk (-6882.33%), exhibit significantly higher leverage levels. Capital intensity shows a mean value of 36.24%, but with a lower standard deviation (19.57%) compared to the mean. This suggests that most companies maintain a relatively stable proportion of fixed asset utilization, although

some firms, such as PT Indo Pureco Pratama Tbk (96.26%), have exceptionally high capital intensity values.

Tax avoidance has a mean value of 16.55%, with a higher standard deviation (20.54%), indicating variation in tax avoidance levels among companies. Some firms, such as PT Buyung Poetra Sembada Tbk, exhibit exceptionally high tax avoidance, while others may have negative values, such as PT Tri Bayan Tirta Tbk. The standard deviation of institutional ownership is 26.33%, while the mean value is 63.32%. Thus, despite significant variation, the majority of businesses have high levels of institutional ownership. Notably, 0% of the significant businesses lack institutional shareholders.

Additionally, based on the results of the descriptive statistical test, the initial dataset of 279 data points had to be reduced to 125 after the elimination of outliers. This elimination process is crucial, as outliers can distort the analysis results and hinder an accurate representation of the data. Descriptive statistics, in general, summarize the distribution and variation of research variables. They also help ensure that the data used for analysis is reliable.

After removing outliers, the comparison between mean values and standard deviations no longer indicates an excessively wide range. The Corporate Social Responsibility (CSR) variable reached a maximum disclosure level of 91.45% in 2022, reported by PT FAP Agri Tbk, while the lowest CSR disclosure was recorded at 6.84% in 2020 by PT Budi Starch & Sweetener Tbk. This reflects a significant variation in CSR disclosure practices among companies in the consumer non-cyclicals sector, despite some firms still reporting relatively low levels of disclosure. An example of an extremely high leverage ratio was observed at PT Jaya Agra Wattie Tbk, which recorded a debt-to-equity ratio of 2931.67% in 2022. Conversely, the lowest leverage ratio, -219.81%, was recorded by PT Bakrie Sumatera Plantations Tbk in 2021. These figures illustrate the substantial variation in capital structure, particularly in the debt-to-equity ratios among the companies studied. For the capital intensity variable, PT Sariguna Primatirta Tbk reported a ratio of 76.22% in 2021 and 1.38% in 2022, while PT Millennium Pharmacon International Tbk showed the lowest level of capital intensity. These results indicate diverse levels of fixed asset utilization within the sector, with some companies allocating a significantly higher proportion of their resources to fixed assets compared to others.

In 2020, PT Triputra Agro Persada Tbk had the highest institutional ownership, reaching 100%. Conversely, some companies exhibited extremely low levels of institutional ownership, with certain firms reporting as low as 0%. Notable examples include PT Campina Ice Cream Industry Tbk during 2021–2022, PT Cisarua Mountain Dairy Tbk in 2022, and PT Wismilak Inti Makmur Tbk from 2020 to 2022. This indicates that some companies are predominantly controlled by individual or non-institutional shareholders. The tax avoidance variable recorded a value of 85.28% for PT Austindo Nusantara Jaya in 2020, while the lowest value of -25.75% was reported by PT Martina Berto Tbk in 2021. This suggests that some companies employ highly aggressive tax avoidance strategies, whereas others even recorded negative values, which may indicate the implementation of more conservative or efficient tax policies.

Overall, the results of the descriptive statistical analysis indicate significant variations among companies within the studied sector in terms of CSR disclosure, leverage levels, fixed asset intensity, institutional ownership, and tax avoidance practices. This variation illustrates that the consumer non-cyclicals sector in Indonesia exhibits diverse dynamics in policies and decision-making related to these factors.

4.2 Panel Data Regression Model Test

4.2.1 Common Effect Model

Dependent Variable: Y
Method: Panel Least Squares
Date: 01/28/25 Time: 18:54
Sample: 2020 2022
Periods included: 3
Cross-sections included: 48
Total panel (unbalanced) observations: 125

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.200167	0.053639	3.731761	0.0003
X1	0.125167	0.067999	1.840722	0.0681
X2	-0.014856	0.002867	-5.181527	0.0000
X3	-0.154865	0.073941	-2.094433	0.0383
Z	0.037328	0.056193	0.664277	0.5078

Figure 2. Common Effect Model Estimations Results

The estimation results of the Common Effect Model indicate that the constant coefficient is 20.02% with a probability of 0.03%. The coefficient for the corporate social responsibility variable (X1) is 12.52% with a probability value of 6.81%, while the coefficient for the leverage variable (X2) is -1.49% with a probability value of 0%. The coefficient for the capital intensity variable (X3) is recorded at -15.49% with a probability value of 3.38%, and the coefficient for the institutional ownership variable (Z) is 3.73% with a probability value of 50.78%.

4.2.2 Fixed Effect Model

Dependent Variable: Y
Method: Panel Least Squares
Date: 01/28/25 Time: 18:54
Sample: 2020 2022
Periods included: 3
Cross-sections included: 48
Total panel (unbalanced) observations: 125

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.266276	0.241374	1.103166	0.2736
X1	-0.015067	0.074510	-0.202212	0.8403
X2	0.004514	0.005403	0.835492	0.4062
X3	0.932851	0.405644	2.299677	0.0243
Z	-0.624060	0.286719	-2.176558	0.0327

Figure 3. Fixed Effect Model Estimations Results

The estimated coefficient value is 26.62% with a probability of 27.36% according to the Fixed Effect Model. The CSR variable (X1) has a probability value of 84.03% and a coefficient of -1.51%. The probability value for the leverage variable (X2) is 40.62%, with a coefficient of 0.45%. The coefficient for the capital intensity variable (X3) is 93.28%, with a probability value of 2.43%, while the coefficient for the institutional ownership variable (Z) is recorded at -62.41% with a probability of 3.27%.

4.2.3 Random Effect Model

Dependent Variable: Y
Method: Panel EGLS (Cross-section random effects)
Date: 01/28/25 Time: 18:55
Sample: 2020 2022
Periods included: 3
Cross-sections included: 48
Total panel (unbalanced) observations: 125
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.222357	0.060358	3.683963	0.0003
X1	0.045785	0.060110	0.761690	0.4477
X2	-0.011207	0.003128	-3.582924	0.0005
X3	-0.075950	0.088533	-0.857873	0.3927
Z	-0.003260	0.066514	-0.049014	0.9610

Figure 4. Random Effect Model Estimations Results

The estimation results from the Random Effect Model indicate that the coefficient for the constant is 22.24% with a probability value of 0.03%. The coefficient for the corporate social responsibility variable (X1) is recorded at 4.58% with a probability value of 44.77%, while the coefficient for the leverage variable (X2) is -1.12% with a probability value of 0.05%. The coefficient for the capital intensity variable (X3) is -7.59% with a probability value of 39.27%, and the coefficient for the institutional ownership variable (Z) is -3.26% with a probability value of 96.10%.

4.3 Panel Data Regression Model Estimation Test

4.3.1 Chow Test

To compare the Common Effect Model with the Fixed Effect Model, the Chow test is used. If the chi-square probability value exceeds 0.05, the Common Effect Model should be used instead. However, if the chi-square probability value is less than 0.05, the Fixed Effect Model is preferred.

When updated to reflect the latest information, the following are the results of the Chow test. The Common Effect Model is selected when the chi-square probability is greater than 0.05. However, since the chi-square probability is less than 0.05, this analysis employs the Fixed Effect Model.

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.361860	(47,73)	0.0000
Cross-section Chi-square	143.998798	47	0.0000

Figure 5. Chow Test Results

The results of the Chow test indicate that the chi-square cross-section probability value is 0.0000, which is below the significance threshold of 0.05. Therefore, these findings suggest that the Fixed Effect Model is the most appropriate approach for analyzing this data.

4.3.2 Hausman Test

The results of the Hausman test are used to compare the Fixed Effect Model with the Random Effect Model. To apply the Random Effect Model, it is essential to ensure that the random cross-section probability value is greater than 0.05. Conversely, the Fixed Effect Model is applied when the random cross-section probability value is less than 0.05.

The findings from the Hausman test, which can be adjusted to align with the current data, are outlined below. When the random cross-section probability value falls below 0.05, the Fixed Effect Model is applied. The larger the model, the more effective it becomes.

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	24.127971	4	0.0001

Figure 6. Hausman Test Results

The random cross-section probability value of 0.0001 < 0.05 was identified in the Hausman test. Therefore, the Fixed Effect Model emerges as the most appropriate choice for this study. Since the Hausman test has confirmed the superiority of the Fixed Effect Model, the Lagrange Multiplier test is no longer necessary.

4.4 Classic Assumption Test

It was determined that the Fixed Effect Model is the most appropriate choice based on the estimation of the panel data regression model. Therefore, conventional assumption tests, including multicollinearity and heteroscedasticity tests, must be conducted.

4.4.1 Multicollinearity Test

The study on multicollinearity testing was conducted using the correlation matrix in EViews 12. When the regression model identifies a strong or perfect relationship among independent variables, it indicates that the multicollinearity test has achieved its objective. The following presents the results of the multicollinearity test for the Fixed Effect Model:

	Y	X1	X2	X3	Z
Y	1.000000	0.168307	-0.406551	-0.083795	-0.042354
X1	0.168307	1.000000	-0.078587	0.075201	-0.049329
X2	-0.406551	-0.078587	1.000000	-0.173762	0.190121
X3	-0.083795	0.075201	-0.173762	1.000000	0.041411
Z	-0.042354	-0.049329	0.190121	0.041411	1.000000

Figure 7. Multicollinearity Test Results

The analysis results indicate that none of the independent variables exhibit a correlation value greater than 0.80. Therefore, it can be concluded that this model is free from multicollinearity. This suggests that there is no significant overlap among the independent variables in the model that could affect the regression estimation results, as no statistically significant relationships were found among these variables.

4.4.2 Heteroscedasticity Test

The heteroscedasticity test is used to determine whether the regression model maintains a consistent variance. The results of the heteroscedasticity test for the fixed effect model are as follows:

Dependent Variable: ABS(RESID)
Method: Panel Least Squares
Date: 01/28/25 Time: 19:01
Sample: 2020 2022
Periods included: 3
Cross-sections included: 48
Total panel (unbalanced) observations: 125

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.027095	0.030331	0.893284	0.3746
X1	-0.012431	0.009363	-1.327626	0.1884
X2	-1.24E-05	0.000679	-0.018254	0.9855
X3	0.045100	0.050974	0.884776	0.3792
Z	-0.033630	0.036030	-0.933408	0.3537

Figure 8. Heteroscedasticity Test Results

The test results indicate that the variables in this model have the following probability values: corporate social responsibility (X1) at 18.84%, leverage (X2) at 98.55%, capital intensity (X3) at 37.92%, and institutional ownership (Z) at 35.37%. The data does not exhibit heteroscedasticity issues, as the probability values for all variables are greater than 0.05 (5%). The distribution of residual variance for the variables used in this model does not show any outliers. Therefore, the regression model used is reliable and free from bias caused by heteroscedasticity.

4.5 Hypothesis Test

4.5.1 F-Test

When examining the dependent and independent variables together, the F-test determines whether the model has an effect on the dependent variable. The findings from the F-test are as follows:

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.789556	Mean dependent var	0.184632
Adjusted R-squared	0.627214	S.D. dependent var	0.162400
S.E. of regression	0.099155	Akaike info criterion	-1.484082
Sum squared resid	0.688221	Schwarz criterion	-0.239624
Log likelihood	147.7551	Hannan-Quinn criter.	-0.978524
F-statistic	4.863520	Durbin-Watson stat	3.271897
Prob(F-statistic)	0.000000		

Figure 9. F-Test Results

The Prob (F-statistic) value of 0.000000 is less than 0.05, indicating that the dependent variable (tax avoidance) is significantly influenced by the independent variables (corporate social responsibility, leverage, capital intensity, and institutional ownership) in consumer non-cyclical sector companies listed on the Indonesia Stock Exchange from 2020 to 2022. Given the significant impact of the independent variables on the dependent variable, it can be concluded that the regression model used is appropriate.

4.5.2 Coefficient of Determination Test (R2)

One method to determine the extent to which independent variables explain the dependent variable is by using the coefficient of determination test (R^2). This data provides a general overview of the R^2 test results regarding the coefficient of determination.

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.789556	Mean dependent var	0.184632
Adjusted R-squared	0.627214	S.D. dependent var	0.162400
S.E. of regression	0.099155	Akaike info criterion	-1.484082
Sum squared resid	0.688221	Schwarz criterion	-0.239624
Log likelihood	147.7551	Hannan-Quinn criter.	-0.978524
F-statistic	4.863520	Durbin-Watson stat	3.271897
Prob(F-statistic)	0.000000		

Figure 9. Coefficient of Determination Test Results (R2)

The independent variables explain 62.72% of the variation in changes to the dependent variable, as indicated by the test results showing an adjusted R-squared value of 0.627214. However, the remaining 37.28% is explained by other variables outside the scope of this study and independent variables included in the analysis. Therefore, while this model effectively captures changes in the dependent variable, additional factors should be considered for future research.

4.5.3 T-Test

The threshold for the T-test is set at 0.05 or 5%, involving a comparison between the calculated T-value and the critical T-table value. The findings from the T-test are presented below:

Dependent Variable: Y
Method: Panel Least Squares
Date: 01/28/25 Time: 19:02
Sample: 2020 2022
Periods included: 3
Cross-sections included: 48
Total panel (unbalanced) observations: 125

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.211499	0.379911	-0.556706	0.5795
X1	-0.124035	0.351542	-0.352830	0.7253
X2	-0.005748	0.020845	-0.275757	0.7835
X3	2.381733	0.650701	3.660255	0.0005
Z	0.304174	0.566842	0.536611	0.5932
X1Z	0.130811	0.455993	0.286870	0.7751
X2Z	0.009818	0.026618	0.368859	0.7133
X3Z	-2.682984	0.947504	-2.831635	0.0060

Figure 10. T-Test Results (Partial Influence)

Corporate social responsibility (X1) has a probability value of 0.7253 and a coefficient of -0.124035, both of which exceed the significance level of 0.05. Therefore, X1 does not significantly affect tax avoidance. Leverage (X2) has a probability value of 0.7835 and a coefficient of -0.005748, both higher than 0.05. This suggests that X2 does not influence tax avoidance. Capital intensity (X3) has a coefficient of 2.381733 and a probability value of 0.0005, which is below the 0.05 significance level. This indicates that X3 has a significant effect on tax avoidance.

The coefficient for institutional ownership (Z) is 0.304174, with a probability value of 0.5932, both exceeding the significance level of 0.05. This suggests that institutional ownership does not influence tax avoidance. The interaction coefficient between corporate social responsibility and institutional ownership is 0.130811, with a probability value of 0.7751, which is also above 0.05. This indicates that institutional ownership does not moderate the effect of CSR on tax avoidance. The interaction between leverage and institutional ownership has a probability value of 0.7133 (>0.05) and an interaction coefficient of 0.009818, indicating that institutional ownership does not moderate the effect of leverage on tax avoidance. However, the interaction between capital intensity and institutional ownership has a probability value of 0.0060 (<0.05) and a coefficient of -2.682984. This finding suggests that institutional ownership mitigates the effect of capital intensity on tax avoidance.

5. Conclusion

1. Corporate Social Responsibility (CSR) and Tax Avoidance: The absence of a significant effect between CSR and tax avoidance indicates that, although companies engage in CSR activities, these efforts do not directly relate to reducing their tax obligations. This may be due to the fact that corporate CSR policies are more focused on enhancing public perception and stakeholder relations rather than serving as a means to lower tax burdens.
2. Leverage and Tax Avoidance: There is no significant relationship between leverage (debt-to-equity ratio) and tax avoidance. This suggests that corporate decisions regarding capital structure (debt) do not have a significant impact on tax avoidance. Companies may not be using debt as their primary strategy to achieve tax savings through interest deductions, or other factors may play a more dominant role in tax decisions.
3. Capital Intensity and Tax Avoidance: A positive correlation between capital intensity (the proportion of fixed assets used) and tax avoidance suggests that firms with higher fixed asset holdings may reduce their tax liabilities through asset depreciation strategies.

4. Institutional Ownership and Tax Avoidance: The lack of a causal relationship between institutional ownership and tax avoidance indicates that, despite their control over business decisions, institutional shareholders do not necessarily influence how a company manages its tax affairs. This could be due to various factors, including corporate policies prioritizing short-term gains or managerial decisions emphasizing tax efficiency.
5. CSR and Institutional Ownership: The findings show no relationship between CSR and tax avoidance regardless of an organization's ownership structure. Thus, even if institutional investors oversee CSR initiatives, they do not significantly influence corporate decisions regarding tax avoidance.
6. Leverage and Institutional Ownership: Institutional ownership does not moderate the relationship between leverage and tax avoidance. This suggests that, despite institutional shareholders' oversight, their presence does not alter corporate decisions on debt utilization in tax strategies.
7. Capital Intensity and Institutional Ownership: Institutional ownership weakens the relationship between capital intensity and tax avoidance. This implies that rigorous monitoring by institutional investors reduces the likelihood of companies using fixed assets as a tool for tax avoidance. Institutional shareholders tend to prioritize corporate governance and compliance, ensuring that firms do not engage in aggressive tax strategies that could harm their reputation or lead to non-compliance.

References:

[1] Gunawan, J., Nurhasanah, S., Rusdiyanti, W., Andriyani, M., & Azizah, M. N. (2023). The Influence of company size and sales growth on tax avoidance. *Journal of Social and Economics Research*, *5*(2), 171–188. https://doi.org/10.54783/jser.v5i2.128

[2] Amrulloh, A., Indrabudiman, A., Riyadi, S., & Handayani, W. S. (2019). Pengaruh CSR terhadap tax avoidance serta dampaknya pada firm value. *Prosiding Abstrak Konferensi Ilmiah Akuntansi VI*, 114-125.

[3] Soerzawa, D., Yusmaniarti, & Suhendra, C. (2018). Influence of tax avoidance on company value with leverage as the moderating variable. *Bilancia: Jurnal Ilmiah Akuntansi*, *2*(4), 367–377. https://doi.org/10.30997/bilancia.v2i4.187

[4] Sinaga, R., & Malau, H. (2021). Pengaruh capital intensity dan inventory intensity terhadap penghindaran pajak. *Jurnal Ilmiah Mahasiswa Manajemen, Bisnis Dan Akuntansi (JIMMBA)*, *3*(2), 311–322. https://doi.org/10.32639/jimmba.v3i2.811

[5] Yohanes, & Sherly, F. (2022). Pengaruh profitability, leverage, audit quality, dan faktor lainnya terhadap tax avoidance. *E-Jurnal Akuntansi TSM*, *2*(2), 543–558. http://jurnaltsm.id/index.php/EJATSM

[6] Ritonga, P. (2022). Pengaruh corporate social responsibility dan komite audit terhadap kualitas audit dan implikasinya terhadap penghindaran pajak. *Ultimaccounting Jurnal Ilmu Akuntansi*, *14*(1), 1–18. https://doi.org/10.31937/akuntansi.v14i1.2526

[7] Wahyuni, M. A., Julianto, I. P., & Dewi, N. W. Y. (2019). The examination of tax evasion behavior of tax payers from the perspective of planned behavior theory. *Conference: Proceedings of the International Conference on Tourism, Economics, Accounting, Management, and Science (TEAMS 2018)*, *69*, 45–51. https://doi.org/10.2991/teams-18.2019.9

[8] Wahyuni, K., Aditya, E. M., & Indarti, I. (2021). Pengaruh leverage, return on assets dan ukuran perusahaan terhadap penghindaran pajak pada perusahaan publik di Indonesia. *Management & Accounting Expose*, *2*(2), 116–123. https://doi.org/10.36441/mae.v2i2.103

[9] Hidayat, F. A., & Novita, S. (2023). Pengaruh corporate social responsibility terhadap tax avoidance. *Owner: Riset Dan Jurnal Akuntansi*, *7*(3), 2555–2565. https://doi.org/10.33395/owner.v7i3.1521

[10] Rohmatika, A., & Amilahaq, F. (2021). Is corporate social responsibility able to mediate increased tax avoidance?. *Jurnal Reviu Akuntansi dan Keuangan*, *11*(2), 346–365.https://doi.org/10.22219/jrak.v11i2.16470

[11] Dilinanda, C. A., & Laturette, K. (2023). Analisis pengaruh good corporate governance dan corporate social responsibility terhadap tax avoidance. *Media Akuntansi dan Perpajakan Indonesia*, *4*(2), 201-224. https://doi.org/10.37715/mapi.v4i2.3715

[12] Tanika, J., & Martok, Y. (2022). The analysis of the effect of profitability, leverage, and sales growth toward tax avoidance in consumer goods companies listed on Indonesia Stock Exchange. *Journal of Accounting & Management Innovation*, *6*(2), 158–181. https://ejournal-medan.uph.edu/index.php/jam/article/view/580

[13] Putri, V. R., & Putra, B. I. (2017). Pengaruh leverage, profitability, ukuran perusahaan dan proporsi kepemilikan institusional terhadap tax

avoidance. *Jurnal Manajemen Dayasaing*, *19*(1), 1–11. https://doi.org/10.23917/dayasaing.v19i1.5100

[14] Rahmadani, D., Asmeri, R., & P, S. Y. A. (2022). Pengaruh profitabilitas, inventory intensity dan capital intensity terhadap tax avoidance(Studi empiris pada perusahaan konstruksi dan bangunan yang terdaftar di Bursa Efek Indonesia tahun 2014-2018). *Pareso Jurnal*, *4*(2), 325–344. https://ejurnal-unespadang.ac.id/index.php/PJ/article/view/588

[15] Rohendi, E. & Darsita, I. (2022). The effect of corporate governance and capital intensity on tax avoidance. *Jurnal Manajemen Bisnis, Akuntansi Dan Keuangan*, *1*(2), 142–162. https://doi.org/10.55927/jambak.v1i2.928

[16] Oktris, L., Kresnawati, M., & Mulya, H. (2021). Pengaruh corporate social responsibility, profitabilitas, leverage, dan capital intensity terhadap agresivitas pajak. *Accounting Cycle Journal*, *2*(2), 21-40. https://doi.org/10.38142/ljes.v1i2.161

[17] Indradi, D. (2018). Pengaruh likuiditas, capital intensity terhadap agresivitas pajak (Studi empiris perusahan manufaktur sub sektor industri dasar dan kimia yang terdaftar di BEI tahun 2012-2016.). *JABI (Jurnal Akuntansi Berkelanjutan Indonesia)*, *1*(1), 147–167. https://doi.org/10.32493/jabi.v1i1.y2018.p147-167

[18] Puspitasari, T. O., & Njit, T. F. (2022). Faktor-faktor yang mempengaruhi tax avoidance pada perusahaan manufaktur di Indonesia. *E-Jurnal Akuntansi Trisakti School of Management*, *2*(1), 51–66. http://jurnaltsm.id/index.php/ejatsm

[19] Nurseto, I., & Bandiyono, A. (2021). The effect of tax avoidance on firm value with tax expert as moderating variables. *Jurnal Keuangan Dan Perbankan*, *25*(4), 804–820. https://doi.org/10.26905/jkdp.v25i4.5563

[20] Dang, V. C., & Tran, X. H. (2021). The impact of financial distress on tax avoidance: An empirical analysis of the Vietnamese listed companies. *Cogent Business and Management*, *8*(1), 1–10. https://doi.org/10.1080/23311975.2021.1953678

[21] Rakhmayani, A., Aresteria, M., & Sulestiyono, D. (2024). Internal control and tax avoidance : A possible mitigation effort. *Proceeding Internasional Conference on Accounting and Finance*, *2*, 354–358. Retrieved from https://journal.uii.ac.id/inCAF/article/view/32668

[22] Gloria, & Apriwenni, P. (2020). Effective tax rate dan faktor-faktor yang memengaruhi. *Jurnal Akuntansi*, *9*(2), 17–31. https://doi.org/10.46806/ja.v9i2.759

[23] Tarmizi, A., & Perkasa, D. H. (2022). Pengaruh kepemilikan institusional, kepemilikan keluarga, dan thin capitalization terhadap penghindaran pajak. *Jurnal Perspektif Manajerial Dan Kewirausahaan (JPMK)*, *3*(1), 47–61. https://doi.org/10.59832/jpmk.v3i1.182

[24] Sari, A. Y., & Kinasih, H. W. (2021). Pengaruh profitabilitas, leverage, dan kepemilikan institusional terhadap tax avoidance. *Dinamika Akuntansi Keuangan Dan Perbankan*, *10*(1), 51–61. https://doi.org/10.35315/dakp.v10i1.8541

[25] Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.