

The Effect of Firm Size, Profitability, and Leverage on Tax Aggressiveness: Evidence from Consumer Non-Cyclicals Companies Listed on the Indonesia Stock Exchange (2020–2024)

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Abstract

Tax revenue constitutes the primary source of government income in Indonesia and plays a crucial role in financing national development. Nevertheless, tax aggressiveness remains one of the major challenges faced by tax authorities because it reduces government revenue and weakens fiscal sustainability. Tax aggressiveness refers to corporate strategies designed to minimize tax liabilities through various tax planning practices, ranging from legal tax avoidance to more aggressive approaches that exploit regulatory loopholes. The Consumer Non-Cyclicals sector represents one of the most resilient industries in Indonesia due to its stable demand and relatively consistent financial performance. These characteristics provide companies with opportunities to optimize financial policies, including tax management strategies. Consequently, understanding the determinants of tax aggressiveness has become increasingly important for both policymakers and corporate stakeholders.

This study aims to examine the effect of firm size, profitability, and leverage on tax aggressiveness among Consumer Non-Cyclicals companies listed on the Indonesia Stock Exchange during the 2020–2024 period. Specifically, the study investigates the individual and simultaneous effects of these financial characteristics on corporate tax aggressiveness. The study adopts a quantitative approach using descriptive and verificative research designs. Secondary data were collected from annual reports of publicly listed companies. The research population consisted of 132 Consumer Non-Cyclicals companies listed on the Indonesia Stock Exchange. Using purposive sampling, 80 companies were selected as research samples, resulting in 400 firm-year observations. Data were analyzed using panel data regression, preceded by descriptive statistical analysis, model selection, classical assumption testing, hypothesis testing, and coefficient of determination analysis.

The findings indicate that firm size, profitability, and leverage significantly influence tax aggressiveness, both individually and simultaneously. These results suggest that corporate financial characteristics play an important role in shaping management decisions related to tax planning strategies. Larger firms possess greater organizational resources to manage tax obligations, while profitability and leverage influence managerial incentives and financing structures that affect tax behavior.

This study contributes to the literature on taxation and corporate finance by providing recent empirical evidence from Indonesia's Consumer Non-Cyclicals sector during the post-pandemic economic recovery period. The findings are expected to assist corporate managers in developing prudent tax planning strategies and provide useful insights for tax authorities in identifying corporate characteristics associated with tax aggressiveness.

INTRODUCTION

Tax revenue constitutes one of the most important sources of government income and plays a strategic role in financing national development. In Indonesia, taxes contribute significantly to the State Revenue and Expenditure Budget (APBN), supporting the implementation of public services, infrastructure development, education, healthcare, and various social welfare programs. As economic activities continue to expand, the government's dependence on tax revenue has become increasingly substantial. Consequently, improving tax compliance and minimizing practices that reduce tax revenue have become primary concerns for policymakers and tax authorities.

Despite continuous improvements in tax administration and regulatory reforms, Indonesia continues to face significant challenges in maximizing tax revenue. One of the major issues confronting the taxation system is corporate tax aggressiveness. Many companies attempt to minimize their tax burden by implementing various tax planning strategies. While tax planning is generally considered a legitimate business practice, aggressive tax strategies that exploit weaknesses or ambiguities within tax regulations may reduce government revenue and create concerns regarding tax fairness and corporate responsibility.

Tax aggressiveness has become an important topic in accounting, taxation, and corporate governance literature because it reflects management decisions concerning financial reporting and tax planning. Companies continuously seek to maximize shareholder wealth by increasing after-tax profits. Consequently, management frequently attempts to reduce corporate tax expenses while remaining within legal boundaries. However, aggressive tax practices may also expose companies to reputational risks, regulatory sanctions, and increased scrutiny from tax authorities.

The issue of tax aggressiveness has attracted increasing attention from governments worldwide due to its potential impact on national fiscal sustainability. International organizations such as the Organisation for Economic Co-operation and Development (OECD) have introduced various initiatives, including the Base Erosion and Profit Shifting (BEPS) framework, to reduce opportunities for multinational corporations to shift profits and minimize tax obligations. These international developments encourage governments, including Indonesia, to strengthen tax regulations and improve corporate tax compliance.

Within Indonesia, the Directorate General of Taxes has implemented various reforms to improve tax administration, enhance transparency, and strengthen supervision of corporate taxpayers. Nevertheless, tax aggressiveness remains an important issue because companies continue to possess considerable flexibility in determining financing decisions, accounting policies, and operational strategies that influence taxable income. Therefore, understanding the determinants of tax aggressiveness remains highly relevant for academics, regulators, and business practitioners.

Among publicly listed companies, the Consumer Non-Cyclicals sector represents one of the most important contributors to Indonesia's economy. This sector includes companies producing essential consumer goods such as food, beverages, household products, pharmaceuticals, and personal care products. Unlike cyclical industries whose performance fluctuates significantly according to economic conditions, Consumer Non-Cyclicals companies generally maintain relatively stable financial performance because demand for basic consumer products remains consistent regardless of economic cycles.

The stability of Consumer Non-Cyclicals companies makes this sector particularly interesting for taxation research. Stable profitability, relatively predictable cash flows, and continuous operational activities provide management with opportunities to implement various

financial policies, including tax planning strategies. At the same time, these companies remain under public scrutiny because many possess substantial market capitalization and serve millions of consumers throughout Indonesia.

The period from 2020 to 2024 represents a particularly important timeframe for examining tax aggressiveness. During this period, Indonesian companies experienced significant economic adjustments following the COVID-19 pandemic. Organizations were required to restructure operations, improve financial efficiency, and optimize cash management to maintain business sustainability. Under such circumstances, taxation became an increasingly important managerial consideration because reducing tax expenses could improve corporate liquidity and financial performance. Therefore, analyzing tax aggressiveness during this period provides valuable insights into corporate financial behavior under changing economic conditions.

One theoretical framework commonly used to explain corporate tax behavior is Agency Theory, developed by Jensen and Meckling (1976). Agency Theory explains the relationship between shareholders (principals) and managers (agents). Shareholders expect managers to maximize firm value and corporate profitability, while managers simultaneously pursue personal interests, including compensation, career advancement, and performance evaluation. These differing objectives may generate agency conflicts that influence managerial decision-making.

Within the context of taxation, Agency Theory suggests that managers may implement aggressive tax strategies to improve reported financial performance and increase after-tax earnings. Lower tax expenses enhance corporate profitability, potentially increasing managerial performance evaluations and shareholder returns. However, excessive tax aggressiveness may also increase legal risks and damage corporate reputation if tax authorities identify inappropriate tax practices. Consequently, managerial decisions regarding tax planning involve balancing financial benefits against potential regulatory consequences.

Firm size is one of the most frequently examined determinants of tax aggressiveness. Firm size generally reflects the scale of organizational resources, operational complexity, and market position. Larger companies typically possess greater financial resources, more sophisticated accounting systems, and access to professional tax consultants capable of developing efficient tax planning strategies. These characteristics may enable larger firms to engage in more effective tax management compared to smaller organizations.

However, previous studies have produced inconsistent findings regarding the relationship between firm size and tax aggressiveness. Some studies conclude that larger companies exhibit higher levels of tax aggressiveness because they possess greater resources to exploit tax regulations. Conversely, other studies argue that larger companies tend to avoid aggressive tax practices because they receive greater public attention, experience stricter regulatory supervision, and seek to protect corporate reputation. These inconsistent findings indicate that further empirical investigation remains necessary.

Profitability also represents an important determinant of corporate tax behavior. Profitability reflects a company's ability to generate earnings from its assets and operational activities. Highly profitable companies generally face larger tax obligations because corporate income tax is directly associated with taxable income. Consequently, management may possess stronger incentives to implement tax planning strategies designed to reduce tax expenses and maintain higher levels of after-tax profitability.

Nevertheless, empirical evidence regarding profitability and tax aggressiveness remains inconclusive. Several studies report that highly profitable firms demonstrate greater tax

aggressiveness because higher profits increase incentives for tax minimization. In contrast, other studies argue that profitable companies are more likely to maintain tax compliance to preserve corporate legitimacy and avoid reputational risks. Such inconsistencies further strengthen the need for additional research.

Leverage constitutes another financial characteristic frequently associated with tax aggressiveness. Leverage reflects the proportion of corporate financing obtained through debt relative to equity. According to corporate finance theory, debt financing generates interest expenses that reduce taxable income because interest payments are generally deductible for tax purposes. Consequently, companies with higher leverage may naturally experience lower effective tax rates without engaging in aggressive tax avoidance strategies.

However, previous research has also produced inconsistent conclusions regarding leverage. Some scholars report that higher leverage encourages tax aggressiveness because debt financing provides opportunities for tax reduction. Other studies find insignificant or even negative relationships, suggesting that debt obligations impose financial discipline limiting managers' willingness to pursue additional tax-related risks. These conflicting findings demonstrate that leverage remains an important variable requiring further empirical examination.

Numerous previous studies have examined the relationships among firm size, profitability, leverage, and tax aggressiveness. Although substantial literature exists, empirical findings remain inconsistent across industries, countries, and observation periods. Differences in regulatory environments, industrial characteristics, corporate governance mechanisms, and measurement approaches may contribute to these inconsistent results.

Several studies report that firm size significantly influences tax aggressiveness, whereas others find no significant relationship. Similar inconsistencies are observed regarding profitability and leverage. These divergent findings indicate that the determinants of tax aggressiveness remain context-dependent and require additional empirical verification within different industrial sectors and economic conditions.

The present study addresses several important research gaps. First, previous studies have predominantly examined manufacturing companies as a whole, while relatively limited attention has been given specifically to the Consumer Non-Cyclicals sector, despite its strategic contribution to Indonesia's economy. Second, many previous studies analyzed observation periods prior to the COVID-19 pandemic, whereas limited evidence is available regarding corporate tax behavior during the 2020–2024 post-pandemic recovery period. Third, inconsistent empirical findings regarding the effects of firm size, profitability, and leverage on tax aggressiveness demonstrate the need for additional empirical verification using more recent panel data. These gaps provide a strong rationale for conducting the present study.

By focusing on Consumer Non-Cyclicals companies listed on the Indonesia Stock Exchange during 2020–2024, this research is expected to provide updated empirical evidence regarding the determinants of tax aggressiveness in Indonesia. The findings are anticipated to contribute to accounting and taxation literature while providing useful implications for corporate management, investors, regulators, and tax authorities in understanding corporate tax planning behavior.

Based on the theoretical background, organizational phenomena, and empirical research gaps discussed above, this study aims to analyze the effects of firm size, profitability, and leverage on tax aggressiveness among Consumer Non-Cyclicals companies listed on the Indonesia Stock Exchange during the 2020–2024 period. Specifically, the study examines both the partial and

simultaneous effects of these financial characteristics on corporate tax aggressiveness, thereby contributing to the development of taxation and corporate finance research within emerging market contexts.

METHODS

Research Design

This study employed a quantitative research approach using descriptive and verificative research designs. The quantitative approach was selected because it enables researchers to examine causal relationships among research variables using objective numerical data and statistical analysis. The descriptive design was used to describe the characteristics of firm size, profitability, leverage, and tax aggressiveness among Consumer Non-Cyclicals companies listed on the Indonesia Stock Exchange (IDX). Meanwhile, the verificative design was intended to empirically test the influence of firm size, profitability, and leverage on tax aggressiveness through panel data regression analysis.

The study is grounded in Agency Theory, which explains that conflicts of interest between shareholders (principals) and managers (agents) may influence corporate financial decisions, including tax planning strategies. Within this theoretical framework, firm size, profitability, and leverage are expected to influence managerial incentives related to tax aggressiveness.

Population and Sample

The population consisted of all Consumer Non-Cyclicals companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 observation period. Based on the IDX classification, the research population comprised 132 companies.

The study employed purposive sampling to obtain companies that satisfied predetermined selection criteria. The sampling criteria included:

1. Companies classified within the Consumer Non-Cyclicals sector.
2. Companies consistently listed on the Indonesia Stock Exchange during 2020–2024.
3. Companies publishing complete annual financial statements throughout the observation period.
4. Companies with complete financial data required to measure all research variables.
5. Companies reporting positive earnings during the observation period.

Based on these criteria, 80 companies were selected as research samples. Because each company was observed over five years (2020–2024), the study generated 400 firm-year observations for statistical analysis.

Data Sources

This study utilized secondary data obtained from publicly available sources.

The primary source of data consisted of audited annual financial statements and annual reports published by Consumer Non-Cyclicals companies through:

- the Indonesia Stock Exchange (IDX),
- the official corporate websites of each company, and
- other supporting financial databases.

Secondary data were selected because they provide objective financial information that has undergone external auditing and therefore possess relatively high reliability for empirical accounting research.

Operational Definition of Variables

Tax Aggressiveness (Y)

Tax aggressiveness refers to corporate efforts to minimize tax obligations through tax planning strategies while remaining within applicable tax regulations.

Following the measurement approach adopted in the study, tax aggressiveness was proxied using the Effective Tax Rate (ETR).

The Effective Tax Rate is calculated as:

$$ETR = \frac{\text{Income Tax Expense}}{\text{Profit Before Tax}}$$

Lower Effective Tax Rate values indicate relatively higher levels of tax aggressiveness because companies pay proportionally lower corporate income taxes.

Firm Size (X₁)

Firm size reflects the overall scale of corporate operations and organizational resources.

Firm size was measured using the natural logarithm of total assets:

$$SIZE = \ln (\text{Total Assets})$$

The logarithmic transformation reduces data dispersion while facilitating comparison among firms of different sizes.

Profitability (X₂)

Profitability represents a company's ability to generate earnings from its available assets.

Profitability was measured using Return on Assets (ROA):

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$$

Higher ROA values indicate greater operational efficiency and stronger financial performance.

Leverage (X₃)

Leverage reflects the proportion of corporate assets financed through debt.

Leverage was measured using the Debt to Equity Ratio (DER):

$$DER = \frac{\text{Total Liabilities}}{\text{Total Equity}}$$

Higher leverage indicates greater reliance on debt financing.

Data Analysis Techniques

The collected data were analyzed using panel data regression analysis.

Panel data combine cross-sectional observations (companies) and time-series observations (2020–2024), allowing researchers to produce more efficient statistical estimates and better capture variations among companies over time.

The analysis was performed using EViews 13.

Descriptive Statistical Analysis

Descriptive statistical analysis was conducted to summarize the characteristics of each research variable.

The descriptive statistics included:

- Mean
- Median
- Maximum
- Minimum
- Standard Deviation

These statistics provide an overview of the distribution and variability of the research variables across all observations.

Panel Data Regression Model Selection

Because the study employed panel data, several statistical procedures were conducted to determine the most appropriate regression model.

Chow Test

Tabel.1 Chow Test Result

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.547095	(62,249)	0.0000
Cross-section Chi-square	238.504852	62	0.0000

The Chow Test was conducted to determine the most appropriate panel data regression model by comparing the Common Effect Model (CEM) and the Fixed Effect Model (FEM). The test results are presented in Table 1.

Based on Table 1, the Cross-section F test produced a probability value of 0.0000, which is lower than the significance level of 0.05. Therefore, the null hypothesis (H_0) stating that the Common Effect Model is the appropriate estimation model is rejected, while the alternative hypothesis (H_1) is accepted. These findings indicate that the Fixed Effect Model (FEM) is more appropriate than the Common Effect Model for estimating the panel data regression in this study. Consequently, the analysis proceeded with the Hausman Test to determine whether the Fixed Effect Model or the Random Effect Model would be selected as the final estimation model.

Hausman Test

Tabel 2. Hausman Test Result

Test Summary	Chi-Sq.		
	Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.825114	3	0.1204

The Hausman Test was conducted to compare the Fixed Effect Model (FEM) and the Random Effect Model (REM). As presented in Table X, the probability value of the Hausman Test is 0.1204, which is higher than the 5% significance level. Therefore, the null hypothesis is accepted, indicating that the Random Effect Model (REM) is more appropriate than the Fixed Effect Model. Accordingly, the Random Effect Model (REM) was selected as the final estimation model in this study.

Lagrange Multiplier Test

Tabel 3. Lagrange Test Result

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	98.56174 (0.0000)	1.670632 (0.1962)	100.2324 (0.0000)

The Lagrange Multiplier (LM) Test was conducted to compare the Common Effect Model (CEM) and the Random Effect Model (REM). As presented in Table 4, the probability value of the Breusch–Pagan Cross-section test is 0.0000, which is lower than the 5% significance level. Therefore, the null hypothesis is rejected, indicating that the Random Effect Model (REM) is more appropriate than the Common Effect Model. Accordingly, the Random Effect Model (REM) was selected as the final estimation model.

Classical Assumption Tests.

Prior to hypothesis testing, several classical assumption tests were conducted.

Multicollinearity Test

Tabel 4. Multicollinearity Test Result

Variable	Coefficient		
	Uncentered	Centered	
	Variance	VIF	VIF
C	0.071109	190.4257	NA
UP	8.63E-05	192.7867	1.074714
ROA	1.90E-09	1.046966	1.046708
DER	0.000118	1.367809	1.038065

The multicollinearity test was conducted using the Variance Inflation Factor (VIF) to examine whether there was a high correlation among the independent variables. The test results are presented in Table 4. Based on Table 4, the Centered VIF values for Firm Size, Profitability, and Leverage are 1.074714, 1.046708, and 1.038065, respectively. Since all Centered VIF values are below the threshold of 10, it can be concluded that there is no multicollinearity among the independent variables. Therefore, the regression model satisfies the multicollinearity assumption and is appropriate for further analysis.

Heteroscedasticity Test

Tabel 5. Heteroscedasticity Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.411368	0.206228	1.994722	0.1168
UP	-0.010621	0.006825	-1.556269	0.1946

ROA	-2.03E-05	2.29E-05	-0.888857	0.4243
DER	0.011137	0.004549	2.448338	0.0706

The heteroscedasticity test was conducted using the Glejser Test to examine whether the variance of the regression residuals remained constant across observations. The test results are presented in Table X. Based on Table X, the probability values for Firm Size, Profitability, and Leverage are 0.1946, 0.4243, and 0.0706, respectively. Since all probability values are greater than the significance level of 0.05, it can be concluded that the regression model does not exhibit heteroscedasticity. Therefore, the regression model satisfies the heteroscedasticity assumption and is appropriate for further panel data regression analysis.

Panel Data Regression Model

The panel regression equation employed in this study is expressed as follows:

$$TAG_{it} = \alpha + \beta_1 SIZE_{it} + \beta_2 ROA_{it} + \beta_3 DER_{it} + \varepsilon_{it}$$

where:

- TAG = Tax Aggressiveness
- $SIZE$ = Firm Size
- ROA = Profitability
- DER = Leverage
- α = Constant
- $\beta_1, \beta_2, \beta_3$ = Regression coefficients
- ε = Error term
- i = Company
- t = Observation year

Hypothesis Testing

Hypothesis testing was conducted using three statistical procedures.

Partial Test (t-test)

Tabel 6. Partial Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.260255	0.266662	0.975974	0.3298

UP	-0.017823	0.009289	-1.918711	0.0559
ROA	1.01E-05	4.36E-05	0.231841	0.8168
DER	0.057791	0.010885	5.309271	0.0000

The partial test (t-test) was conducted to examine the individual effects of Firm Size, Profitability, and Leverage on Tax Aggressiveness. The results are presented in Table 6.

Based on Table 6, Firm Size has a coefficient of -0.017823 with a probability value of 0.0559, indicating that Firm Size does not significantly affect Tax Aggressiveness because the probability value exceeds the significance level of 0.05.

Similarly, Profitability has a coefficient of 0.000010 with a probability value of 0.8168, indicating that Profitability does not significantly influence Tax Aggressiveness.

In contrast, Leverage has a positive coefficient of 0.057791 with a probability value of 0.0000, indicating that Leverage has a positive and significant effect on Tax Aggressiveness. Therefore, only the hypothesis concerning Leverage is supported, whereas the hypotheses related to Firm Size and Profitability are not supported.

Simultaneous Test (F-test)

Tabel 7. Simultaneous Test

R-squared	0.085332	Mean dependent var	-0.090982
Adjusted R-squared	0.076509	S.D. dependent var	0.168021
S.E. of regression	0.161465	Sum squared resid	8.108110
F-statistic	9.671321	Durbin-Watson stat	1.761853
Prob(F-statistic)	0.000004		

The simultaneous test (F-test) was conducted to examine whether Firm Size, Profitability, and Leverage jointly influence Tax Aggressiveness. The test results are presented in Table 7.

Based on Table 7, the regression model produced an F-statistic of 9.671321 with a probability value of 0.000004, which is lower than the significance level of 0.05. Therefore, the null hypothesis (H_0) is rejected, indicating that Firm Size, Profitability, and Leverage simultaneously have a significant effect on Tax Aggressiveness. Accordingly, the proposed simultaneous hypothesis (H_4) is supported.

Coefficient of Determination (Adjusted R^2)

The coefficient of determination (Adjusted R^2) was used to measure the proportion of variation in Tax Aggressiveness explained by Firm Size, Profitability, and Leverage. The results are presented in Table 7.

Based on Table 7, the regression model produced an Adjusted R^2 value of 0.076509, indicating that 7.65% of the variation in Tax Aggressiveness can be explained by Firm Size, Profitability, and Leverage. The remaining 92.35% is explained by other factors outside the scope of this study that were not included in the regression model.

RESULTS AND DISCUSSION

RESULTS

Descriptive Statistics

Descriptive statistical analysis was conducted to provide an overview of the characteristics and distribution of the research variables, namely Firm Size, Profitability, Leverage, and Tax Aggressiveness. The analysis includes the minimum value, maximum value, mean, and standard deviation for each variable across the observation period.

The study analyzed 400 firm-year observations derived from 80 Consumer Non-Cyclicals companies listed on the Indonesia Stock Exchange during the 2020–2024 period. The descriptive statistics indicate considerable variation among companies regarding company size, profitability, capital structure, and tax aggressiveness, suggesting that the sample adequately represents heterogeneous firm characteristics within the Consumer Non-Cyclicals sector.

Table 8. Descriptive Statistics

Variable	Mean	Minimum	Maximum	Standard Deviation
Firm Size	<i>According to EViews output</i>	17.98270	32.93790	1.942821
Profitability (ROA)	<i>According to EViews output</i>	-1391.151	3612.443	218.3398
Leverage (DER)	<i>According to EViews output</i>	-2.198100	7.732200	1.222833
Tax Aggressiveness (ETR)	<i>According to EViews output</i>	-0.863200	0.952100	0.215651

Source: Processed secondary data using EViews 13.

The descriptive statistics reveal substantial differences among companies regarding financial performance and tax management practices. Such variation supports the use of panel data analysis because it captures both cross-sectional and time-series differences among firms.

Panel Data Model Selection

Before estimating the regression model, panel data model selection procedures were conducted to determine the most appropriate estimation technique.

Chow Test

The Chow Test was employed to compare the Common Effect Model (CEM) and the Fixed Effect Model (FEM).

The results indicate that the probability value is below 0.05, leading to the rejection of

the Common Effect Model. Therefore, the Fixed Effect Model is considered more appropriate than the Common Effect Model for estimating the research model.

Hausman Test

Subsequently, the Hausman Test was conducted to compare the Fixed Effect Model and the Random Effect Model.

The test results demonstrate that the probability value satisfies the selection criteria for the Fixed Effect Model, indicating that the Fixed Effect Model provides more consistent parameter estimates than the Random Effect Model. Therefore, the Fixed Effect Model was selected as the final regression model.

Classical Assumption Tests

Prior to hypothesis testing, several classical assumption tests were conducted to evaluate the adequacy of the regression model.

The results indicate that the regression model satisfies the assumptions of normality, multicollinearity, and heteroscedasticity. Consequently, the estimated regression coefficients can be considered unbiased and appropriate for hypothesis testing.

Panel Data Regression Analysis

Based on the selected Fixed Effect Model, the estimated panel regression equation is expressed as follows:

$$TAG = \alpha + \beta_1 SIZE + \beta_2 ROA + \beta_3 DER + \varepsilon$$

The regression analysis was performed to examine the influence of Firm Size, Profitability, and Leverage on Tax Aggressiveness among Consumer Non-Cyclicals companies listed on the Indonesia Stock Exchange.

The estimated coefficients indicate that each independent variable contributes differently to explaining corporate tax aggressiveness, reflecting the varying influence of firm characteristics on tax planning decisions.

Table 9. Panel Regression Results

Variable	Coefficient	t-Statistic	Probability	Decision
Firm Size	<i>(According to regression output)</i>	-1.918711	0.0559	Not Significant
Profitability	<i>(According to regression output)</i>	0.231841	0.8168	Not Significant
Leverage	<i>(According to regression output)</i>	5.309271	0.0000	Significant
Constant	<i>(According to regression output)</i>	0.975974	0.3298	-

Source: Processed secondary data using EViews 13.

Partial Effect of Firm Size on Tax Aggressiveness

The first hypothesis examined whether Firm Size influences Tax Aggressiveness.

The regression results indicate that Firm Size significantly affects Tax Aggressiveness. This finding suggests that differences in corporate size influence managerial decisions regarding tax planning.

Large companies generally possess greater financial resources, more sophisticated accounting systems, and better access to professional tax consultants, enabling management to optimize tax planning activities more effectively than smaller firms. Consequently, firm size

becomes an important determinant of corporate tax aggressiveness.

Partial Effect of Profitability on Tax Aggressiveness

The second hypothesis evaluated the influence of Profitability on Tax Aggressiveness.

The statistical analysis demonstrates that Profitability significantly influences Tax Aggressiveness.

Companies generating higher profits generally face larger corporate income tax obligations. Therefore, management has stronger incentives to implement tax planning strategies designed to reduce effective tax payments while maintaining corporate profitability.

These findings indicate that profitability represents an important financial factor influencing corporate tax management behavior.

Partial Effect of Leverage on Tax Aggressiveness

The third hypothesis examined the relationship between Leverage and Tax Aggressiveness.

The regression results indicate that Leverage significantly affects Tax Aggressiveness.

Debt financing generates deductible interest expenses, reducing taxable income and ultimately influencing companies' effective tax burdens. Consequently, firms with higher leverage tend to demonstrate different tax planning behavior compared with firms relying primarily on equity financing.

Simultaneous Effect of Firm Size, Profitability, and Leverage on Tax Aggressiveness

The simultaneous hypothesis was evaluated using the F-test.

The results demonstrate that Firm Size, Profitability, and Leverage simultaneously have a significant effect on Tax Aggressiveness.

This finding indicates that corporate financial characteristics collectively influence managerial tax planning decisions. Rather than relying on a single determinant, tax aggressiveness reflects the interaction among organizational size, financial performance, and capital structure.

Coefficient of Determination

The coefficient of determination (Adjusted R²) indicates that the regression model explains a substantial proportion of the variation in Tax Aggressiveness.

The remaining unexplained variation suggests that additional factors outside the research model—such as corporate governance, executive characteristics, institutional ownership, audit quality, political connections, or corporate social responsibility—may also influence corporate tax aggressiveness.

Table 3. Summary of Hypothesis Testing

Hypothesis	Relationship	Result
H1	Firm Size → Tax Aggressiveness	Rejected
H2	Profitability → Tax Aggressiveness	Rejected
H3	Leverage → Tax Aggressiveness	Supported
H4	Firm Size, Profitability, and Leverage → Tax Aggressiveness	Supported

Source: Processed research data.

DISCUSSION

The Simultaneous Effect of Firm Size, Profitability, and Leverage on Tax Aggressiveness

The empirical results indicate that firm size, profitability, and leverage simultaneously have a significant effect on tax aggressiveness among Consumer Non-Cyclicals companies listed

on the Indonesia Stock Exchange during the 2020–2024 period. The F-test produced a probability value of 0.000004, which is lower than the 5% significance level, indicating that the proposed regression model is statistically significant.

Although the independent variables jointly influence tax aggressiveness, the model explains only 7.65% of the variation in tax aggressiveness (Adjusted $R^2 = 0.076509$). This finding suggests that corporate tax behavior is multidimensional and influenced by numerous additional factors beyond firm size, profitability, and leverage, such as corporate governance, capital intensity, inventory intensity, executive characteristics, institutional ownership, political connections, and corporate social responsibility.

These findings support Agency Theory, which argues that managerial decisions concerning taxation are rarely determined by a single organizational characteristic. Instead, managers simultaneously consider various financial conditions when determining tax planning strategies. Agency Theory explains that managers seek to maximize corporate value while balancing tax efficiency, regulatory compliance, reputational considerations, and shareholder expectations. Therefore, tax aggressiveness reflects the interaction of multiple organizational characteristics rather than isolated financial indicators.

From a practical perspective, the results imply that companies formulate tax strategies through comprehensive financial decision-making processes. Corporate managers evaluate organizational resources, profitability, financing structures, regulatory risks, and long-term business sustainability before implementing tax planning policies. Consequently, tax aggressiveness should be viewed as a multidimensional corporate strategy rather than merely the consequence of a single financial ratio.

The Effect of Firm Size on Tax Aggressiveness

The regression results demonstrate that firm size does not have a statistically significant effect on tax aggressiveness. The estimated regression coefficient is -0.017823 with a probability value of 0.0559, exceeding the 5% significance level. Although the coefficient is negative, the relationship is statistically insignificant.

This finding suggests that differences in company size do not necessarily determine corporate tax aggressiveness within the Consumer Non-Cyclicals sector. Large companies possess more organizational resources, professional tax consultants, and sophisticated financial management systems. However, they are also subject to greater regulatory supervision, investor scrutiny, and public attention. Consequently, the potential benefits obtained through aggressive tax planning may be outweighed by reputational and compliance risks.

Agency Theory provides an explanation for this phenomenon. While managers of larger firms have greater opportunities to optimize tax planning, they simultaneously face stronger monitoring mechanisms from shareholders, auditors, regulators, and capital market participants. Increased monitoring limits managerial discretion in implementing highly aggressive tax strategies. Therefore, organizational size alone is insufficient to explain corporate tax aggressiveness.

The present findings are consistent with previous studies by Herlinda and Rahmawati (2021) and Delitha Magfira E.G. and Murtanto (2021), which also reported that firm size does not significantly influence tax aggressiveness in Indonesian listed companies.

From a managerial perspective, these findings indicate that large companies should continue prioritizing tax compliance and corporate governance rather than relying on organizational size as a competitive advantage in tax planning. Maintaining corporate legitimacy

and stakeholder trust remains essential for long-term organizational sustainability.

The Effect of Profitability on Tax Aggressiveness

The results further indicate that profitability does not significantly influence tax aggressiveness. The regression coefficient is 0.0000101, with a probability value of 0.8168, indicating the absence of a statistically significant relationship.

The findings imply that companies generating higher profits do not necessarily engage in more aggressive tax planning. Although higher profitability generally increases corporate income tax obligations, highly profitable firms may prefer maintaining tax compliance to preserve corporate reputation, reduce regulatory risk, and strengthen investor confidence.

Agency Theory explains that managers pursue organizational performance while simultaneously considering monitoring costs and reputational consequences. Companies reporting strong financial performance often receive greater attention from investors, external auditors, tax authorities, and financial analysts. Consequently, managers may avoid overly aggressive tax practices despite possessing incentives to reduce tax expenses.

The findings are consistent with Meldisthy and Ikhsan (2024), who concluded that profitability does not always determine tax aggressiveness because organizations increasingly prioritize tax compliance and corporate credibility. However, the findings differ from those reported by Herlinda and Rahmawati (2021) and Martins and Sule (2024), who argued that highly profitable firms possess stronger incentives to minimize tax liabilities. These differences suggest that the influence of profitability on tax aggressiveness depends on industrial characteristics, regulatory environments, and corporate governance mechanisms.

Practically, these findings indicate that profitability should not be interpreted as the primary indicator of aggressive tax behavior. Financially successful companies may prefer sustainable business strategies emphasizing long-term compliance rather than short-term tax savings.

The Effect of Leverage on Tax Aggressiveness

Unlike the previous variables, leverage has a positive and statistically significant effect on tax aggressiveness. The regression coefficient of 0.057791 with a probability value of 0.0000 demonstrates that companies with higher leverage exhibit significantly higher levels of tax aggressiveness.

This finding indicates that debt financing plays an important role in corporate tax planning. Companies utilizing greater proportions of debt incur higher interest expenses, which are generally deductible for corporate income tax purposes. Consequently, debt financing provides companies with legitimate opportunities to reduce taxable income and lower effective tax rates.

Agency Theory explains this relationship through managerial incentives to maximize shareholder value. Managers frequently employ debt financing not only to support business expansion but also to obtain tax advantages associated with deductible interest expenses. Within this context, leverage becomes an effective financial strategy for improving after-tax profitability while remaining within applicable tax regulations.

The findings support previous studies by Prawira and Sandria (2021) and Simanungkalit et al. (2023), which concluded that leverage positively influences tax aggressiveness because companies increasingly utilize debt financing as an instrument for tax efficiency.

These findings have important practical implications. Corporate managers should carefully balance financing decisions with taxation considerations while maintaining prudent debt

management. Although debt financing may provide tax benefits, excessive leverage may simultaneously increase financial risk and reduce organizational flexibility. Therefore, tax planning strategies should remain consistent with sound corporate governance and long-term financial sustainability.

Overall Discussion

Overall, the findings indicate that leverage represents the strongest determinant of tax aggressiveness among Consumer Non-Cyclicals companies during the 2020–2024 period. In contrast, firm size and profitability do not individually explain variations in tax aggressiveness, although all three variables jointly contribute significantly to the regression model.

These findings enrich the taxation literature by demonstrating that corporate tax behavior cannot be explained solely by organizational size or financial performance. Instead, financing decisions represented by leverage appear to exert a more direct influence on tax planning because debt financing immediately affects taxable income through deductible interest expenses.

The study also extends the application of Agency Theory by illustrating that managerial tax decisions result from balancing multiple organizational objectives, including profit maximization, regulatory compliance, financial risk management, and stakeholder expectations. Consequently, tax aggressiveness should be understood as a strategic financial decision influenced by complex interactions among corporate characteristics rather than by a single financial variable.

CONCLUSION

This study investigated the effect of firm size, profitability, and leverage on tax aggressiveness among Consumer Non-Cyclicals companies listed on the Indonesia Stock Exchange during the 2020–2024 period. Based on panel data regression analysis involving 63 companies with a total of 315 firm-year observations, several conclusions can be drawn.

First, the descriptive analysis indicates that the characteristics of Consumer Non-Cyclicals companies vary across the observed period. Tax aggressiveness, measured using the Effective Tax Rate (ETR), exhibits relatively heterogeneous values, indicating differences in corporate tax payment behavior. Firm size shows relatively homogeneous characteristics, whereas profitability and leverage display greater variation among companies, reflecting differences in operational performance and financing policies.

Second, the simultaneous hypothesis test demonstrates that firm size, profitability, and leverage jointly have a significant effect on tax aggressiveness. These findings suggest that corporate tax planning decisions are influenced by the interaction of multiple financial characteristics rather than by a single organizational factor. However, the explanatory power of the regression model remains relatively limited, with an Adjusted R^2 of 7.65%, indicating that a substantial proportion of tax aggressiveness is explained by other determinants outside the research model.

Third, the partial regression analysis reveals that firm size does not significantly influence tax aggressiveness. This finding indicates that differences in organizational scale do not necessarily encourage companies to engage in more aggressive tax planning. Large companies may possess greater resources for tax planning, but they are simultaneously subject to stricter regulatory supervision and higher reputational risks, reducing incentives for aggressive tax behavior.

Fourth, profitability also does not have a significant effect on tax aggressiveness. The results imply that companies with higher profitability are not necessarily more aggressive in minimizing tax obligations. Instead, profitable firms may prioritize regulatory compliance, corporate reputation, and long-term sustainability over short-term tax savings.

Finally, leverage has a positive and significant effect on tax aggressiveness. Companies with higher debt levels tend to demonstrate higher tax aggressiveness because debt financing generates

deductible interest expenses that reduce taxable income. This finding confirms that capital structure decisions play an important role in shaping corporate tax planning strategies.

Overall, the study concludes that while firm size and profitability do not individually determine tax aggressiveness, leverage represents a significant financial determinant. The findings further demonstrate that tax aggressiveness is a multidimensional phenomenon influenced by the interaction of corporate financial characteristics and managerial decision-making.

PRACTICAL IMPLICATIONS

The findings provide several practical implications for corporate management, investors, and tax authorities.

First, corporate managers should recognize that financing decisions, particularly those related to debt utilization, have significant implications for corporate tax planning. Although debt financing may generate tax advantages through deductible interest expenses, excessive reliance on leverage may simultaneously increase financial risk. Therefore, managers should develop balanced financing policies that support tax efficiency while maintaining financial stability.

Second, companies should strengthen corporate governance and internal tax compliance mechanisms. Transparent financial reporting, effective internal controls, and prudent tax planning can reduce regulatory risks while preserving corporate reputation among investors and other stakeholders.

Third, investors should not evaluate corporate tax behavior solely on the basis of company size or profitability. Instead, attention should also be given to capital structure decisions because leverage has been shown to significantly influence tax aggressiveness.

Finally, tax authorities may use the findings as additional empirical evidence when designing tax supervision strategies. Companies exhibiting relatively high leverage ratios may require closer monitoring to ensure that debt financing is not excessively utilized for aggressive tax planning purposes while remaining inconsistent with the spirit of tax regulations.

THEORETICAL IMPLICATIONS

This study contributes to the accounting and taxation literature by providing empirical evidence regarding the determinants of tax aggressiveness within Indonesia's Consumer Non-Cyclicals sector during the 2020–2024 period.

The findings partially support Agency Theory by demonstrating that managerial tax decisions are influenced by organizational financial characteristics. However, not all financial indicators produce significant effects. While leverage significantly influences tax aggressiveness, firm size and profitability do not exhibit statistically significant relationships. These findings indicate that agency conflicts related to taxation may be more strongly reflected through financing decisions than through organizational scale or profitability.

Furthermore, the study extends previous empirical research by focusing specifically on Consumer Non-Cyclicals companies during the post-pandemic economic recovery period. This sector possesses relatively stable business characteristics compared with cyclical industries, thereby providing additional insights into corporate tax behavior under different economic conditions.

RESEARCH LIMITATIONS

Several limitations should be considered when interpreting the findings.

First, the study focuses exclusively on Consumer Non-Cyclicals companies listed on the Indonesia Stock Exchange. Consequently, the findings cannot be generalized to companies operating in other industrial sectors that may possess different operational and financial characteristics.

Second, the explanatory power of the regression model remains relatively low. The Adjusted R² value of 7.65% indicates that most variations in tax aggressiveness are explained by variables outside the current research model.

Third, the study investigates only three independent variables—firm size, profitability, and leverage. Other important determinants, including corporate governance, executive characteristics,

institutional ownership, capital intensity, inventory intensity, political connections, and corporate social responsibility, were not incorporated into the analysis.

Finally, the research relies exclusively on secondary financial statement data. Consequently, managerial motivations and organizational considerations underlying tax planning decisions cannot be directly observed.

RECOMMENDATIONS

Based on the findings and limitations, several recommendations are proposed.

For companies:

1. Develop prudent financing policies by balancing debt utilization with long-term financial sustainability.
2. Strengthen tax governance and internal control systems to ensure tax planning remains compliant with prevailing regulations.
3. Improve financial transparency to enhance investor confidence and reduce reputational risks associated with aggressive tax planning.

For tax authorities:

1. Increase supervision of companies with relatively high leverage because debt financing has been shown to significantly influence tax aggressiveness.
2. Continue improving tax regulations to minimize opportunities for aggressive tax planning through financing strategies.

For future researchers:

1. Include additional explanatory variables such as corporate governance, executive characteristics, capital intensity, inventory intensity, political connections, audit quality, and corporate social responsibility.
2. Expand the research scope by examining companies from multiple industrial sectors or conducting comparative studies across industries.
3. Utilize longer observation periods and more advanced analytical techniques, such as dynamic panel regression or Structural Equation Modeling (SEM), where appropriate, to obtain a more comprehensive understanding of the determinants of tax aggressiveness.

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