

Determinants of Corporate Income Tax Payable to Chemical Sector Manufacturing Companies Listed on the Indonesia Stock Exchange

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Abstract

Purpose: This study aims to analyze the effect of profitability, tax planning, and capital structure on corporate income tax payable in chemical manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period.

Methodology/approach: This study employs a quantitative research approach, utilizing secondary data derived from annual financial reports obtained from the official IDX website and company websites. The sample was selected using purposive sampling, resulting in 7 companies observed over 5 years (2020–2024), yielding a total of 35 observations. Data analysis techniques employed include descriptive statistics, classical assumption tests, multiple linear regression analysis, and hypothesis testing (t-test and F-test), utilizing SPSS software.

Results/findings: The results show that, partially, profitability has a significant effect on corporate income tax payable, while tax planning and capital structure have no significant effect. However, simultaneously, all three independent variables have a significant effect on corporate income tax payable.

Conclusions: These findings indicate that profitability is the primary factor determining the amount of tax liability. In contrast, the effectiveness of tax planning and capital structure does not consistently contribute to reducing the tax burden.

Limitations: This study was only able to explain the influence of profitability, tax planning, and capital structure on the income tax of 13.6% of outstanding entities. This means that 86.4% of other variables outside the model can still affect the amount of tax payable.

Contribution: This research provides evaluation material for manufacturing companies to develop optimal financial and tax strategies. This research makes a theoretical contribution to the development of accounting and taxation science, particularly in understanding the relationship between profitability, tax planning, and capital structure in relation to the income tax of debt-issuing entities.

Keywords: *Profitability, Tax Planning, Capital Structure, Corporate Income Tax Payable, Chemical Manufacturing Companies.*

1. Introduction

Taxes are the primary source of State revenue used to finance various government and national development activities. One type of tax that plays a significant role in State revenue is the Corporate Income Tax. In practice, the amount of Corporate Income Tax payable is not only determined by the amount of income or profit earned by the company, but also influenced by various other factors that can be classified into internal factors and external factors. Understanding these two types of factors is crucial for explaining the dynamics of the tax liability faced by the company. Internal factors are those that originate within the company and can generally be directly controlled by management. Internal factors that affect the amount of Corporate Income Tax payable include profitability, capital structure, and tax planning. Profitability reflects the company's ability to generate profits, where the higher the level of profitability, the greater the potential for taxable income imposed by Corporate Income Tax (Sari & Ramantha, 2016).

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One of the key indicators is profitability, which measures a company's ability to generate profits from its operational activities. The higher a company's level of profitability, the greater its potential for taxable income subject to Corporate Income Tax. However, not a few companies have high profitability but do not have a significant corporate income tax payable, which suggests the existence of a tax management strategy implemented by the company (Sari & Ramantha, 2016).

A high profitability ratio indicates that the company can manage its operational activities efficiently, which is an indicator of a healthy financial condition (Harahap, 2015). Companies with high profitability also tend to attract investors, and as profits increase, the potential corporate income tax liability owed also increases (Bakhtiar, 2020).

According to Rahayu (2017), tax planning is an effort made by taxpayers to minimize tax obligations that should arise by taking advantage of loopholes in applicable tax provisions, without violating the rule of law. This strategy enables companies to optimize the efficiency of tax expenses by selecting appropriate accounting methods, delaying revenue recognition, accelerating cost recognition, and utilizing tax incentives and facilities legally regulated by tax laws. With effective tax planning, taxable income can be legally reduced, allowing for a lower Corporate Income Tax (CIT) payable.

In addition to profitability and tax planning, another factor that affects the amount of corporate income tax is the capital structure. The high capital structure of debt tends to reduce the corporate income tax burden. The use of debt in corporate financing can effectively reduce taxable income, resulting in a lower amount of Corporate Income Tax payable (Darussalam & Septriadi, 2019). This strategy is part of legal and ethical tax planning, provided it is carried out in accordance with the principles of legal tax avoidance and does not violate the provisions of tax regulations (Fadli, 2021).

Although the theory suggests that profitability, tax planning, and capital structure influence the amount of income tax paid by the debatable entity, the results of previous studies reveal inconsistencies or discrepancies in the findings. Some studies have found that profitability has a significant influence on income tax payable, while other studies show that there is no significant influence (Rahayu, 2020).

Recent years have seen a phenomenon where many companies are implementing strategies to reduce tax burdens, one of which is through aggressive tax planning. Tax revenue experienced a significant decrease of 16.2% in 2019, partly due to the high number of tax refunds (nasional.kontan.co.id, 2019). This indicates that some companies overpay taxes and then file returns, which can be a form of aggressive tax management strategy. This type of strategy demonstrates how companies can legally manage tax obligations to minimize tax burdens, which is a relevant consideration in tax planning. On the other hand, unstable economic conditions also have a significant impact on the industrial sector, particularly the basic and chemical industries. The Composite Stock Price Index (JCI) report experienced a drastic decline in 2020, with the basic and chemical industry sectors experiencing the most profound decline of 43.53% year-to-date (kontan.co.id, 2020). The decline in the performance of this sector certainly affects the company's level of profitability, which in turn can impact the amount of income tax due by the debatable entity. This condition raises important questions about the extent to which the company's profitability level is related to its tax obligations.

The period from 2020 to 2024 is also a challenging time for the business world, particularly in navigating the impact of the COVID-19 pandemic, which has affected nearly all economic sectors. Changes in fiscal policies and tax incentives provided by the government also affect the capital structure and profitability of companies, which ultimately impacts the amount of corporate income tax that must be paid. Therefore, it is essential to examine in more detail how these factors impact tax liabilities on manufacturing companies, particularly in the chemical sector, which makes a substantial contribution to the Indonesian economy. This study examines the simultaneous and partial influence of profitability,

tax planning, and capital structure on corporate income tax payable in manufacturing companies in the Chemical Sector listed on the Indonesia Stock Exchange for the period 2020–2024.

2. Literature review and hypothesis/es development

Agency theory provides a crucial foundation for analyzing management decision-making related to profitability, capital structure, and tax planning, as well as its impact on the Corporate Income Tax (CIT) payable. In terms of profitability, agency theory suggests that managers tend to maximize profits in order to demonstrate good performance to their owners. However, managers can also be driven to manipulate financial statements for personal gain. Therefore, the principal monitors profitability as a tool of control over agent performance, because the higher the profitability, the greater the potential for taxable income and the amount of Corporate Income Tax owed (Utama & Anis, 2020). Regarding capital structure, the decision to use debt or equity is greatly influenced by agency relationships. Managers may be reluctant to use debt due to the risk of bankruptcy or pressure from creditors; however, the optimal use of debt can provide tax benefits in the form of an interest tax shield. Thus, agency theory helps explain how the use of debt can mitigate agency conflicts through debt discipline mechanisms, while also influencing corporate tax liabilities (Fitriani & Hidayat, 2021). In tax planning, agency theory is relevant for explaining the potential information asymmetry between managers and owners. Managers have an incentive to reduce the company's tax burden in order to increase its value, but such actions can also pose risks if undertaken aggressively. Therefore, tax planning is an area where owners must provide adequate supervision to prevent long-term adverse irregularities from occurring (Wulandari & Nugroho, 2019).

Profitability, tax planning, and capital structure are internal factors of the company that can affect the amount of Income Tax Payable. These three variables are interrelated in determining the amount of taxable profit and the fiscal burden that the company must bear. Profitability reflects a company's ability to generate profits, which ultimately affects the amount of taxes it is subject to. On the other hand, tax planning is a strategic instrument used to minimize the tax burden legally. Meanwhile, the capital structure affects the calculation of taxes through the interest expense on deductible debts. Research by Sari & Ramantha (2016) shows that simultaneously, these three variables have a significant influence on the amount of Income Tax of Accounts Receivable, especially in companies engaged in the manufacturing sector, so the following hypotheses can be formulated:

H1: Profitability, tax planning, and capital structure simultaneously have a significant effect on Income Tax Receivables in manufacturing companies listed on the Indonesia Stock Exchange in 2020–2024.

Profitability is one of the important indicators that reflects the company's ability to generate profits from all its operational activities. The higher the level of profitability of a company, the greater the taxable profit obtained, which will ultimately increase the amount of Income Tax Payable. Santi and Wardani (2018) stated that profitability has a positive influence on Corporate Income Tax Payable, as companies with high profit levels are subject to greater taxes. The results of Return on Assets (ROA), as a proxy for profitability, have a positive relationship with tax obligations. Based on these findings, the following hypotheses can be formulated:

H2: Profitability affects the Income Tax of Accounts Receivable.

Tax planning is a legal effort undertaken by companies to minimize their tax burden through transaction management strategies, the selection of appropriate accounting methods, and the utilization of tax incentives. The goal is to optimize tax efficiency while adhering to applicable legal requirements. Several studies have shown that tax planning can reduce the amount of corporate income tax payable, as companies can take advantage of legal loopholes to minimize their tax burden. Based on this, the following hypothesis is formulated:

H3: Tax planning affects the Income Tax of Accounts Receivable.

The capital structure refers to the comparison between debt and equity in a company's financing of its assets. The composition of the capital structure influences tax expenses, primarily through the component of debt interest cost that can be deducted for tax purposes (tax shield). Companies with a capital structure dominated by debt have the potential to reduce the burden of Income Tax Payable, as loan interest can offset taxable profits. According to Ningsih's research (2020), the higher the proportion of debt in the capital structure, the lower the amount of tax owed. Capital structure harms corporate income tax because the use of debt as a source of funding provides fiscal benefits. Leverage, as a proxy for capital structure, has a negative relationship with the Corporate Income Tax burden. Based on this description, the hypotheses that can be proposed are:

H4: Capital structure affects Income Tax Payable.

3. Methodology

This study employs a quantitative approach, utilizing SPSS for analysis. This study was conducted to analyze the extent to which independent variables, namely profitability, tax planning, and capital structure, affect the dependent variable, namely the income tax liability of the debatable entity. The data used in this study were collected from the annual reports and financial statements of companies engaged in the basic and chemical industry sectors, which are listed on the Indonesia Stock Exchange (IDX) for the period 2020–2024. The data source was obtained through the IDX Fact Book, the official IDX website (www.idx.co.id), and the official website of each company.

The population of this study is manufacturing companies in the basic industry and chemical sectors that are listed consecutively on the Indonesia Stock Exchange (IDX) during the period 2020-2024. The sampling technique uses purposive sampling with the following criteria: 1) Companies that publish complete annual financial statements in the period 2020–2024. 2) Companies that do not suffer consecutive losses during the observation period. 3) Companies that have complete research variable data, including: profitability, tax planning, and capital structure 4. Companies that use the Rupiah currency in their annual financial statements. The research sample obtained was from 7 companies.

In this study, the Net Profit Margin (NPM) is used as an indicator of profitability because it reflects net profit, which serves as the basis for the imposition of Corporate Income Tax (CIT). Tax plans are measured using the Effective Tax Rate (ETR). The Debt-to-Equity Ratio (DER) is a commonly used indicator in capital structure analysis. Corporate Income Tax Payable is converted into a form of ratio, namely by comparing the value of Corporate Income Tax Payable to the company's Net Profit (Ghozali, 2016, pp. 21-23) The researcher conducted a data test which included a normality test and classical assumption, multiple linear regression test, hypothesis test, which included an F test and a t test as well as a determination coefficient test.

4. Results and discussion

The analysis of the multiple linear regression coefficient test can be used for hypothesis testing regarding the relationship between the independent variable and a single dependent variable. The results of multiple linear regression tests can be seen in the following table:

Table 1: Multiple Linear Regression Analysis Results

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,384	,272		5,090	,000
	Profitabilitas	-3,349	1,545	-,396	-2,168	,038
	Perencanaan Pajak	-2,878	,862	-,750	-3,337	,002
	Struktur Modal	,211	,116	,359	1,823	,078

The regression equations obtained from the test results are as follows:

$$Y = 1,384 - 3,349X_1 - 2,878X_2 + 0,211X_3$$

Based on these equations, it can be explained that:

1. The constant value of 1.384 in the regression Equation shows that if the profitability, tax planning, and capital structure are at zero or have no effect, then the resulting Income Tax value of Payable is 1.384. This value represents the starting point or basis for the corporate income tax value payable, before considering the influence of the three independent variables.
2. The profitability regression coefficient (X_1) of -3.349 indicates that every increase in profitability will reduce the tax payable by 3.349 units, assuming other variables remain the same.
3. The tax planning regression coefficient (X_2) of -2.878 shows that every increase in one tax planning unit will reduce the income tax of the payable entity by 2.878 units.
4. The regression coefficient of capital structure (X_3) of 0.211 shows that every increase in one unit of capital structure will increase the income tax of the payable entity by 0.211 units.

Based on the results of the regression analysis, the F-value was calculated to be 3.839, with a significance value of 0.019. In contrast, the F-value in the table was at a significance level of 5% ($\alpha = 0.05$), with $df_1 = 3$ and $df_2 = 31$, yielding a value of 2.911. Since F is calculated $> F$ table and the significance value is < 0.05 , the test results show that the regression model is simultaneously significant.

This result aligns with agency theory, which posits that managers, as agents, are responsible for decisions that impact the company's tax liability. These three variables reflect management's strategic decisions in generating profits, developing tax-efficient strategies, and selecting funding sources. Empirically, these results are also supported by research from Ningsih (2020) and Wisnu Mulyadi (2024), which indicate that profitability, tax planning, and capital structure collectively influence the amount of income tax payable. Although significant, the determination coefficient (R^2) of 13.6% indicates that most of the variability of the income tax payable (86.4%) is explained by other factors such as company size, fixed asset intensity, and government fiscal policy.

The results of the partial test (t-test) for the profitability variable showed that the calculated t-value was -2.168 with a significance value of 0.038. Because the significance value is < 0.05 , this result shows that the effect of profitability on corporate income tax is statistically significant. Moreover, the value of the regression coefficient for this variable is -3.349, which indicates the direction of the negative relationship. Thus, the second hypothesis is accepted, indicating that profitability has a negative and significant impact on the income tax of the debatable entity.

This result can be interpreted as indicating that companies with a high level of profitability actually have lower corporate tax liabilities. This is likely because more profitable companies have better capabilities and resources to achieve tax efficiency, such as through sophisticated tax planning strategies, the use of tax incentives, tax sheltering, or the application of specific cost recognition methods to reduce fiscal profits. The direction of this negative relationship reflects the reality of tax management that occurs in the chemical industry sector in Indonesia. Theoretically, this is consistent with agency theory, which suggests that managers with high profitability tend to have greater resources to engage in tax planning, thereby reducing the company's tax liability. These strategies include tax sheltering, early cost recognition, or the use of fiscal incentives. These results align with the research of Rochmat & Irianto (2014) and Andika & Marlina (2024), which found that profitability harms income tax payable, as companies tend to employ tax efficiency strategies when profits increase.

The t-test on the tax planning variable resulted in a calculated t-value of -3.337 with a significance value of 0.002. This significance value is much smaller than 0.05, so the effect is statistically significant. The value of the regression coefficient of -2.878 also shows that the influence of tax planning on the income tax of the debatable entity is negative. With this result, a third hypothesis is accepted, indicating that tax planning has a negative and significant impact on the income tax of the debatable entity. The more effective the tax planning carried out by the company, the lower the corporate income tax payable will be.

Companies that have a well-defined tax strategy can legally reduce their tax burden in accordance with applicable tax regulations. For example, this can be achieved by utilizing fiscal facilities, adjusting transaction timings, or selecting specific fiscal accounting methods. This finding aligns with the concept of tax minimization strategy, where companies aim to manage their tax obligations to avoid paying more taxes than necessary, without violating the law. In the context of this study, this is represented by the Net Effective Tax Rate (NET) indicator, which decreases with more optimal tax planning. Tax planning is a crucial factor in reducing corporate tax liability. These results reinforce Tax Planning Theory, which states that through legal and systematic strategies, companies can reduce their tax obligations without breaking the law. This finding is supported by research from Ningsih (2020), which suggests that tax planning can lead to increased income tax.

The t-test on the variable of capital structure yielded a t-value of 1.823 with a significance value of 0.078. Because the significance value is greater than 0.05, the influence of capital structure on the income tax of the payable entity is not statistically significant. Thus, the fourth hypothesis is rejected, indicating that the capital structure has no significant influence on the income tax of the debenture-issuing entity. This suggests that changes in the company's funding composition, whether from debt or equity, do not significantly impact the amount of taxes paid. This finding contradicts some theories that the use of debt will reduce the company's tax burden through the interest tax shield mechanism, which involves recognizing interest expense as a deductible expense from taxable income. However, in the context of manufacturing companies in the chemical sector sampled in this study, likely, the influence is not dominant or inconsistent across the sample companies, so it does not produce statistical

significance. Additionally, there is a possibility that the company's management is more focused on operational efficiency or other tax planning strategies rather than utilizing the capital structure as a tool to reduce its tax burden. Other factors, such as the limited number of samples, differences in industry characteristics within the chemical sector, and internal company policies, can also affect the results, causing them to diverge from the predictions of capital structure theory.

5. Conclusion

5.1. Conclusion

Based on the results of data analysis, descriptive statistical testing, multiple linear regression, and partial and simultaneous hypothesis tests, the following conclusions were obtained:

1. Simultaneously, profitability, tax planning, and capital structure have a significant effect on the Income Tax of Accounts Receivable. Through the F-test, it was determined that the three independent variables collectively had a significant influence on the dependent variable, with a significance level of $0.019 < 0.05$ and a calculated F-value that exceeded the F-value in the table. This indicates that the combination of profitability, tax planning strategy, and corporate financing structure is a collectively relevant factor in influencing the magnitude of a company's tax liability.
2. Profitability has a negative and significant effect on Income Tax of Accounts Receivable. The results of the t-test showed that profitability, measured using Net Profit Margin (NPM), had a significant negative influence on the income tax of the debatable entity. This means that the higher a company's profitability, the lower its corporate income tax payable.
3. Tax planning has a negative and significant effect on the Income Tax of Accounts Receivable. This result was obtained through the significance value of the t-test, which indicates that the more effective the tax planning carried out by the company (as evidenced by the low Net Effective Tax Rate), the smaller the tax payable.
4. The capital structure does not have a significant effect on the Income Tax of Accounts Receivable. This means that the difference in the proportion between debt and equity in a company's financing structure does not directly determine the amount of tax payable, and that other factors also affect the efficiency of using debt as a tax-deductible.

5.2. Limitation

The value of the determination coefficient (R^2) of 13.6% indicates that the model can only account for a small portion of the variation in income tax of the debatable entity. Other variables outside the model influenced the remaining 86.4%.

5.3. Suggestion

The researcher then needs to add other variables such as company size, capital intensity, liquidity, fixed asset intensity, and tax accounting policies implemented by each company.

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