

Revisiting tax management determinants: the interplay of capital intensity, liquidity, and firm size in Indonesia

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Abstract

This study aims to examine the effect of financial aspects, namely capital intensity and liquidity, on tax management practices in manufacturing companies in Indonesia. In addition, this study also examines the role of company size as a moderating variable that can strengthen or weaken the relationship between independent variables and tax management. A quantitative method with a *purposive sampling* approach was used to sample 204 years of companies from their financial reports during the 2019-2024 period. The data were analyzed using statistical techniques with the EViews application. The results showed that capital intensity and liquidity did not have a significant effect on tax management. Furthermore, company size proved to be a moderating variable that influenced the strength of this relationship. These findings provide theoretical and practical contributions to corporate tax strategy management, particularly in the context of companies in Indonesia, and provide insights for managers and decision makers on efficient financial and tax management.

Keyword: Capital Intensity, Liquidity, Tax Management, Company Size.

INTRODUCTION

Taxes are mandatory contributions owed by individuals or entities to a country that are compulsory in nature and do not provide direct benefits, and are used for the needs of the country (Widyaningsih, 2021). Taxes have two important functions in a country's economy. The first function is that taxes are a source of government funds for development, both at the central and local government levels. The second function is that taxes serve to regulate government policies in the social and economic fields. Therefore, Indonesia is trying to increase revenue in the taxation sector (Pucantika & Sartika Wulandari, 2022).

Companies are one of the subjects of income tax and also have an obligation to pay taxes calculated based on the company's net profit. Indonesia is a promising tax object because it has a large population and abundant natural resources, supported by an attractive geographical location, making Indonesia a global trade hub. High competition drives the growth of companies in Indonesia, especially manufacturing or service companies, which results in the economy moving more significantly and increasing the level of prosperity of those living in the company's area (Ardyansah, 2014). This study discusses banking companies because banking companies are one of the main instruments of a country's economy.

Tax management is a government regulation that requires taxpayers to pay taxes, but this regulation has weaknesses that can be exploited for tax planning. Companies consider tax burdens as additional costs that can reduce company profits, so they may engage in tax planning to reduce efficiency (Heryana & Hermanto, 2020).

The main issue underlying this study is the practice of tax management (including tax planning to reduce tax burdens) carried out by companies, which is considered an additional burden that can reduce net profits. This phenomenon has become a concern in Indonesia due to

various tax incentives and regulations that open up opportunities for companies to carry out optimal tax planning. This study provides a solid foundation through testing complex relationships (moderation) in a specific economic context, thereby enriching the literature and providing significant practical insights for all stakeholders.

The phenomenon of tax management is the case of an affiliated healthcare company in Singapore (Emiten Rajawali Nusantara Indonesia). The company has recorded large affiliated debts (Rp20.4 billion in 2014, with a turnover of only Rp2.178 billion). These debts are included as capital, and interest/debt payments are considered dividends by owners in Singapore, which has the potential to reduce taxable income in Indonesia. In addition, the company also took advantage of Government Regulation 46/2013 (1% final income tax for MSMEs), and there were indications that shareholders did not report their tax returns correctly. www.kompas.com

The first factor that can affect tax management is leverage. The leverage ratio is a ratio used to measure the extent to which a company's assets are financed by debt. Companies are obliged to pay interest on their loans when they want to reduce their taxable income using debt as a way to reduce their taxable income, because when a company has high debt, it has an obligation to pay interest on its loans (Djuniar & Ningsih, 2019).

The second factor that can influence tax management is liquidity. Liquidity is the comparison of a company's long-term funding, as shown by the ratio of long-term debt to equity. A company's liquidity can generate profits through good company performance. The fulfillment of a company's funding needs comes from share capital, retained earnings, and the company's share premium and reserves. Liquidity theory assumes that bond issuance and repurchases or new share issuances are the main sources of liquidity modification. In Indonesia itself, tax management practices are a concern due to various tax incentives and regulations that provide opportunities for companies to conduct optimal tax planning (Nur Amalia, 2021).

Against this background, this study aims to analyze the influence of financial factors, namely capital intensity and liquidity, on tax management in the consumer goods industry sector in Indonesia. In addition, this study will also examine the role of company size as a moderating variable. The results of this study are expected to contribute theoretically to enriching the literature on the relationship between financial aspects and taxation practices, as well as providing practical guidance for companies in managing their tax obligations efficiently and in accordance with regulations.

Based on the results of the analysis, the development of hypotheses related to the influence of variables on tax management needs to be carried out based on previous theories and research. First, the hypothesis that the Capital Intensity Ratio (CIR) does not have a significant effect on tax management but has a negative effect. However, empirical results show that this is not significant, so it can be developed based on the theory of fixed asset depreciation, which functions as a deduction from pre-tax profit, so that companies with high CIR tend to have lower tax burdens and take aggressive tax management measures. This is supported by the theory of tax burden optimization and tax avoidance strategies presented in the literature by (Desai & Dharmapala, 2005), which states that an increase in fixed assets tends to reduce a company's tax burden due to the use of depreciation as a tax incentive. Second, for the liquidity variable, the hypothesis that liquidity has a positive effect on tax management can be developed with agency theory and liquidity as an indicator of a company's ability to meet its obligations, which influences more open and less aggressive tax policies when liquidity is high. Research by (Developments & Gujarat, 2015) shows that companies with high liquidity tend to implement conservative tax strategies to maintain financial stability, so this relationship is hypothesized to be positive. Third, from the perspective of stakeholder theory and risk management, the variable of company size as a moderator has a positive effect on the relationship between CIR and tax management, which means that large companies tend to manage taxes more carefully and consider social and regulatory implications. Therefore, the development of this hypothesis will enrich the theoretical framework in understanding the complex and multifactorial dynamics of tax management.

This study supports the development of hypotheses and enhances the credibility of the work in the following ways. First, the hypotheses are developed based on the latest theories and research, such as the Capital Intensity Ratio (CIR), which shows that an increase in fixed assets reduces the tax burden. Second, it uses the latest financial statement data from manufacturing companies from 2019-2024 to capture current market conditions. Third, it applies company size as a moderating variable to understand the relationship between capital intensity, liquidity, and tax management. Fourth, it compares the results with previous studies to demonstrate a rigorous scientific process. Finally, this study recommends that future researchers consider more up-to-date variables and conduct broader studies. This research framework aims to analyze the influence of financial factors (CIR and Liquidity) on tax management, with a specific focus on the role of Company Size as a moderating variable.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Literature Review and Hypothesis Development

The capital intensity ratio (capital intensity) is a company activity related to investment activities in the form of fixed assets. The capital intensity ratio describes the level of efficiency in generating company sales through asset management (Damayanti & Gazali, 2019). Based on agency theory, the interest of management (agents) is to improve company performance with the aim of obtaining the desired compensation. Based on previous research from (Ardyansah, 2014), which states that the capital intensity ratio has a negative effect on tax management. The principal in calculating the amount of capital required to generate profits is to use capital intensity. In addition, capital intensity is also used to see the level of efficiency in the use of capital investment activities (Wahyuningtyas, 2014).

The CIR (Capital Intensity Ratio) hypothesis has a negative effect on tax management, with a t-value of -3.184 and a sig value of 0.0017, which is less than 0.05, thus supporting the CIR hypothesis on tax management. Based on research from (Darmadi, 2013), a company's fixed assets can reduce its tax burden through depreciation, which is attached to fixed assets. Depreciation costs have an effect on taxes by acting as a tax deduction.

H1: *Capital Intensity Ratio* has a significant negative effect on *Tax Management*.

High liquidity indicates that the company is in good condition. The higher the company's profits, the higher its capital will be (Dwi & Supramono, 2020). If the company is in good condition, companies with high liquidity ratios will try to distribute current period profits to the next period due to higher tax costs, which are directly proportional to the degree of taxation. According to agency theory, it is believed that liquidity will affect tax management, and companies with high liquidity tend to use retained earnings for company operations, thereby reducing the company's taxable income and reducing tax debt costs. In the studies (Fadli, 2016), (Putra, Rio, & Suryani, 2018), it is stated that liquidity affects tax management.

H2: *Liquidity* has a significant positive effect on *Tax Management*

The larger a company is, the greater its capital and assets will be. With these large resources, companies can reduce their tax burden. However, the larger a company is in terms of asset value, the more attention it will receive from authorities and investors. Therefore, larger companies with high capital intensity tend to reduce their tax management activities.

This statement is supported by research conducted by (Tiaras & Wijaya, 2017), (Yuliana & Wahyudi, 2018) and (Yanti & Hartono, 2019) which states that company size moderates the relationship between capital intensity and tax management.

The larger a company is, the greater the intensity of its capital and assets will be. With these large resources, companies can reduce their tax burden. However, as a company grows in size, as indicated by the value of its assets, it will receive more attention from authorities and investors.

Therefore, larger companies with high capital intensity tend to reduce their tax management activities.

This statement is supported by research conducted by Tiaras & Wijaya (2017) , Yuliana & Wahyudi (2018) and Yanti & Hartono (2019) which states that company size moderates the relationship between capital intensity and tax management

H3: Firm size moderates the relationship between capital intensity and tax management.

Company size strengthens the relationship between liquidity and tax management, because if a company with good sales has an impact on the scale of the company's profits, then that company is classified as a large company. Good sales will increase cash and accounts receivable, so the company's liquidity level will also be high. The greater the company's profits, the greater the taxes and fees that the company must bear, so companies tend to try to reduce their tax burden. Agency theory shows that liquidity has a positive effect on tax aggressiveness. Companies with high liquidity tend to use retained earnings for company operations, so that the company's taxable income is lower and tax liabilities are also reduced. (Cahyadi et al., 2020) . (Kurniawan, 2019) , (D , and (Cahyadi et al., 2020) conclude that liquidity improves tax management. From the above statements, the following assumptions can be made:

H4: Company size moderates the relationship between liquidity and tax management

METHODS

Agency Theory

According to (Meckling, W. H., & Jensen, 1976) , the agency relationship is a contract between a manager (agent) and a shareholder (principal). Both parties are bound by a contract that specifies their respective rights and obligations. The principal provides facilities and funds to run the company, while the agent has the obligation to manage what the shareholders have assigned to him. For this purpose, the principal will receive profits, while the agent receives a salary, bonuses, and various other forms of compensation.

This study is quantitative in nature, with the aim of empirically testing the effect of capital intensity and liquidity on tax management, as well as the role of company size as a moderating variable. A quantitative approach was chosen because it allows for statistical testing of the relationship between variables and provides data that can be generalized.

In this study, data were obtained through secondary data collection from the financial reports of manufacturing companies listed on the Indonesia Stock Exchange (IDX). The sampling technique used was purposive sampling with the following criteria:

1. Companies engaged in manufacturing.
2. Companies that published financial reports during the 2019-2024 period.
3. Companies that prepare financial statements using the rupiah currency.

A total of 204 companies that met these criteria were sampled. Data was collected by downloading financial reports from the official website of the Indonesia Stock Exchange (IDX) of the relevant companies.

Data analysis was performed using multiple regression analysis to determine the effect of independent variables (*capital intensity* and liquidity) on the dependent variable (tax management). In addition, the effect of moderating variables was tested using regression moderation techniques to determine whether company size strengthens or weakens this relationship.

The research instrument used was a variable measurement table, which was filled in based on financial reports and related literature. The validity and reliability of the instrument were maintained by referring to relevant theories and literature to ensure the accuracy of variable measurements.

The research used manufacturing companies listed on the Indonesia Stock Exchange for the period 2019-2024, using *annual reports*. The sampling criteria were manufacturing companies,

with 34 companies multiplied by 6 periods, and *outlier* data was removed, resulting in 204 observations.

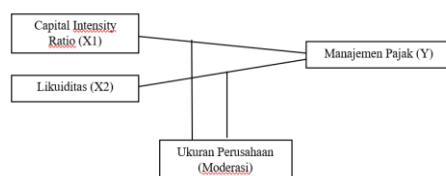


Figure 1. Research Framework

RESULT AND DISCUSSION

Variable Measurement

Tax Management

Tax management is an activity that can be carried out by management to fulfill their tax obligations correctly while minimizing tax costs with the aim of increasing company profits. Tax management is measured using the effective tax rate model ((Djuniar & Ningsih, 2019)). The effective tax rate (ETR) formula is as follows:

$$ETR = \frac{\text{Beban Pajak} - \text{Penghasilan}}{\text{Laba Sebelum Pajak}}$$

Capital intensity

Capital intensity is a company activity that maximizes part of its wealth or capital to be invested in fixed assets that are also used in operational activities in order to generate profits. Investment in these fixed assets will result in depreciation expenses that can reduce net business profits. Based on the research "(Junensie et al., 2020)", the measurement of capital intensity is formulated as follows:

$$CIR = \frac{\text{Total A Net Fixed Assets}}{\text{Total Assets}}$$

Liquidity

Liquidity measurement is a company's ability to meet its short-term liabilities, which can be determined by comparing the amount of current assets with *current* liabilities. The ratio between current assets and current liabilities is usually referred to as the current ratio (Sembiring & Hutabalian, 2022). The current ratio formula is as follows:

$$CR = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Company Size

A moderating variable is a variable that can influence the relationship between independent and dependent variables (Sugiyono., 2015). According to company size can be calculated using the natural logarithm (Ln) of the average company assets. The use of total assets is based on the fact that total assets indicate the size of a company and tend to influence timeliness (Goh, 2023) using the following formula:

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

RESULT AND DISCUSSION

The study used manufacturing companies listed on the Indonesia Stock Exchange for the period 2019-2024, using *annual reports*. The sampling criteria included 34 manufacturing companies, multiplied by 6 periods, for a total of 204 samples.

Table 1. Decision-Making Criteria

Sample Selection Criteria	Number
Companies engaged in manufacturing	34
Companies that published financial reports during the 2019-2024 period	34
Companies that prepare financial statements using the following currencies, rupiah.	34
Number of companies used as samples	34
Observation period	6
Final sample size	204

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Descriptive Statistical Analysis Test

The results of descriptive statistical analysis of the variables used include:

Table 2. Results of Descriptive Statistical Analysis

	Descriptive Statistics			
	ETR	CIR	CR	SIZE
Mean	0.384342	1.282270	2.068382	23.32188
Median	0.248702	0.602394	1.775000	23.18222
Maximum	32.18564	8.435260	9.950000	26.03011
Minimum	-0.865517	0.020000	0.310000	20.51906
Std. Dev.	2.250788	1.712769	1.311812	1.089552
Skewness	13.92590	2.037473	2.015468	0.227404
Kurtosis	197.2809	6.412823	9.816382	2.817866
Jarque-Bera	327,426.7	240.1466	533.0478	2.040204
Probability	0.0000	0.0000	0.0000	0.360558
Sum	78.40587	261.5830	421.95	4757.664
Sum Sq. Dev.	1028.407	595.5165	349.3328	240.9863
Observations	204	204	204	204

Source: Secondary Data Processed With

Based on Table 2, the results of the descriptive analysis are as follows:

1. Capital intensity, which is proxied by the *capital intensity* ratio (CIR), shows that capital intensity has a minimum value of 0.02 and a maximum value of 8.43, while the average capital intensity value is 1.2822 with a standard deviation of 1.7127 and a total of 204 samples.
2. Liquidity, proxied by the *current ratio* (CR), shows that liquidity has a minimum value of 0.31 and a maximum value of 9.95, while the average liquidity value is 2.0683 with a standard deviation of 1.3118 and a total of 204 samples observed.
3. The size of the company, as proxied by Total Assets (Ln), shows that the minimum value is 20.51 and the maximum value is 26.03, while the average value of the company size is 23.3218 with a standard deviation of 1.0895 and a total of 204 samples.

4. Tax management has a minimum value of -0.86, a maximum value of 32.18, an average value of 0.3843, a standard deviation of 2.2507, and a total of 204 samples.

Regression Analysis (Model Selection)

The results of the multiple linear regression analysis can be seen in the following table:

Table 3. Chow Test Results

Chow Test			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.724716	(33,167)	0.8618
Cross-section Chi-square	27.302922	33	0.7463

Probability value > 0.05, therefore the Common Effect Model is selected

Based on Table 4.3, the developed regression equation model is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta M$$

Based on the regression equation, several things can be interpreted as follows:

Lagrange Multiplier Test

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	3.509637 (0.0610)	0.003667 (0.9517)	3.513305 (0.0609)
Honda	-1.873403 (0.9695)	0.060558 (0.4759)	-1.281875 (0.9001)
King-Wu	-1.873403 (0.9695)	0.060558 (0.4759)	-0.623121 (0.7334)
Standardized Honda	-1.648752 (0.9504)	0.375669 (0.3536)	-5.838195 (1.0000)
Standardized King-Wu	-1.648752 (0.9504)	0.375669 (0.3536)	-3.922098 (1.0000)
Gourieroux, et al.	--	--	0.003667 (0.7254)

Probability value > 0.05, therefore the Common Effect Model is selected

Regression Equation (Hypothesis Test)

Equation 1

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Variable	Coefficient	Std. Error	t- Statistic	Prob.
C	0.251275	0.157971	1.590644	0.1133
CIR	0.000149	3.91E-05	3.809214	0.0002
CR	3.10E-06	2.19E-05	0.141506	0.8876
Root MSE	2.168352			0.067337
Mean dependent variable	0.384342			0.058057
S.D. dependent variable	2.250788			2.184474
Akaike information criterion	4.415224	R-squared		959.1572
Schwarz criterion	4.464020	Adjusted R-squared		-
Hannan-Quinn criterion	4.434963	S.E. of regression		447.3528
Durbin-Watson statistic	2.596825	Sum of squared residuals		7.256010
		Log likelihood		
		F-statistic		
		Probability of F-statistic		0.000906

Supported CIR against ETR

Equation 2

Variable	Coefficient	Std. Error	t- Statistic	Prob.
C	-0.928864	3.375139	0.275208	0.7834
CIR	0.000147	3.96E-05	3.713473	0.0003
CR	4.43E-06	2.23E-05	0.198977	0.8425
SIZE	0.050626	0.144629	0.350042	0.7267
Root MSE	2.167688			0.067908
Mean dependent variable	0.384342			0.053927
S.D. dependent variable	2.250788			2.189258
Akaike information criterion	4.424415	R-squared		958.5699
Schwarz criterion	4.489476	Adjusted R-squared		-
Hannan-Quinn criterion	4.450734	S.E. of regression		447.2904
Durbin-Watson statistic	2.596683	Sum of squared residuals		4.857066
		Log likelihood		
		F-statistic		
		Probability of F-statistic		0.002772

Supported CIR against ETR

Equation 3

Variable	Coefficient	Standard Error	t-Statistic	Prob.
C	0.138163	3.330237	0.041487	0.9669
CIR	-0.013423	0.004216	3.184000	0.0017
CR	0.000701	0.002257	0.310364	0.7566
SIZE	0.007761	0.142770	0.054361	0.9567
CIRSIZE	0.000563	0.000175	3.218913	0.0015
CRSIZE	-3.28E-05	0.000106	0.309356	0.7574
Root MSE	2.112862			0.114462
Mean dependent variable	0.384342			0.092100
S.D. of dependent variable	2.250788			2.144636
Akaike information criterion	4.392788	R-squared		910.6942
Schwarz criterion	4.490380	Adjusted R-squared		-
Hannan-Quinn criterion	4.432265	S.E. of regression		442.0644
Durbin-Watson statistic	2.725361	Sum of squared residuals		5.118563
		Log likelihood		
		F-statistic		
		Probability of F-statistic		0.000194

Hypothesis Test Results

t-Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.138163	3.330237	0.041487	0.9669
CIR	-0.013423	0.004216	3.184000	0.0017
CR	0.000701	0.002257	0.310364	0.7566
SIZE	0.007761	0.142770	0.054361	0.9567
CIRSIZE	0.000563	0.000175	3.218913	0.0015
CRSIZE	-3.28E-05	0.000106	0.309356	0.7574

1. The t-test result for the CIR variable (X1) obtained a t-value of -3.184000 > t-table, which is 1.971777385, and a sig value of 0.0017 < 0.05, Therefore, the higher the proportion of fixed assets (CIR), the lower the effective tax rate (ETR), indicating that companies tend to engage in more aggressive tax management (or at least have a lower tax burden).

2. The t-test results for the CR variable (X2) obtained a t-value of $0.310364 < t\text{-table}$, which is 1.971777385, and a sig value of $0.7566 > 0.05$, so the CR variable has no statistical effect, and therefore no effect can be concluded on tax management partially.

3. The t-test results for the SIZE (M) variable obtained a t-value of $0.054361 < t\text{-table}$, namely 1.971777385 and a sig value of $0.9567 > 0.05$, so the SIZE variable has no statistical significance, meaning that no effect can be concluded on tax management in part.

F Test Results

R-squared	0.114462
Adjusted R-squared	0.092100
S.E. of regression	2.144636
Sum of squared	910.6942
residuals	-
Log likelihood	442.0644
F-statistic	5.118563
Probability of F-	
statistic	0.000194

The calculated F value of 5.118563 is greater than the table F value of 2.649752, and the sig value of 0.000194 is less than 0.05, indicating that the variables CIR, CR, and SIZE influence ETR.

Determination Coefficient Test R

R-squared	0.114462
Adjusted R-squared	0.092100
S.E. of regression	2.144636
Sum of squared	910.6942
residuals	-
Log likelihood	442.0644
F-statistic	5.118563
Probability of F-	
statistic	0.000194

The adjusted R square value is 0.092100 or 9.2100%. The coefficient of determination value shows that the independent variables consisting of CIR, CR, and SIZE are able to explain the ETR variable in Indonesia by 9.2100%. while the remaining 90.97% ($100 - \text{adjusted R square value}$) is explained by other variables not included in the research model.

Discussion

The Effect of Capital Intensity Ratio on Tax Management

Capital Intensity Ratio (CIR) is an activity of investing in fixed assets. The depreciation cost of fixed assets is deducted from pre-tax profit, thereby becoming a proportion of fixed assets that can affect a company's effective tax rate. The fixed assets owned by a company can be used as a tax deduction due to the annual depreciation of fixed assets. Therefore, companies with a higher fixed asset ratio are likely to have a lower tax burden. Based on previous research by (Ardyansah, 2014), which states that the capital intensity ratio has a negative effect on tax management. The

proportion of a company's fixed assets can be reduced by the tax liability from the depreciation of fixed assets. The cost of depreciation of assets is deducted from pre-tax profit, which has an impact on the company's fixed assets and affects the company's effective tax rate.

The CIR (Capital Intensity Ratio) variable has a negative effect on tax management, with a t-value of -3.184 and a sig value of 0.0017, which is less than 0.05, so the hypothesis that CIR has a significant effect can be accepted. This indicates that the higher the CIR, the lower the tendency for companies to engage in aggressive tax management, as companies tend to follow regulations and pay attention to the legal risks that may arise from tax management practices that do not comply with the rules. This is in line with research by (Ardyansah, D., & Zulaikha, 2014), which states that the fixed asset ratio has a negative effect on tax management practices because the depreciation of fixed assets serves as a reduction in pre-tax profit, as well as a study by (MOKOBANE, 2019), which shows that asset size has a negative effect on tax burdens due to depreciation. However, there are also studies that do not support these findings, such as a previous study that shows that the level of fixed assets does not automatically encourage companies to engage in aggressive tax management, because companies may comply with tax regulations and have no incentive to manipulate them.

H1: Capital Intensity Ratio has a significant effect on Tax Management

The Effect of Liquidity on Tax Management

Liquidity is a ratio that describes a company's ability to settle its short-term obligations. If a company's liquidity value is high, this indicates that the company's financial condition is good because it is able to meet its short-term obligations, such as paying taxes on time. Conversely, if the liquidity value is low, it indicates that the company's financial condition is poor and it is experiencing difficulties in meeting its short-term obligations and paying taxes (Niariana & Anggraeni, 2022).

This liquidity variable challenges the initial hypothesis developed from agency and liquidity theory, which assumes that high liquidity will encourage a more conservative (positive) taxation strategy to maintain financial stability. Companies with good liquidity are likely to focus on efficient financial and operational management, without the need for aggressive tax management strategies. According to (Amalia, 2017), the liquidity variable is more related to cash flow management and short-term financial risk, so its influence on taxation practices is not very direct. Another factor that may influence this is companies' awareness and compliance with tax regulations and supervision from tax authorities, which tend to make companies more cautious in their tax management practices, regardless of their liquidity levels. Several studies support this finding, such as (Niariana & Anggraeni, 2022), which states that the level of liquidity does not have a significant effect on tax management practices because the main focus of companies is to maintain financial stability and cash flow, not to manipulate taxes. Conversely, there are studies that disagree, such as (Ardyansah, D., & Zulaikha, 2014), which argues that low liquidity can trigger companies to implement tax management strategies to maintain cash flow, and (Amalia, 2017), which states that companies with low liquidity tend to engage in tax manipulation to maintain their financial position. Therefore, these results confirm that in the context of this study, liquidity is not a major factor influencing tax management practices, most likely because companies are more oriented towards operational stability and other financial obligations than aggressive tax reduction.

H2: Liquidity does not have a significant effect on tax management.

Company size moderates the relationship between capital intensity and tax management

Large companies tend to have abundant resources to run their operations. Large companies can pay less tax than small companies. This is because they can optimize their efforts in tax management by utilizing experts to obtain tax incentives ((Perusahaan & Utang, 2016)) explains that large companies pay lower taxes than small companies. (Perusahaan & Utang, 2016) explains that large companies have more resources that can be used for tax planning and political lobbying.

Meanwhile, small-scale companies lose the opportunity to take advantage of tax incentives because they are unable to optimize their tax management activities.

Further support comes from (Ardyansah, D., & Zulaikha, 2014), who assert that high liquidity levels do not always motivate companies to engage in tax manipulation, as companies tend to follow regulations and avoid legal risks. Conversely, there are studies that do not support this, such as (Amalia, 2017), which argues that low liquidity can trigger tax management practices as an effort to maintain cash flow and reduce financial risk, and another study by (Djarmiko, 2019) which shows that low liquidity can encourage companies to engage in tax manipulation in order to meet their financial obligations, especially in conditions of high liquidity pressure. Therefore, these results indicate that, in the context of manufacturing companies in Indonesia, the liquidity variable does not significantly affect tax management practices because companies are more oriented towards operational stability and financial risk management than aggressiveness in tax management.

H3: Company size does not have a significant effect on tax management.

Company size moderates the relationship between liquidity and tax management

Company size strengthens the relationship between liquidity and tax management, because if a company with good sales has an impact on the scale of the company's profits, then that company is classified as a large company. Good sales will increase cash and accounts receivable, so the company's liquidity level will also be high. The greater the company's profits, the greater the taxes and fees that the company must bear, so companies tend to try to reduce their tax burden. Agency theory shows that liquidity has a positive effect on tax aggressiveness.

Company size moderates the relationship between liquidity and tax management, given that the t-value is -0.3094 and the significance value is 0.7574, both of which are greater than the significance level of 0.05. This indicates that the effect of liquidity on tax management practices is significantly positive due to company size. Companies with high liquidity tend to use retained earnings for company operations, thereby reducing the company's taxable income and tax liabilities. (Cahyadi et al., 2020) . (Kurniawan, 2019) , (D , and (Cahyadi et al., 2020) conclude that liquidity improves tax management. From the above statements, the following assumptions can be made:

H4: Company size moderates the relationship between liquidity and tax management

CONCLUSION

This study shows that financial variables such as capital intensity and liquidity significantly affect the tax management practices of manufacturing companies in Indonesia. In addition, moderation in the relationship between CIR and tax management (CIR x SIZE) These significant results indicate that company size strengthens (positive moderation) the relationship between capital intensity and tax management. This means that companies with high fixed assets and good liquidity tend to implement more effective tax management strategies, especially large companies that have more resources and pay greater attention to regulations. These findings reinforce the theory that financial factors and company size play an important role in tax liability management.

This study emphasizes that tax management is a highly complex and multifactorial phenomenon. Other factors, such as management strategy, sector-specific regulations, corporate culture, non-financial incentives, and macroeconomic conditions (which are recognized as limitations in this study), play a much more dominant role in determining the taxation practices of manufacturing companies in Indonesia than just Capital Intensity, Liquidity, and Company Size, which were tested in this model. For further research, it is recommended that researchers consider the influence of other variables such as regulatory factors, corporate culture, and social aspects that may affect tax practices.

The measurement of variables only uses data available in quantitative financial reports. This means that non-financial and qualitative aspects such as corporate strategy, organizational culture, internal incentives, and managerial ethics, which may greatly influence taxation practices, are not fully covered or considered in the research model. In addition, long-term or cross-sector studies are needed to make the results more comprehensive and the generalizations broader. The influence of significant external variables, such as frequently changing tax regulatory factors in Indonesia and macroeconomic conditions (e.g., economic conditions during the 2019–2024 period), has not been considered in depth in the research model used.

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