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The Effect of Thin Capitalization Capital Intensity and Multinationality on Tax Avoidance with the Utilization of Tax Havens Countries as a Moderating Variable

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Abstract
This research aims to examine the influence of thin capitalization, capital intensity, and multinationality on tax avoidance by using tax havens countries as a moderating variable. This research uses a sample of multinational companies in the manufacturing sector listed on the Indonesia Stock Exchange during the 2019-2022 period. The number of companies in the research sample was 32 companies over four years. The total research sample was 128 financial reports and annual reports. Data were analyzed using the Moderate Regression Analysis (MRA) method with the help of SPSS 26 software. The results of this research show that thin capitalization and multinationality have no effect on tax avoidance, while capital intensity has a significant negative effect on tax avoidance. The use of country tax havens strengthens the influence of thin capitalization and multinationality on tax avoidance. The use of country tax havens weakens the influence of thin capitalization and multinationality on tax avoidance.
Keywords: *thin capitalization; capital intensity; multinationality; tax avoidance; utilization of country tax havens*

Abstrak
Penelitian ini bertujuan untuk menguji pengaruh *thin capitalization, capital intensity*, dan *multinationality* terhadap *tax avoidance* dengan pemanfaatan *tax havens country* sebagai variabel moderating. Penelitian ini menggunakan populasi pada perusahaan multinasional sektor manufaktur yang terdaftar di Bursa Efek Indonesia selama periode 2019-2022. Jumlah perusahaan yang menjadi sampel penelitian sebanyak 32 perusahaan selama empat tahun. Total sampel penelitian adalah 128 laporan keuangan dan laporan tahunan. Data dianalisis menggunakan metode *Moderate Regression Analyze* (MRA) dengan bantuan *software* SPSS 26. Hasil penelitian ini menunjukkan bahwa *thin capitalization* dan *multinationality* tidak berpengaruh terhadap penghindaran pajak, sedangkan *capital intensity* berpengaruh signifikan negatif terhadap penghindaran pajak. Pemanfaatan *tax havens country* memperkuat pengaruh *thin capitalization* dan *multinationality* terhadap penghindaran pajak. Pemanfaatan *tax havens country* memperlemah pengaruh *thin capitalization* dan *multinationality* terhadap penghindaran pajak.
Kata kunci: *thin capitalization*; *capital intensity*; *multinationality*; *tax avoidance*; pemanfaatan *tax havens country*.

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INTRODUCTION

In the current era of globalization, there has also been an increase in the flow of international-scale transactions. The fulfillment of the needs of people in various countries, whether for goods or services, has been widely offered by multinational companies expanding their businesses into other countries. This indicates that multinational companies are experiencing improving profits. Therefore, as business entities, multinational companies also need to take measures to efficiently manage their profits in order to meet their tax obligations. Companies must make every effort to minimize their payable taxes. Taxes are a primary source and play an important role in the structure of a country's revenue. However, in reality, there are still taxpayers, particularly business entities such as multinational companies, who engage in tax avoidance when fulfilling their tax obligations. With the growth of globalization, which is seen as blurring national boundaries, it is possible that some parties may take advantage of this to engage in tax avoidance practices. This includes multinational companies that engage in income shifting to affiliated companies in lower-tax jurisdictions.

According to Pramesthi et al., (2019), companies can undertake income shifting practises through the instruments of multinationality, transfer pricing, thin capitalization and intangible assets. In 2016, the International Consortium of Investigative Journalists revealed the phenomenon of tax avoidance, when it released an investigative document known as the Panama Papers. (Prastiwi & Ratnasari, 2019). The 11.5 million investigations referenced here involved 214,000 multinational companies, shareholders and company directors. In 2017 this tax avoidance phenomenon appeared again under the name of Paradise Papers with 13.4 million documents showing individuals or companies who try to hide the assets in tax haven countries. In 2021, the International Consortium of Investigative Journalists published an investigative document once again, this time including 11.9 million data records, made up of 6.4 million documents, 3 million images, 500,000 spreadsheets and over 1 million emails of companies that do business to create shell companies in tax havens including Panama, Dubai, Monaco, Switzerland, and the Cayman Islands. This investigative document is referred to as the Pandora Papers.

Heber, as cited in (Fatmawati & Solikin, 2017), defines tax avoidance as the efforts of taxpayers to exploit loopholes in tax laws, allowing them to pay less tax than they should. It can be said that tax avoidance practices occur because taxpayers do not voluntarily fulfill their tax obligations according to the procedures set by the government. Tax avoidance is a process in which companies seek to reduce income tax payments to tax authorities (Salehi et al., 2017). An important factor contributing to taxpayer non-compliance with tax obligations is that taxes can significantly reduce profits, thus decreasing the amount of profit that can be distributed to shareholders and managers, who are responsible for running the company (Salwah & Herianti, 2019). According to (Cabello et al., 2019), tax avoidance is a risky activity that incurs significant costs to companies and their management.

The phenomenon of tax avoidance in Indonesia, according to a report by the Tax Justice Network, suggests that Indonesia is estimated to lose approximately US$4.86 billion annually, equivalent to Rp. 68.7 trillion, due to tax avoidance. The amount of tax avoidance carried out by corporate and individual taxpayers is equivalent to 1.09 million medical staff salaries. There are many factors that may trigger companies to engage in tax avoidance practices. However, in this study, the primary focus of the researchers is on thin capitalization, capital intensity, multinationality, and the utilization of tax haven countries. Thin capitalization is a mechanism by which companies increase their level of debt, thus reducing the value of their equity (Syahidah & Rahayu, 2018). Thin capitalization is

characterized by a tendency toward a higher debt-to-equity ratio, which leads to greater tax avoidance.

Thin capitalization is one of the main drivers of tax avoidance because it provides an incentive for companies to reduce taxable income through interest deductions on loans (Taylor & Richardson, 2012). Research by Taylor & Richardson, (2012) conducted on companies listed on the Australian Stock Exchange indicates that thin capitalization is one of the primary drivers of tax avoidance and is used by public companies in Australia as a tool for international tax avoidance.

Capital intensity is another factor that can influence companies in implementing tax avoidance strategies. Tax avoidance practices through capital intensity are carried out by utilizing depreciation expenses, which can be deducted from income when calculating taxes. Therefore, the larger the fixed assets owned by a company, the higher the depreciation, resulting in a lower effective taxable income (Dharma & Noviari, 2017). According to Fernández-Rodríguez & Martínez-Arias, (2012), the fixed assets owned by a company allow it to reduce taxes as a result of the annual depreciation of these assets.

A multinational company is a company that operates across multiple countries. Companies operating across borders have a higher likelihood of engaging in tax avoidance compared to companies that operate solely domestically. This is because they may engage in profit shifting (transfer pricing) to companies located in other countries where tax rates are lower than in other jurisdictions (Anouar & Houria, 2017).

Another factor related to tax avoidance is tax haven countries. Countries with low tax rates, known as tax havens, contribute to the increase in tax avoidance practices. Tax havens are countries or regions that impose lower tax rates, maintain secrecy, and provide ways for individuals and businesses to avoid paying taxes while refusing to cooperate with other jurisdictions, especially regarding information exchange (Mugarura, 2017). The use of tax haven countries offers many benefits for companies as well as the tax havens themselves. Tax havens, which often house subsidiaries, are not only used to facilitate tax avoidance but also to increase post-tax cash flows for companies. As a result, tax havens become highly significant in reducing corporate taxes, but such practices should be closely monitored by national and global tax authorities (Nugraha & Kristanto, 2019).

Currently, there is limited research that specifically examines the effects of thin capitalization, capital intensity, and multinationality on tax avoidance. Previous studies have shown inconsistent results, which encourages further investigation. The researchers are also interested in undertaking research on tax avoidance practises by Indonesian companies, particularly by multinational corporations. Earlier studies that have tested whether tax avoidance is influenced by thin capitalization, capital intensity and multinationality, only include the country variable within the tax haven as a moderator variable. For this reason, the moderating variable used by the researchers is tax haven countries as they are often assumed to be the root of international tax avoidance practise. The moderating variable of tax haven countries is used in this study to examine whether they strengthen or weaken the effect of thin capitalization, capital intensity and multinationality on tax avoidance.

RESEARCH METHODOLOGY

This research is designed to evaluate the influence of thin capitalization, capital intensity, and multinationality on tax avoidance, with the use of tax havens countries as a moderating variable. The study employs a quantitative method with a panel data regression analysis approach. The population of this research consists of multinational companies in the manufacturing sector listed on the Indonesia Stock Exchange (IDX) during the 2019-2022 period. The sample is selected using a purposive sampling method, with the following

criteria: 1) companies listed on the IDX during the 2019-2022 period; 2) excluding companies from the financial, insurance, mining, and infrastructure sectors; 3) consistently reporting financial statements; 4) profitable (earning profits); 5) using Indonesian Rupiah as the currency in financial statements.

The data used in this research is secondary data obtained from financial statements and annual reports of companies available on the official IDX website. Data collection techniques include literature research, where data is gathered from various references such as journals, the internet, and related literature, as well as field research involving the collection of secondary data from financial and annual reports of companies listed on the IDX. Data is analyzed using descriptive statistics to provide an overview of the data, panel data regression models to observe the relationship between variables, and classical assumption tests, including normality, multicollinearity, heteroscedasticity, and autocorrelation tests. Hypothesis testing is carried out using Moderated Regression Analysis (MRA) to evaluate the effect of independent variables on the dependent variable, with the use of tax havens countries as a moderating variable. The variables in this study are measured using the following formulas:

Table 1. Variable Measurement

Variable	Calculation	Measurement Scale
Tax Avoidance (Y)	$\text{BTD}=\frac{(\text{Taxable Income} - \text{Net Income})}{\text{Average Assets}}$	Ratio
Thin Capitalization (X1)	$\text{DER} = \frac{\text{Total Debt}}{\text{Total Equity}}$	Ratio
Capital Intensity (X2)	$\text{Capital Intensity} = \frac{\text{Total Non-Current Asset}}{\text{Total Assets}}$	Ratio
Multionationality (X3)	Dummy	Nominal
Utilization of Tax Havens Country	Dummy	Nominal

Source: Processed by the Author (2023)

RESULTS AND DISCUSSION

General Overview of the Companies

In this study, the sampling method used is purposive sampling, which is a technique of determining samples based on specific criteria with the aim of ensuring that the selected sample can represent the study conducted. The analysis method employed in this research is quantitative, utilizing Microsoft Excel and SPSS version 26 as tools to test the data.

The data used in this study is secondary data sourced from the financial statements and annual reports of all multinational manufacturing sector companies listed on the Indonesia Stock Exchange (IDX). The sample in this study spans a period of four years, from 2019 to 2022, with data accessed through the official Indonesia Stock Exchange website at www.idx.co.id, and supplemented by articles, journals, previous research, and other relevant sources. The variables used include thin capitalization, capital intensity, multinationality, tax avoidance, and the use of tax havens countries.

Based on the predetermined sampling criteria, the number of financial statements used as samples in this study amounts to 128 financial statements from 32 companies listed on

the Indonesia Stock Exchange (IDX) over four years, namely from 2019 to 2022. However, only 109 data points were processed due to the elimination of 19 outlier data points.

Table 2. Sample Selection Procedure

No	Criteria	Total
	Population: Multinational manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2019 to 2022	227
	Sampling based on criteria (purposive sampling):	
1.	Companies that are not multinational in the manufacturing sector listed on the IDX from 2019 to 2022	(148)
2.	Multinational companies in the manufacturing sector excluded, specifically companies in the finance, insurance, mining, and infrastructure subsectors listed on the IDX from 2019 to 2022	(10)
3.	Companies not continuously listed on the IDX from 2019 to 2022	(2)
4.	Companies that did not report financial statements for the period 2019 to 2022	(1)
5.	Companies that incurred losses during the observation period from 2019 to 2022	(26)
6.	Companies that do not use IDR (Rupiah) as their currency	(8)
	Total Research Sample Before Outliers	32
	Total Sample (n x research period) (32 x 4 years)	128
	Outlier Data	(19)
	Final Total Data	109

Source: Processed by the Author (2023)

Data Analysis

Descriptive analysis was conducted on the data from companies observed over a 4-year period with a total of n=32 observations, resulting in a sample size of 128.

Table 3. Descriptive Statistics Results

Variable	N	Minimum	Maximum	Mean	Std. Deviation
X1	128	0,070	3,820	0,777	0,694
X2	128	0,170	0,800	0,492	0,159
X3	128	0,000	1,000	0,617	0,487
Y	128	-0,010	0,150	0,351	0,027
Z	128	0,000	1,000	0,507	0,501

Source: SPSS Output Processed by the Author (2024)

The thin capitalization variable in this study is measured using the Debt-to-Equity Ratio (DER), which represents the ratio of total debt to total equity. The research findings indicate that thin capitalization has a minimum value of 0.070 and a maximum value of 3.820. Furthermore, the thin capitalization variable has an average value of 0.777 with a standard deviation of 0.694. These results suggest that the companies in this study have an

average DER ratio of 0.777:1, indicating that the total debt is slightly less than the total equity. This value is significantly lower than the allowable thin capitalization threshold in Indonesia, which is approximately 4:1.

The capital intensity variable has a minimum value of 0.170 and a maximum value of 0.800. Additionally, the average capital intensity among multinational companies is 0.492, with a standard deviation of 0.159, indicating a relatively small data dispersion as the standard deviation is lower than the mean.

The multinationality variable has a minimum value of 0 and a maximum value of 1. The mean value of multinationality is 0.617, with a standard deviation of 0.487. This variable is dichotomous or a dummy variable. In this context, a value of 1 is assigned if the company has one or more subsidiaries abroad, while a value of 0 is given if the company does not have any foreign subsidiaries.

The tax avoidance variable, which is the dependent variable, has a minimum value of -0.010 and a maximum value of 0.150. The average value of tax avoidance is 0.351, reflecting the level of tax avoidance in multinational companies. The standard deviation of this variable is 0.027, indicating a relatively small data dispersion compared to the mean.

The use of tax havens as a moderating variable has a minimum value of 0 and a maximum value of 1. The average value of this variable is 0.507, with a standard deviation of 0.501. Similar to multinationality, this variable is also dichotomous. A value of 1 is assigned if the company has at least one subsidiary located in a tax haven country, while a value of 0 is given if the company does not have subsidiaries in tax haven countries.

Assumption Testing

The normality test in this study was conducted using the One-Sample Kolmogorov-Smirnov test. If the Kolmogorov-Smirnov test results show an Asymp. Sig. (2-tailed) value > 0.05, it can be concluded that the data is normally distributed within the regression model.

Table 4. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		128
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	,02431990
Most Extreme Differences	Absolute	,171
	Positive	,171
	Negative	-,089
Test Statistic		,171
Asymp. Sig. (2-tailed)		,000[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Source: Data Processing Results using SPSS (2024)

The results of the normality test indicated a significance value of 0.000, which is less than 0.05. This implies that the initial data of 128 samples was not normally distributed due to the presence of extreme values. To address this issue, an outlier test was performed. Outliers are data points that exhibit unique characteristics and deviate significantly from other observations, appearing as extreme values in either a single variable or a combination

of variables. After conducting the outlier test, 19 data points were eliminated, leaving a total of 109 usable data points.

Table 5. Normality Test Results (After Outlier Removal)

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		109
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	,01129205
Most Extreme Differences	Absolute	,044
	Positive	,044
	Negative	-,029
Test Statistic		,044
Asymp. Sig. (2-tailed)		,200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Source: Data Processing Results using SPSS (2024)

Following this, the Asymp. Sig. (2-tailed) coefficient obtained through the One-Sample Kolmogorov-Smirnov test was 0.200, which is greater than 0.05. Thus, it can be concluded that the regression model used is normally distributed.

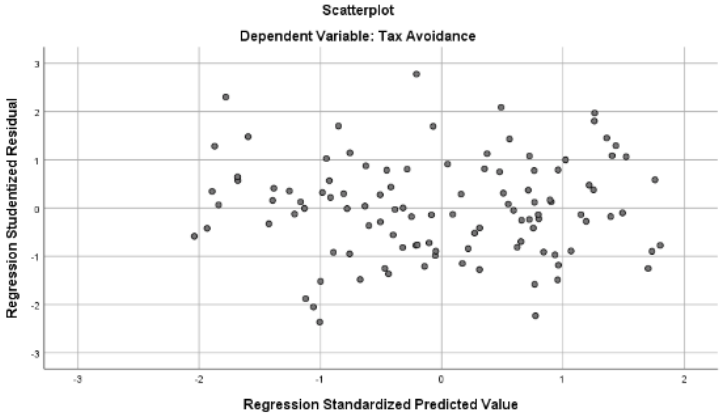
Table 6. Multicollinearity Test Results

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,056	,004		15,307	,000		
	Thin Capitalization	-,006	,003	-,163	-1,829	,070	,684	1,463
	Capital Intensity	-,052	,008	-,579	-6,847	,000	,763	1,310
	Multinationality	-,001	,004	-,047	-,346	,730	,294	3,404
	Tax Havens Country	,003	,004	,107	,755	,452	,273	3,663

a. Dependent Variable: Tax Avoidance

Source: Data Processing Results using SPSS (2024)

The multicollinearity test is used to examine whether there is any correlation between the independent variables in the regression model. This test can be conducted by assessing the tolerance value (which should be ≥ 0.1) or the Variance Inflation Factor (VIF) value (which should be ≤ 10). Based on the test results, if the tolerance values are not less than 0.1 and the VIF values do not exceed 10, it indicates that multicollinearity is not present in the model.



Source: Data Processing Results using SPSS (2024)
Figure 1. Heteroscedasticity Test Results (Scatterplot)

The heteroscedasticity test is used to determine whether there is an unequal variance of residuals across observations in the regression model. The evaluation criterion for this test involves analyzing the scatterplot. Based on the test results, it was observed that the distribution of points spreads randomly above and below zero. Therefore, it can be concluded that there is no indication of heteroscedasticity in this study.

Table 7. Durbin-Watson Test Results

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,610[a]	,372	,348	,01066	1,947

a. Predictors: (Constant), LAG_Z, LAG_X2, LAG_X1, LAG_X3
b. Dependent Variable: LAG_Y1

Source: Data Processing Results using SPSS (2024)

The autocorrelation test aims to examine whether there is a correlation between the error terms at time t and the error terms at time t−1 (the previous period) in the linear regression model. The test results indicate that the Durbin-Watson statistic is 1.947. When compared against a significance level of 5%, with a sample size of 109 (n) and four independent variables, the Durbin-Watson value falls between the values of du and 4-du where 1,7644 < 1,947 < 2,2356 (du<dw<4-du). Therefore, it can be concluded that there are no issues of autocorrelation present in the regression model.

Hypothesis Testing
Multiple Linear Regression Analysis and Moderated Regression Analysis (MRA)

Multiple linear regression analysis aims to determine the effects of thin capitalization, capital intensity, and multinationality, as well as the moderating variable of tax haven utilization, on tax avoidance.

Table 8. Multiple Linear Regression Analysis Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,037	,003		12,868	,000
	Thin Capitalization	-,005	,004	-,123	-1,456	,148
	Capital Intensity	-,057	,009	-,551	-6,508	,000
	Multinationality	,001	,003	,025	,317	,752

a. Dependent Variable: Tax Avoidance

Source: Data Processing Results using SPSS (2024)

Table 9. Moderated Regression Analysis (MRA) Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,034	,004		9,503	,000
	Thin Capitalization	-,003	,005	-,058	-,553	,582
	Capital Intensity	-,054	,010	-,522	-5,369	,000
	Multinationality	-,002	,005	-,045	-,349	,728
	TC * THC	-,016	,008	-,332	-2,006	,048
	CI * THC	,005	,017	,056	,300	,765
	M * THC	,016	,006	,326	2,441	,016

a. Dependent Variable: Tax Avoidance

Source: Data Processing Results using SPSS (2024)

Based on the two tables presented above, the regression equation can be expressed as follows:

$$Y = 0{,}037 – 0{,}005X_1 - 0{,}057X_2 + 0{,}001X_3 + e$$

$$Y = 0{,}037 – 0{,}005X_1 – 0{,}057X_2 + 0{,}001X_3 – 0{,}016X_1Z + 0{,}005X_2Z + 0{,}016X_3Z + e$$

Keterangan:

Y = Tax Avoidance
X = Thin Capitalization
X = Capital Intensity
X = Multinationality
Z = Utilization Tax Havens Country
α = Konstanta
$\beta_{1\text{-}3}$ = Koefisien
e = error

Table 10. F-Test Results for Model 1

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,007	3	,002	20,476	,000[b]
	Residual	,012	104	,000		
	Total	,019	107			

a. Dependent Variable: Tax Avoidance
b. Predictors: (Constant), Multinationality, Thin Capitalization, Capital Intensity

Source: Data Processing Results using SPSS (2024)

Table 11. F-Test Results for Model 2

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,008	6	,001	12,519	,000[b]
	Residual	,011	101	,000		
	Total	,019	107			

a. Dependent Variable: Tax Avoidance
b. Predictors: (Constant), M * THC, Capital Intensity, Thin Capitalization, Multinationality, TC * THC, CI * THC

Source: Data Processing Results using SPSS (2024)

Based on the results of the F-test for Model 1, the significance value obtained is 0.000. This value is less than 0.05, allowing us to conclude that this regression model is adequate and can proceed to hypothesis testing. It can be inferred that thin capitalization, capital intensity, and multinationality collectively influence tax avoidance.

For Model 2, the significance value obtained from the F-test is also 0.000. This value, being less than 0.05, indicates that this regression model is also adequate and can advance to hypothesis testing.

Table 12. Coefficient of Determination Test Results for Model 1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,609[a]	,371	,353	,01062

a. Predictors: (Constant), LAG_X3, LAG_X1, LAG_X2

Source: Data Processing Results using SPSS (2024)

Table 13. Coefficient of Determination Test Results for Model 2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,653[a]	,427	,392	,01029

a. Predictors: (Constant), LAG_X3Z, Capital Intensity, Thin Capitalization, Multinationality, LAG_X1Z, LAG_X2Z

Source: Data Processing Results using SPSS (2024)

Based on the results of the determination coefficient test for Model 1, the R-squared value is 0.371. This indicates that the relationship among thin capitalization, capital intensity, and multinationality accounts for 37.1% of the variance in tax avoidance. The Adjusted R-squared value for the regression model is 0.392, suggesting that 39.2% of tax avoidance is influenced by the independent variables: thin capitalization, capital intensity, and multinationality. The remaining 60.8% is influenced by other variables not examined in this study, such as intangible assets, family ownership, political connections, and differences in management levels.

In the determination coefficient test for Model 2, the R-squared value is found to be 0.427. This implies that the influence of thin capitalization, capital intensity, and

multinationality on tax avoidance is 42.7%. Therefore, it can be concluded that the introduction of tax havens country as a moderating variable strengthens the impact of thin capitalization, capital intensity, and multinationality on tax avoidance, as evidenced by the increase in the percentage from 37.1% to 42.7%. Although tax havens country does not significantly moderate capital intensity (X2), the overall percentage increase suggests that tax havens country can enhance the effect of thin capitalization, capital intensity, and multinationality on tax avoidance.

The Effect of Thin Capitalization on Tax Avoidance

The regression coefficient on the test results of thin capitalization is -0.005 and with significance level 0.148. In these findings their significance value is greater than 0.05 meaning thin capitalization does not significantly affect tax avoidance therefore Hypothesis 1 is rejected. This study contrasts with the findings of Prastiwi & Ratnasari, (2019) and Setiawan & Agustina (2018), that supports the positive effect of thin capitalization on tax avoidance. The difference may be due to companies' own burden of interest from their debt, which can erode profits and ultimately reduce taxable income, opening the door to tax avoidance practises.

Furthermore, this study supports earlier research conducted by Selistiaweni et al., (2020), and found that thin capitalisation does not affect tax avoidance. According to the Minister of Finance Regulation No. 169/PMK.010/2015, the maximum debt-to-equity ratio is set at 4:Based on this, 1 is 1, which means that if the debt to equity ratio (DER) falls below this figure, this ratio is considered reasonable. As a result, thin capitalization does not propel tax avoidance to a significant degree as most firms adopt high debt financing to perform their operations rather than for tax avoidance.

Additionally, thin capitalization is often associated with related party transactions. However, this study finds that related party transactions do not influence tax avoidance strategies employed by companies through thin capitalization schemes. The debt arising from related party transactions does not affect tax avoidance, as it is typically accompanied by reciprocal agreements or services provided between related parties.

The Effect of Thin Capital Intensity on Tax Avoidance

Both capital intensity and the significance level of 0.000, capital intensity has regression coefficient of -0.057. The significance value is less than 0.05, and the effect is negative, so that these findings suggest that Hypothesis 2 is accepted; capital intensity has a significant negative impact on tax avoidance. This result contrasts with previous research by Dayanara et al., (2020), this last finding, which found that capital intensity does not affect tax avoidance. Instead, their study demonstrated that the firms deployed their fixed assets toward operating purpose rather than for depreciation expensing. Depreciation is considered a deductible expense that will reduce the taxable income (therefore lower the tax liability) of a company.

Conversely, this study aligns with findings from Dwiyanti & Jati, (2019), this showed that capital intensity has a large positive impact on tax avoidance. An increase in a type of capital intensity is positively related to the likelihood of tax avoidance practises. Similarly, research by Wulandari et al., (2020) found that tax avoidance is strongly and positively associated with capital intensity. It means that companies can reduce their pre tax income by using depreciation expenses on fixed assets, and lower tax burdens from which they can employ tax avoidance strategies.

Results indicate that capital intensity has a negative influence, which means that the higher a firm’s capital intensity, the lower the book tax difference (BTD). This means a

lower BTD means a higher probability of tax avoidance. This also means the company has lower tax obligation since greater depreciation expenses. Finally, since firms with greater capital intensity ratios have lower tax rates, they appear to be involved in tax avoidance.

The Effect of Multinationality on Tax Avoidance

Based on the test results, multinationality has a regression coefficient of 0.001 and a significance level of 0.752. This data suggests that multinationality does not significantly affect tax avoidance, as the significance value exceeds 0.05, leading to the rejection of Hypothesis 3, despite the positive coefficient. These findings contradict the study by Turwanto & Fendy (2022), which asserted that multinationality positively influences tax avoidance. They provided evidence that income generated from abroad (export income) allows Indonesian companies to engage in tax avoidance practices.

Conversely, this study supports previous research conducted by Khirstina & Imam (2023), which indicated that multinationality does not significantly affect tax avoidance. This lack of impact may be attributed to the lower tax rates in Indonesia compared to the 77% rates imposed in the parent or subsidiary countries, making transfer pricing practices impractical. The number of subsidiaries across various countries does not necessarily influence a company's tax avoidance behavior.

It is true that multinational companies generally have more opportunities to engage in tax avoidance compared to domestic firms, as they operate subsidiaries in different countries with varying tax rates. However, in the context of this study, the foreign subsidiaries of the sampled companies are located in countries with tax rates equal to or even higher than those in Indonesia, such as Australia, the Netherlands, Brazil, China, and Malaysia. This situation likely discourages these companies from pursuing tax avoidance strategies. Instead, multinational firms in this study may be utilizing their multinational status to expand their market presence.

The Effect of Thin Capitalization on Tax Avoidance with the Utilization of Tax Havens as a Moderating Variable

Based on the regression coefficient value of TC*THC, which is -0.016 with a significance level of 0.048, it can be concluded that the utilization of tax havens strengthens the influence of thin capitalization on tax avoidance. The significance value is less than 0.05, allowing for the acceptance of Hypothesis 4. This finding contrasts with the research conducted by Pramesthi et al., (2019), which suggested that thin capitalization does not affect the use of tax havens. This discrepancy may arise from differences in the proxies used to measure thin capitalization between parent companies and subsidiaries located in tax havens. Companies with subsidiaries in tax havens and low debt structures may have opportunities to practice thin capitalization, but they often choose not to, as their primary goal is not to engage in tax avoidance through the utilization of tax havens.

Furthermore, this study supports earlier research by Richardson & Taylor (2015), which stated that the utilization of tax havens enhances the effect of thin capitalization on tax avoidance. The findings suggest that multinational companies leverage thin capitalization regulations and financing bodies in tax havens to minimize tax liabilities. Companies operating in tax havens can shift income from high-tax jurisdictions to low-tax ones through inter-company debt practices. Therefore, it can be concluded that multinational firms with high thin capitalization are likely to engage in significant tax avoidance, indicating that firms with substantial debt financing tend to exploit tax havens. This highlights the effective utilization of tax havens by these companies.

In relation to the theoretical framework applied in this research, specifically the Theory of Planned Behavior, having affiliated or subsidiary companies located in tax havens offers significant advantages. The presence of other beneficial factors motivates managers to engage in certain actions. In this case, companies may adopt debt repayment schemes through financing bodies situated in tax havens to avoid tax rates associated with interest payments. Consequently, the tax burden on these companies remains low, indicating that they are employing tax avoidance strategies.

The Effect of Capital Intensity on Tax Avoidance with the Utilization of Tax Havens as a Moderating Variable

Based on the regression coefficient value of CI*THC, which is 0.005 with a significance level of 0.765, it can be concluded that the utilization of tax havens weakens the influence of capital intensity on tax avoidance. The significance value exceeds 0.05, leading to the rejection of Hypothesis 5. These findings contradict previous studies conducted by Wulandari et al. (2020), which indicated a significant effect of capital intensity on tax avoidance, and by Widodo et al. (2020), which stated a strong relationship between tax havens and tax avoidance.

The results of this research suggest that multinational companies are utilizing their capital intensity by maximizing depreciation expenses through fixed asset investments in tax havens. This strategy results in lower tax burdens for the companies, creating opportunities for tax avoidance practices. However, the findings align with Dayanara et al. (2020), which reported that capital intensity does not significantly affect tax avoidance. In this case, it indicates that multinational companies are not effectively leveraging their capital intensity to maximize depreciation expenses through fixed asset investments in tax havens, suggesting that the benefits of utilizing tax havens are diminished for companies that use fixed assets primarily for operational purposes rather than solely to take advantage of depreciation expenses.

Connecting these findings to the theoretical framework employed in this study, specifically the Theory of Planned Behavior, having affiliated or subsidiary companies in tax havens offers potential advantages. The presence of other favorable factors may motivate managers to undertake certain actions. However, in this context, companies tend to act in compliance with applicable regulations, avoiding the maximization of depreciation expenses related to their investments in subsidiaries located in tax havens. The primary goal of establishing subsidiaries in low-tax jurisdictions is often to expand business operations, rather than to exploit depreciation benefits. Consequently, the utilization of tax havens may diminish the influence of capital intensity on tax avoidance.

The Effect of Multinationality on Tax Avoidance with the Utilization of Tax Havens as a Moderating Variable

Based on the regression coefficient value of M*THC, which is 0.016 with a significance level of 0.016, it can be concluded that the utilization of tax havens strengthens the influence of multinationality on tax avoidance. The significance value is less than 0.05, leading to the acceptance of Hypothesis 6. These findings contradict the research conducted by Nugraha & Kristanto (2019), which indicated that multinationality does not significantly affect the use of tax havens. Their study suggested that the magnitude of foreign income does not influence a company's utilization of affiliates in tax havens, implying that multinational companies with affiliates in tax havens do not necessarily engage in tax avoidance through these jurisdictions.

Conversely, this study aligns with the findings of Ayuningtyas & Pratiwi (2022), which stated that the utilization of tax havens significantly influences tax avoidance decisions among multinational companies. This is primarily due to the higher flexibility multinational firms have in choosing investment locations, as they are not limited by national borders. Companies with geographical flexibility are more inclined to engage in tax avoidance practices by taking advantage of differing tax rates across countries.

Multinationality can be assessed by the existence of affiliates in foreign countries. From an economic perspective, affiliated companies can enhance a firm's competitive edge by facilitating business expansion, which ultimately increases profitability. Multinational firms often leverage their affiliates to engage in tax avoidance. They can utilize countries with lower tax rates (tax havens) to conduct these tax avoidance practices effectively.

Linking these findings to the theoretical framework of this study, particularly the Theory of Planned Behavior, the presence of affiliated companies in tax havens provides significant advantages. Favorable external factors can motivate managers to undertake certain actions. In this context, companies are more likely to engage in profit-shifting schemes from parent companies to subsidiaries located in lower tax jurisdictions. This international tax avoidance practice involves transferring profits to countries with lower tax rates, thereby reducing the overall tax burden.

The Combined Influence of Thin Capitalization, Capital Intensity and Multinationality on Tax Avoidance

Based on the results of the F-test for Model 1, the significance value obtained is 0.000. This value is less than 0.05, indicating that thin capitalization, capital intensity, and multinationality collectively influence tax avoidance, leading to the acceptance of Hypothesis 7. This finding is consistent with research conducted by Rahmawati (2019), which stated that thin capitalization, transfer pricing, and capital intensity significantly affect tax avoidance simultaneously. Additionally, the study by Sarri & Prasetyo (2023) supports these findings, asserting that multinationality, thin capitalization, related party transactions, capital intensity, company size, and profitability collectively have a significant impact on tax avoidance.

The combined influence of thin capitalization, capital intensity, and multinationality on tax avoidance is likely due to the tax burden companies face, which motivates them to engage in tax avoidance practices. Thin capitalization serves as one method for companies to reduce their tax liabilities by leveraging interest expenses incurred from loans. These interest expenses can be used to lower taxable income, thus minimizing the tax payable.

Capital intensity is another strategy that companies can employ for tax avoidance. Firms that invest heavily in assets are likely to engage in tax avoidance by utilizing the depreciation expenses associated with these investments.

Moreover, multinationality offers additional avenues for tax avoidance. Multinational companies tend to engage in tax avoidance practices more frequently than domestic firms. They can leverage their geographic flexibility to take advantage of differing tax rates across their affiliate countries, facilitating tax avoidance.

This research aligns with the Theory of Planned Behavior, which posits that the presence of favorable factors encourages managers to undertake certain actions. The availability of legal tax avoidance schemes incentivizes managers to exploit these opportunities, leading to actions such as engaging in tax avoidance practices.

CONCLUSION

This study aims to analyze the influence of thin capitalization, capital intensity, and multinationality on tax avoidance, utilizing tax havens as a moderating variable in multinational companies listed on the Indonesia Stock Exchange during the period of 2019-2022. The findings indicate that thin capitalization does not significantly impact tax avoidance, as the debt incurred by companies is primarily directed toward operational activities rather than tax minimization. In contrast, capital intensity has a significant negative effect on tax avoidance; as capital intensity increases, the likelihood of tax avoidance decreases due to lower book-tax differences (BTD). Furthermore, multinationality does not demonstrate a significant influence on tax avoidance, as the number of subsidiaries across various countries does not significantly affect tax avoidance behavior.

However, the utilization of tax havens strengthens the influence of thin capitalization and multinationality on tax avoidance, as companies leverage the low tax rates available in tax havens to reduce their tax liabilities and optimize their multinational structures. Conversely, tax havens weaken the effect of capital intensity on tax avoidance, indicating that companies prioritize the use of fixed assets for operational purposes over engaging in tax avoidance practices. Overall, thin capitalization, capital intensity, and multinationality collectively influence tax avoidance, wherein tax pressure drives companies to seek tax avoidance strategies.

Future research examining the impact of thin capitalization, capital intensity, and multinationality on tax avoidance with the utilization of tax havens is encouraged to yield deeper insights by considering several recommendations. Subsequent researchers are advised to include additional independent variables that may influence tax avoidance, such as family ownership, political connections, and differences in management levels, to obtain a more comprehensive understanding of the factors affecting tax avoidance. Furthermore, employing alternative moderating variables, such as sales growth or intervening variables, could provide new perspectives on the dynamics of tax avoidance. Extending the research period beyond four years would also enrich the data quality and accuracy. Expanding the sample to include both domestic and multinational companies would enhance the analysis and improve the generalizability of the research results. Lastly, researchers are encouraged to apply alternative formulas or criteria for determining thin capitalization, in addition to the commonly used debt-to-equity ratio (DER), to enhance the precision of thin capitalization measurement and analysis.

This study acknowledges limitations, particularly with an R^2 value of 0.392, indicating that 39.2% of the variance in tax avoidance is explained by thin capitalization, capital intensity, and multinationality, while the remaining 60.8% is influenced by other variables not examined in this research. Thus, there may be other factors affecting tax avoidance, and the presence of outlier data may have significantly reduced the sample size in this study.

This study demonstrates that capital intensity has a significant negative effect on tax avoidance. The government is expected to monitor the magnitude of fixed assets owned by companies to ensure that companies feel supervised and are discouraged from engaging in tax avoidance practices. Additionally, company management should exercise caution when formulating policies, particularly those related to fixed assets, to ensure that taxes are paid optimally.

REFERENCES

Anouar & Houria. (2017). The Determinants of Tax Avoidance within Corporate Groups: Evidence from Moroccan Groups. *International Journal of Economics, Finance and Management Sciences, 5*(1), 57. https://doi.org/10.11648/j.ijefm.20170501.15

Ayuningtyas, F., & Pratiwi, A. P. (2022). Pengambilan Keputusan Penghindaran Pajak Pada

Perusahaan Multinasional Berdasarkan Multinasionalism, Pemanfaatan Tax Haven Dan Thin Capitalization. *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi*, *7*(2), 201–212. https://doi.org/10.24815/jimeka.v7i2.20954

Cabello, O. G., Gaio, L. E., & Watrin, C. (2019). Tax avoidance in management-owned firms: evidence from Brazil. *International Journal of Managerial Finance*, *15*(4), 580–592. https://doi.org/10.1108/IJMF-04-2018-0117

Dayanara, L., Titisari, K. H., & Wijayanti, A. (2020). Pengaruh Leverage, Profitabilitas, Ukuran Perusahaan, Dan Capital Intensity Terhadap Penghindaran Pajak Pada Perusahaan Barang Industri Konsumsi Yang Terdaftar Di Bei Tahun 2014 – 2018. *Jurnal Akuntansi Dan Sistem Teknologi Informasi*, *15*(3), 301–310. https://doi.org/10.33061/jasti.v15i3.3693

Dharma & Noviari. (2017). PENGARUH CORPORATE SOCIAL RESPONSIBILITYDAN CAPITAL INTENSITYTERHADAP TAX AVOIDANCE. *E-Jurnal Akuntansi Universitas Udayana*, *18.1*, 529–556. https://doi.org/10.2139/ssrn.1760073

Dwiyanti, I. A. I., & Jati, I. K. (2019). Pengaruh Profitabilitas, Capital Intensity, dan Inventory Intensity pada Penghindaran Pajak. *E-Jurnal Akuntansi*, *27*, 2293. https://doi.org/10.24843/eja.2019.v27.i03.p24

Fatmawati & Solikin. (2017). 212-Article Text-972-1-10-20180226. *Sumber Artikel Akuntansi Auditing Dan Keuangan Vokasi*, *Vol. 1 No.*(https://jurnal.pknstan.ac.id/index.php/SUBS/issue/view/Jurusan%20Akuntansi%2C%20PKN%20STAN), 123–141. https://doi.org/https://doi.org/10.35837/subs.v1i1.212

Fernández-Rodríguez, E., & Martínez-Arias, A. (2012). Do Business Characteristics Determine an Effective Tax Rate? *The Chinese Economy*, *45*(6), 60–83. https://doi.org/10.2753/CES1097-1475450604

Khirstina & Imam. (2023). Determinan Financial Distress, Thin Capitalization, Karakteristik Eksekutif, Dan Multinationality Terhadap Praktik Tax Avoidance Pada Perusahaan Properti Dan Real Estate. *Jurnal Informasi, Perpajakan, Akuntansi, Dan Keuangan Publik*, *18*(1), 1–18. https://doi.org/10.25105/jipak.v18i1.12396

Mugarura, N. (2017). Tax havens, offshore financial centres and the current sanctions regimes. *Journal of Financial Crime*, *24*(2), 200–222. https://doi.org/10.1108/JFC-01-2016-0008

Nugraha, R., & Kristanto, A. B. (2019). Faktor-faktor Yang Mempengaruhi Pemanfaatan Tax Haven. *Jurnal Ilmiah Akuntansi Dan Humanika*, *9*(2), 160–171. https://www.ejournal.warmadewa.ac.id/index.php/juprehum/article/download/2169/1552/

Pramesthi, R. D. F., Suprapti, E., & Kurniawati, E. T. (2019). Income Shifting Dan Pemanfaatan Negara Tax Haven. *Jurnal Reviu Akuntansi Dan Keuangan*, *9*(3), 375. https://doi.org/10.22219/jrak.v9i3.8866

Prastiwi, D., & Ratnasari, R. (2019). The Influence of Thin Capitalization and The Executives' Characteristics Toward Tax Avoidance by Manufacturers Registered on ISE in 2011-2015. *AKRUAL: Jurnal Akuntansi*, *10*(2), 119. https://doi.org/10.26740/jaj.v10n2.p119-134

Rahmawati, R. (2019). Pengaruh Thin Capitalization, Transfer Pricing Dan Capital Intensity Terhadap Penghindaran Pajak Pada Perusahaan Manfaktur. *Journal of Business and Economics (JBE) UPI YPTK*, *4*(1), 13–19. https://doi.org/10.35134/jbeupiyptk.v4i1.83

Richardson, G., & Taylor, G. (2015). Income Shifting Incentives and Tax Haven Utilization: Evidence from Multinational U.S. Firms. *The International Journal of Accounting*,

50(4), 458–485. https://doi.org/10.1016/J.INTACC.2015.10.001

Salehi, M., Ali Mirzaee, M., & Yazdani, M. (2017). Spiritual and emotional intelligences, financial performance, tax avoidance and corporate disclosure quality in Iran. *International Journal of Law and Management*, *59*(2), 237–256. https://doi.org/10.1108/IJLMA-11-2015-0059

Salwah, S., & Herianti, E. (2019). Pengaruh Aktivitas Thin Capitalization Terhadap Penghindaran Pajak. *JRB-Jurnal Riset Bisnis*, *3*(1), 30–36. https://doi.org/10.35592/jrb.v3i1.978

Sarri, S., & Prasetyo, A. H. (2023). Penghindaran Pajak Melalui Strutur Pendanaan, Investasi Dalam Aktiva Dan Metode Transfer Melalui Afiliasi. Innovative. *Journal Of Social Science Research*, *3(2)*, 10935–10946.

Selistiaweni, S., Arieftiara, D., & Samin. (2020). Pengaruh Kepemilikan Keluarga, Financial Distress Dan Thin Capitalization Terhadap Penghindaran Pajak. *Business Management, Economic, and Accounting National Seminar*, *1*(1), 1059–1076.

Setiawan, A., & Agustina, N. (2018). Pengaruh Thin Capitalization Dan Profitabilitas Terhadap Penghindaran Pajak pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia. *Jurnal Akuntansi Dan Pembangunan*, *4*(1), 1–10.

Syahidah, S., & Rahayu, N. (2018). Thin Capitalization Rules di Indonesia, Studi Kasus pada RS X. *Substansi: Sumber Artikel Akuntansi Auditing Dan Keuangan Vokasi*, *2*(2), 157. https://doi.org/10.35837/subs.v2i2.312

Taylor, G., & Richardson, G. (2012). International Corporate Tax Avoidance Practices : Evidence from Australian Firms. *International Journal of Accounting*, *47*(4), 469–496. https://doi.org/10.1016/j.intacc.2012.10.004

Turwanto, & Fendy. (2022). PENGARUH INCOME SHIFTING INCENTIVES DAN PENGGUNAAN AUDITOR TERHADAP PENGHINDARAN PAJAK. *Jurnal Kajian Ilmiah Perpajakan Indonesia*, *Vol. 4 No.*, 43–62.

Widodo, L. L., Diana, N., & Mawardi, M. C. (2020). Pengaruh Multinasionalitas, Good Coorporate Governance, Tax Haven, dan Thin Capitalization Terhadap Praktik Penghindaran Pajak Pada Perusahaan Multinasional yang Terdaftar Di Bei Periode Tahun 2016-2018. *E-Jra*, *9*(6), 119–133.

Wulandari, F., Masripah, & Widiastuti, N. P. E. (2020). Identifikasi Kualitas Audit Pada Hubungan Kompensasi Eksekutif Dan Capital Intensity Terhadap Penghindaran Pajak. *PROSIDING BIEMA Business Management, Economic, and Accounting National Seminar*, *1*, 569–586.