



How International Tax Practices Shape Earnings Quality: The Moderating Role of Tax Risk Management in Southeast Asia

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Abstract. *This study examines the influence of international tax practices (measured by transfer pricing) and tax risk management (measured by effective tax rate) on corporate earnings quality (measured by earnings persistence). It also investigates the moderating role of tax risk management in the relationship between international tax practices and earnings quality. Utilizing panel data and multiple linear regression analysis on 650 firm-year observations from manufacturing companies listed on the Indonesia Stock Exchange, Bursa Malaysia, Philippine Stock Exchange, and Singapore Exchange, this study finds that tax risk management has a positive effect on earnings quality. However, the results do not provide sufficient evidence to support the hypothesized association between international tax practices and earnings quality, nor do they confirm a moderating effect of tax risk management in this relationship. These findings suggest that while tax risk management is an important factor considered by firms in maintaining consistent and persistent earnings, its role may not be sufficient to alter the influence of international tax strategies on earnings quality.*

Keywords: *earnings quality, international tax practices, tax risk management*

1. INTRODUCTION

Taxation is a fundamental expression of state sovereignty, granting governments the authority to impose and regulate taxes within their respective jurisdictions through legal instruments (Lang, 2021). This sovereign power also extends into the international sphere, where the taxation of cross-border transaction, particularly those involving nexus or genuine economic links between countries, requires regulation through international tax frameworks. In recent decades, the global tax landscape has experienced significant disruption, driven by increasing international tax avoidance, the evolving application of the arm's length principle, and heightened attention from developing countries to international tax practices such as transfer pricing. These developments have prompted international initiatives like the OECD/G20 Base Erosion and Profit Shifting (BEPS) project, which addresses harmful tax practices that erode national tax bases. According to the OECD, BEPS practices are estimated to reduce global corporate income tax revenues by 4% to 10%, translating to approximately USD 100 billion to USD 240 billion annually. This loss is especially detrimental to developing economies, including Indonesia, where tax revenue plays a critical role in funding national development.

A 2019 survey conducted by Ernst & Young revealed that 79% of multinational company executives perceive the current international tax environment as highly uncertain. In response,

64% of companies have implemented or enhanced their tax risk management strategies. However, findings from the KPMG Tax Function Benchmarking Survey indicate that only 35% of multinational corporations have documented strategies in place, covering tax planning, regulatory compliance, and communication with tax authorities. Effective tax risk management is not only essential for regulatory compliance but also vital for business continuity and strategic growth. In today's environment, where tax authorities are increasingly leveraging data analytics to assess corporate tax behavior, tax risk management should be viewed as an integral part of business sustainability rather than a mere administrative task.

Despite the growing relevance of tax risk, prior research presents mixed results regarding its impact on financial performance and earnings quality. Studies by Damayanti (2022) and Floropoulos et al. (2023) found that tax risk, measured through deferred tax and book-tax conformity, affects earnings and financial outcomes. Conversely, Prasetyo (2018) concluded that deferred tax does not significantly influence earnings, while Guenther et al. (2014) found no link between tax risk, proxied by the cash effective tax rate, and earnings quality. Further research has explored how international tax practices relate to earnings quality. Omar & Zolkafli (2015) found that multinational corporations often shift profits to subsidiaries in tax haven jurisdictions, leading to lower reported earnings. An & Tan (2014) observed that firms with stronger tax risk management practices are more confident in engaging in transfer pricing, which can reduce earnings quality, especially when involving ownership in tax havens. Similarly, Hidayah & Nuzula (2019) found that transfer pricing and tax planning positively influence earnings management. Masri (2021) advanced this discourse by showing that international tax practices, proxied by thin capitalization and multinationality, are often used to reduce earnings quality through managerial discretion. He further found that tax risk management plays a moderating role, allowing managers to feel more secure in implementing these practices and thereby intensifying their effect on earnings quality.

This study builds on Masri (2021) research by examining the relationship between international tax practices and earnings quality, with tax risk management as a moderating variable. While adopting a similar framework, this research introduces several control variables, including multinationality, average sales growth, debt-to-equity ratio, country-level Gross Domestic Product (GDP), and the macroeconomic impact of the COVID-19 pandemic, to provide a more comprehensive analysis. The research particularly focuses on the landscape of Southeast Asia, offering insights into how regional economic and policy factors influence these relationships. This study offers valuable insights for various stakeholders. For investors, it provides a better understanding of international tax practices, earnings quality, and the

importance of tax risk management in evaluating corporate performance. For companies, the findings highlight the strategic importance of managing tax risks to support financial sustainability and regulatory compliance. For policymakers and tax authorities, the study contributes to the formulation of more effective regulations aimed at minimizing harmful tax practices and optimizing tax revenues. Lastly, the research enriches academic discourse by providing a basis for future studies on the interplay between international tax practices, tax risk management, and financial reporting outcomes.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Agency Theory

Agency theory originates from the contractual relationship between a principal, typically the owner or shareholder, and an agent, such as a company manager, whereby the principal delegates decision-making authority to the agent to operate the business on their behalf. This delegation of authority inherently generates agency costs, which are expenses incurred by the company to ensure that the agent acts in the best interests of the principal. These costs arise from potential conflicts of interest, as agents may pursue personal goals that are misaligned with those of the principals. Agency theory not only explains such conflicts but also provides insight into organizational structures, particularly in corporate groups composed of holding and subsidiary companies. As noted by Hoenen & Kostova (2015), agency theory offers a valuable framework for understanding the dynamics of control, accountability, and information asymmetry between holding companies and their subsidiaries.

Signaling Theory

Signaling theory emerges as a response to the problem of asymmetric information, where one party in an economic transaction possesses more or better information than the other. In such situations, signaling serves as a mechanism to reduce the information gap, thereby enabling more effective and efficient decision-making. Within the context of multinational corporations, this theory is particularly relevant in managing relationships between holding companies and their subsidiaries. Taj (2016) conducted a study examining these intra-organizational dynamics and highlighted the importance of signaling in addressing informational imbalances. The study's findings suggest that subsidiary managers should actively enhance their capabilities and broaden their knowledge base in order to mitigate the risks associated with information asymmetry and improve overall organizational coordination.

International Tax Practices

International tax practices represent a key application of agency theory within the operations of multinational corporations. From an agency perspective, corporate principals are incentivized to minimize tax liabilities in order to enhance profit quality and maximize returns, whereas governments aim to optimize tax collection to fund public expenditures. These conflicting interests have led to the development and use of various international tax strategies. According to Richardson & Taylor (2015), such practices include thin capitalization, transfer pricing, profit shifting, multinationality, the use of tax havens, and treaty shopping. Among these, this study focuses specifically on the practice of transfer pricing.

Transfer pricing refers to the strategic process of setting prices for transactions involving affiliated entities, particularly when goods or services are exchanged across borders within the same corporate group. This mechanism determines the financial remuneration for intercompany transfers and is often scrutinized due to its implications for tax obligations. Desai et al. (2006) note that when affiliated transactions occur across different tax jurisdictions, they can create strong incentives for firms to engage in aggressive tax planning. Further emphasizing its importance, Sikka & Willmott (2010) argue that transfer pricing is a central activity within international tax strategies, as it directly influences reported profits, dividend distributions, and ultimately, the returns realized by shareholders.

Earning Quality

Bellovary et al. (2005) define earnings quality as the degree to which reported earnings accurately represent a company's true financial performance, making them useful for forecasting future earnings. This definition emphasizes key characteristics such as earnings stability and persistence. In most literatures, researchers have assessed earnings quality using a variety of proxies, either individually or in combination, to provide consistent empirical evidence. Among the most commonly used measures are earnings management, which examines the extent of managerial intervention in financial reporting; earnings persistence, which reflects the sustainability of earnings over time; and the earnings response coefficient (ERC), which captures the relationship between unexpected earnings and stock returns, indicating the informativeness of reported earnings.

Tax Risk Management

This risk arises primarily due to the inherent uncertainty in the interpretation and application of tax laws. As companies operate within complex and often ambiguous regulatory frameworks, they face the challenge of complying with tax rules that may be subject to different interpretations. To navigate this uncertainty, firms engage in tax planning and implement tax risk management strategies. Effective tax risk management is essential, as it helps companies mitigate potential financial and reputational consequences associated with tax disputes or non-compliance. Tax risk management involves a systematic process of identifying potential areas where tax risks may emerge, assessing and evaluating the likelihood and impact of those risks, and determining appropriate measures to address or mitigate them (Bakker et al., 2010).

Hypothesis Development

International tax practices, particularly transfer pricing, are widely employed by multinational corporations as part of their tax planning strategies. Richardson & Taylor (2015) conducted a study to investigate how such international tax practices influence earnings quality in Australia, particularly by examining the role of managerial discretion in implementing these strategies. Managerial discretion is central to the selection and execution of these strategies, especially in managing intra-group transactions that must adhere to the principles of fairness and transparency, such as the arm's length principle. However, this discretion also opens the door to earnings management, potentially compromising the reliability and persistence of reported earnings.

Empirical evidence supports the concern that tax-motivated strategies may impair earnings quality. For instance, Mills & Newberry (2001) demonstrated that book-tax differences, a key indicator of tax avoidance, are associated with earnings management behaviors. Similarly, Hanlon (2005) found that firms with larger book-tax differences tend to exhibit lower earnings persistence, suggesting that such discrepancies may obscure a firm's underlying economic performance. In line with this, Krull (2004) and Omar & Zolkafli (2015) revealed that international tax strategies, particularly those involving profit shifting to tax havens, are commonly linked to earnings manipulation. These strategies, often implemented through transfer pricing, have been shown to reduce the consistency and credibility of reported earnings over time. Based on these considerations, this study hypothesizes that international tax practices have a negative effect on earnings quality (H1).

Taxation inherently involves risk, as uncertainties are a fundamental aspect of

business operations. As a result, managing tax risk is an integral component of a company's broader risk management strategies. According to PwC, effective tax risk management begins with identifying the sources of tax risk, which allows companies to develop appropriate responses and assess how best to address these uncertainties. This approach helps firms better navigate the complexities of taxation and reduce potential risks. Research by Wunder (2009) and Plesner Rossing (2013) supports the notion that companies with robust tax risk management practices are more capable of mitigating tax-related uncertainties. By effectively managing these risks, firms can enhance the transparency and consistency of their profit reporting, thereby improving the overall quality of earnings. Based on this, this study proposes that tax risk management has a positive effect on earnings quality (H2) and tax risk management weakens the negative influence of international tax practices on earnings quality (H3).

3. RESEARCH METHODOLOGY

The population of this study consists of multinational companies listed in the ASEAN region, specifically on the Indonesia Stock Exchange (IDX), Bursa Malaysia (BM), Philippine Stock Exchange, Inc. (PSE), and Singapore Exchange (SGX). The sampling technique used is purposive sampling, which aims to select companies that meet specific criteria aligned with the objectives of the study. The criteria applied in the sample selection include: (1) multinational companies listed on the IDX, BM, PSE, or SGX during the 2020–2024 period; (2) companies operating in the manufacturing sector; (3) companies with complete and relevant financial data for measuring the study's operational variables; and (4) companies that are not identified as extreme outliers.

This study relies on secondary data, primarily drawn from the audited financial statements of the selected companies for the 2020–2024 period. These financial statements are publicly accessible through several sources, including the commercial database Standard & Poor's Capital IQ Pro, the official websites of the respective stock exchanges, as well as the official websites of the companies themselves. For data analysis, this study adopts quantitative descriptive analysis and panel data regression analysis, processed using STATA version 17. The analytical procedures include descriptive statistical tests, model selection tests (such as the Chow test and Hausman test), model specification tests, and hypothesis testing to examine the relationships proposed in the research model. To empirically examine the relationship between variables, this study utilizes the following panel data regression model:

Model 1:

$$PRST_{it} = \beta_0 + \beta_1 TPRICE_{it} + \beta_2 TRM_{it} + \beta_3 MULTI_{it} + \beta_4 GRO_{it} + \beta_5 LEV_{it} + \beta_6 GDP_{it} + \beta_7 COV_{it} + e$$

Model 2:

$$PRST_{it} = \beta_0 + \beta_1 TPRICE_{it} + \beta_2 TRM_{it} + \beta_3 TRMXTPRICE_{it} + \beta_4 MULTI_{it} + \beta_5 GRO_{it} + \beta_6 LEV_{it} + \beta_7 GDP_{it} + \beta_8 COV_{it} + e$$

Information:

β_0	: Constant Coefficient
$\beta_1, \beta_2, \beta_3, \dots, \beta_8$: Regression Coefficient
i	: Firm i
t	: Year t
PRST	: Earning Quality
TPRICE	: International Tax Practices
TRM	: Tax Risk Management
TRMXTPRICE	: Interaction between TRM and TPRICE
MULTI	: Multinationality
GRO	: Firm Growth
LEV	: Leverage
GDP	: Gross Domestic Product
COV	: Covid-19 Year
e	: Residual Errors

Table 1. Research Variables and the Measurements

No	Variable	Proxy	Formula
1	Earning Quality	Earning Persistence (Arisandi & Astika, 2019; Lubis, 2022)	$PRST = \frac{\text{Earning Before Tax}}{\text{Average Total Asset}}$
2	International Tax Practices	Transfer Pricing – Transactional Net Margin Method (TNMM) (Feinschreiber, 2003)	$\text{Mark – up on Total Cost (MTC)} = \frac{\text{Net Operating Profit}}{\text{COGS} + \text{Operating Expense}}$ <p>Steps:</p>

			<ol style="list-style-type: none"> 1. Group the MTC values by industry and year. 2. Calculate the quartiles: Q1 (25%), Median (Q2), and Q3 (75%). 3. Determine the position of each company within this distribution. <p>Dummy Variable Assignment: 0: MTC within Q1–Q3 (normal range) 1: MTC is below Q1 or above Q3 (outlier)</p>
3	Tax Risk Management	Effective Tax Rate (ETR) (Novira et al., 2020)	$TRM = \frac{\text{Income Tax Expense}}{\text{Net Income Before Tax}}$
4	Multinationality	Dummy Variable (Ulinnuha & Irawan, 2022)	1: The company has subsidiaries or parent companies in other countries 0: The company operates only in its home country
5	Firm Growth	Sales Growth (Wang, 2006; Kubata et al., 2013)	$GRO = \frac{\text{Sales}_t + \text{Sales}_{t-1}}{t-1}$
6	Leverage	Debt-to-Equity Ratio (DER) (Kasmir, 2019)	$\text{Leverage} = \frac{\text{Total Debt}}{\text{Total Equity}}$
7	GDP Growth	GDP Growth (Taha & Colombage, 2011)	$\text{GDP Growth} = \frac{\text{GDP}_t - \text{GDP}_{t-1}}{\text{GDP}_{t-1}}$
8	Covid-19	Dummy Variable (Almustafa et al., 2023)	1: Covid Year 0: Non-Covid Year

4. RESULT AND DISCUSSION

Descriptive Statistical Analysis

Table 1. Descriptive Statistical Analysis

Variable	Obs	Mean	Std. Dev.	Min	Max	Skew.	Kurt.
PRST	650	.0366771	.1092149	-	1.390039	.1267551	2.817921
TPRICE	650	.5076923	.5003258	.5014515	0	1	1.000947
TRM	650	.2557999	1.17535	-	14.81637	.0307729	3.474353
MULTI	650	.8615385	.3456497	17.21396	0	1	5.382937
GRO	650	11.93023	51.97527	-87.4905	687.6282	2.093546	3.275358
LEV	650	.9150207	2.484707	.0281267	56.40521	.76053	4.773216
GDP	650	2.153505	4.652044	10.97819	-	13.51913	3.362591
						.2849226	

COV	650	.6	.6902752	0	1	.6082483	1.166667
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Source: Processed by the authors (2025)

Based on Table 1 above, it is known that the average value of earnings quality, proxied by earnings persistence (PRST), is 0.036. The average earnings quality of the samples in this study ranges from -0.501 to 1.390, with a standard deviation of 0.109. The international tax practice variable, measured by transfer pricing (TPRICE), is a dummy variable with an average value of 0.507. The international tax practice in this study ranges from 0 to 1, with a standard deviation of 0.50. The tax risk management variable (TRM) has an average value of 0.255. The TRM in this study ranges from -17.213 to 14.816, with a standard deviation of 1.175. The multinationality variable (MULTI) is a dummy variable, where a value of 1 indicates that the sample has subsidiaries or parent companies abroad. Thus, MULTI has an average value of 86.15%, meaning 86.15% of the samples have subsidiaries or parent companies abroad, with a standard deviation of 0.345. The control variable for sales growth (GRO), has an average absolute value of 11.930, ranging from -87.49 to 687.62, with a standard deviation of 51.97. The control variable for leverage (LEV) has an average value of 0.915, ranging from 0.028 to 56.405, with a standard deviation of 2.484. Furthermore, the control variable for gross domestic product (GDP) has an average value of 2.153, ranging from -10.978 to 13.519, with a standard deviation of 4.652. The control variable for the Covid-19 period (COV) has an average value of 60%, meaning that most of the study samples are from years in the Covid-19 pandemic period.

In addition, a skewness value exceeding 3 indicates a significant deviation in the data distribution and suggests the presence of outliers. Meanwhile, a kurtosis value above 10 reflects an extremely peaked distribution, indicating a sharper peak compared to the standard normal distribution (Kline, 2016). The skewness values for most variables are well below the threshold of 3, indicating that the distributions are relatively symmetric and do not exhibit significant deviations from normality. However, the variable MULTI exhibits a relatively high skewness value (-2.09), suggesting a strong negative skewness, where the data is concentrated at the higher end with a long-left tail, though still within acceptable limits. The kurtosis values for the majority of variables are below the threshold of 10, indicating that the distributions do not have excessively heavy tails or extreme peaks. Variables such as LEV (kurtosis = 4.77) and MULTI (kurtosis = 5.38) exhibit leptokurtic distributions, meaning they have a higher peak and heavier tails than a normal distribution, but the values are still well below the threshold of 10, suggesting moderate deviation.

Correlation Analysis

Correlation testing was conducted to determine the direction and significance of relationships between operational variables using the Pearson Correlation method. Significance levels of 10%, 5%, and 1% are represented by one, two, and three stars, respectively. The results, based on a two-tailed test, are presented in Table 2.

Table 2. Pairwise Correlation

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) PRST	1.0000							
(2) TPRICE	-0.1005**	1.0000						
(3) TRM	0.0103		1.0000					
(4) MULTI	0.2902***	-0.3471***		1.0000				
(5) GRO	0.0000	0.0000			1.0000			
(6) LEV	0.1099***	0.0596	0.0836**			1.0000		
(7) GDP	0.0050	0.1289	0.0330				1.0000	
(8) COV	0.2089***	-0.0614	-0.0027	-0.0340				1.0000
	0.0000	0.1181	0.9446	0.3872				
	-0.2872***	-0.0679*	-0.0343	-	-0.0083	1.0000		
	0.0000	0.0835	0.3829	0.0000	0.8318			
	0.1182***	0.0012	0.0052	-0.0212	0.2686***	0.0064	1.0000	
	0.0025	0.9746	0.8957	0.5901	0.0000	0.8714		
	-0.0741*	0.0000	-0.0021	-0.0000	-	-	-	1.0000
	0.0590	1.0000	0.9570	1.0000	0.1154***	0.0144	0.4884**	
					0.0032	0.7149	(0.000)	

Source: Processed by the authors (2025)

Based on the Pearson Correlation results presented in Table 2, the following conclusions can be drawn at a significance level of 10% or better up to 1%. Firstly, international tax practices, measured by TPRICE, are negatively correlated with earnings quality (PRST). Secondly, tax risk management (TRM) is positively correlated with earnings quality (PRST). Thirdly, control variables such as multinationality (MULTI), growth (GRO), and gross domestic product (GDP) are positively correlated with earnings quality (PRST). Lastly, the LEV variable and Covid-19 period are negatively correlated with earnings quality (PRST).

As an initial detection of multicollinearity issues, if the absolute correlation coefficient is no less than 0.8 in the Pairwise Correlation, multicollinearity issues may be present. According to the Pairwise Correlation results in Table 2, there are variables with absolute correlation coefficients lower than 0.8. Therefore, it can be stated that there are early indications of multicollinearity issues in this study. However, a more in-depth multicollinearity test will be conducted in the classical assumption testing section.

The Selection of Panel Data Regression Models

Before processing with panel data regression, it is necessary to conduct model selection for the panel data to be used. The panel data models in question are Pooled OLS or Common Effect, Fixed Effect, or Random Effect. For the selection of the panel data model, there are three tests that can be applied: the Hausman test, the Chow test, and the Lagrange Multiplier test.

The Hausman Test

The Hausman test is applied to choose between the Random Effect or Fixed Effect panel data models. The hypotheses for this test are as follows:

H0: Random Effect Model

H1: Fixed Effect Model

If the Prob > chi2 value is significant at the 5% significance level, H0 is rejected.

Table 3. The Hausman Test Result

Dependent Variable	Chi2	Prob > Chi2	Conclusion
PRST	111.77	0.0113	<i>Fixed Effect</i>

Source: Processed by the authors (2025)

Based on Table 3, the value of Prob>Chi2 is less than 0.05, which is significant at the 5% significance level. Therefore, H0 is rejected, and the Fixed Effect model is selected over the Random Effect model.

The Chow Test

The Chow test is conducted to select the panel data model between Pooled OLS and Fixed Effect. The hypotheses for this test are as follows:

H0: Pooled OLS Model

H1: Fixed Effect Model

The Chow test is performed by running a Fixed Effect regression. If the Prob > F value is significant at the 5% significance level, then H0 cannot be accepted. Therefore, H1 is accepted.

Table 4. The Chow Test Result

Dependent Variable	F test that all $u_i=0$	Prob > F	Conclusion
PRST	8.50	0.0000	<i>Fixed Effect</i>

Source: Processed by the authors (2025)

Based on Table 4, the value of Prob > F is 0.0000, therefore H1 is rejected. Consequently, the Fixed Effect model is chosen over the Pooled OLS model.

The Lagrange Multiplier Test

The Lagrange Multiplier test is applied to select between the Pooled OLS or Random Effect models for panel data. However, since the Chow and Hausman tests concluded that the Fixed Effect model is superior to the Pooled OLS or Random Effect models, the Lagrange Multiplier test is not necessary.

Classical Assumption Test

The classical assumption tests need to be conducted before applying regression to meet the criteria of the multiple regression model as the Best Linear Unbiased Estimator (BLUE). In this study, four classical assumption tests were performed: the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test.

The Normality Test

The normality test is used to examine whether the data of continuous variables are statistically normally distributed. In this study, three tests were conducted to assess normality: the Shapiro-Wilk W test and the Shapiro-Francia W' test. The hypotheses for these three tests are as follows:

H0: The data are normally distributed

H1: The data are not normally distributed

If the p-value is less than 0.05, then H0 is rejected, indicating that the data are not normally distributed. However, if the p-value is greater than 0.05, H0 cannot be rejected, and it can be concluded that the data are normally distributed.

Table 5. The Normality Test Result

Variable	Obs	Shapiro-Wilk W	Shapiro-Francia W'
		Prob>z	Prob>z
PRST	650	0.00011	0.00022
TPRICE	650	1.00000	1.00000
TRM	650	0.00000	0.00001
MULTI	650	0.00000	0.00001
GRO	650	0.00000	0.00001
LEV	650	0.00000	0.00001
GDP	650	0.00000	0.00001
COV	650	0.95276	1.00000

Source: Processed by the authors (2025)

Based on Table 5, almost all variables have a probability of less than 0.05, except for the TPRICE and COV variables in the Shapiro-Wilk W test and Shapiro-Francia W test. Therefore, for the variables PRST, TRM, MULTI, GRO, LEV, and GDP, H1 is rejected. However, the skewness and kurtosis values in the descriptive statistics analysis indicate that all variables are normally distributed.

The Multicollinearity Test

The multicollinearity test is conducted to detect similarity between independent variables that result in high correlations among the independent variables in the model. The variance inflation factor (VIF) test is used to identify multicollinearity issues in this study. If the absolute tolerance value (1/VIF) is less than 0.1 or the VIF value exceeds 10, it indicates a significant multicollinearity problem.

Table 6. The Multicollinearity Test Result

	VIF	1/VIF
COV	1.73	0.579073
LEV	1.65	0.604646
TPRICE	1.56	0.640789
GDP	1.51	0.663666
TRM	1.43	0.696906
GRO	1.17	0.851275
Mean VIF	1.51	.

Source: Processed by the authors (2025)

Based on Table 6, the research model has tolerance values ranging from 0.57 to 0.85, which are substantially greater than 0.1. Additionally, the VIF values range from 1.17 to 1.73, which are substantially lower than 10. Therefore, it can be concluded that there are no multicollinearity issues in this research model.

Heteroscedasticity Test

The heteroscedasticity test is conducted to detect the issue of heteroscedasticity, which refers to the presence of high variance in residuals across observation samples. Since the chosen panel data model is Fixed Effect, the test used for heteroscedasticity is the Modified Wald test. The hypotheses for this test are as follows:

H0: Homoscedasticity

H1: Heteroscedasticity

If the Prob>Chi2 value is less than 0.05 at a 5% significance level, H0 is rejected, indicating the presence of heteroscedasticity. Conversely, if Prob>Chi2 is not less than 0.05, H0 is accepted, indicating no heteroscedasticity problem.

Table 7. The Heteroscedasticity Test Result

Model	Chi2 (130)	Prob > Chi2	Conclusion
1	76727.71	0.0000	Heteroscedasticity
2	76122.59	0.0000	Heteroscedasticity

Source: Processed by the authors (2025)

Based on Table 7, the Prob>Chi2 value for this research model is 0.0000, which is less than 0.05. Therefore, H0 cannot be accepted, and it can be concluded that there is a heteroscedasticity issue in this research model.

Autocorrelation Test

The autocorrelation test is conducted to detect issues of autocorrelation, which refers to errors in time series data variables that exhibit patterns or correlations. The autocorrelation test is performed using the Wooldridge test for the Fixed Effect model. It is important to note that the panel data in this study is of the balanced panel data type. The hypotheses for the autocorrelation test are as follows:

H0: There is no autocorrelation problem

H1: There is an autocorrelation problem

If Prob>F is less than 0.05, then H₀ is rejected, indicating the presence of an autocorrelation problem. Conversely, if Prob>F is not less than 0.05, then H₀ is accepted, indicating no autocorrelation problem.

Table 8. The Autocorrelation Test Result

Model	F(1, 129)	Prob > F	Conclusion
1	41.856	0.0000	<i>Autocorrelation</i>
2	42.005	0.0000	<i>Autocorrelation</i>

Source: Processed by the authors (2025)

Based on Table 8, the Prob>F value is 0.0000, which is less than 0.05, indicating that H₀ cannot be accepted. Therefore, it can be concluded that there is an issue of autocorrelation in this research model. According to the results of the classical assumption test, this research model exhibits issues of heteroscedasticity and autocorrelation.

According to Hoechle (2007), to address the problems of heteroscedasticity and autocorrelation, a Fixed Effect regression model can be performed with robust clustered standard errors. Therefore, this study has applied the necessary treatment for heteroscedasticity and autocorrelation by using robust clustered standard errors.

Determination Coefficient Test (R-squared)

The coefficient of determination (R-squared) test is applied to assess the capability of the regression model in explaining the variance of the dependent variable. A coefficient close to 1 indicates that all independent variables can predict the dependent variable. The results of the R-squared test using the Fixed Effect model with standard errors clustered by firm can be seen in Table 9 below.

Table 9. The Determination Coefficient Test Result

Model	Dependent Variable	Predictors	R-squared
1	PRST	PRST, TPRICE, TRM, MULTI, GRO, LEV, GDP, COV	0.1668
2	PRST	PRST, TPRICE, TRM, TPRICE _x TRM, MULTI, GRO, LEV, GDP, COV	0.1677

Source: Processed by the authors (2025)

Based on Table 9, it can be observed that the research model 1 has an R-squared coefficient of 0.1668. This value indicates that the independent variables can explain 16.68% of the profit quality (PRST), with the remaining variation explained by other variables outside of this research model. Meanwhile, research model 2 has an R-squared coefficient of 0.1677. This value indicates that the independent variables can explain 16.77% of the profit quality (PRST), with the remaining variation explained by other variables outside of Model 2 in this research.

F-Test

The F-test is conducted to determine whether all independent variables simultaneously affect the dependent variable. In a research model, the independent variables have a simultaneous effect on the dependent variable if the F-test is significant at a 5% significance level or if the Prob>F value is no more than 0.05. The results of the F-test can be seen in Table 10.

Table 10. The F-Test Result

Model	Dependent Variable	Predictors	F-test	Prob > F
1	PRST	PRST, TPRICE, TRM, MULTI, GRO, LEV, GDP, COV	12.76	0.0000
2	PRST	PRST, TPRICE, TRM, TPRICExTRM, MULTI, GRO, LEV, GDP, COV	10.94	0.0000

Source: Processed by the authors (2025)

Based on Table 10, Model 1 has a Prob>F value of 0.0000, which is significant at the 5% significance level. This value indicates that the independent variables have a simultaneous effect on earnings quality (PRST) in Model 1. Similarly, Model 2 has a Prob>F value of 0.0000, which is also significant at the 5% significance level. This value indicates that the independent variables have a simultaneous effect on earnings quality (PRST) in Model 2. Therefore, hypothesis testing can be conducted.

Hypothesis Test Analysis

The hypothesis test applied in this study uses the t-statistic test to examine the direction and impact of the estimator variables on earnings quality for each research model. The t-test is conducted at the specified significance levels, namely 1%, 5%, and 10%. The results of the t-test can be seen in Table 4.12 for Model 1 and in Table 4.13 for Model 2. By default, the t-test

in Stata is a two-tailed test. However, this study performs a one-tailed test. Therefore, for hypothesis testing, the p-value is divided by two.

Table 11. The Hypothesis Test Result for Model 1

PRST	Coef.	St.Err	t-value	p-value	Sig (One-tailed)
TPRICE	-.0024447	.0072191	-0.34	0.735	
TRM	.0247766	.0080957	3.06	0.003	***
MULTI	.0001500	.000758	2.14	0.017	**
GRO	.0003555	.000076	4.68	0.000	***
LEV	-.0073438	.0073507	-1.00	0.320	
GDP	.0009894	.0003124	3.17	0.002	***
COV	-.0031493	.0031533	-1.00	0.320	
Constant	.0326524	.0075423	4.33	0.000	
Observations	650				
Number of Firms	130				
Fixed Effects?	Firm, Year				
Clustered	Firm				
Standard Errors?					

*** $p < .01$, ** $p < .05$, * $p < .1$

Source: Processed by the authors (2025)

Based on Table 11, transfer pricing has a coefficient of -0.0024 with a p-value of 0.3675 in a one-tailed test, which is greater than 10%. Therefore, the international tax practice, proxied by transfer pricing, does not have an effect on earnings quality at the 10% significance level. Based on this proxy for international tax practices, it can be concluded that international tax practices measured by transfer pricing have no effect on earnings quality, thus H1 is rejected. Tax risk management has a coefficient of 0.024 with a p-value of 0.0015 on a one-tailed test, which is less than 10%. Therefore, tax risk management, with the ETR indicator, has a significant positive effect on earnings quality at the 10% significance level, thus H2 is accepted.

Table 12. The Hypothesis Test Result for Model 2

PRST	Coef.	St.Err	t-value	p-value	Sig (One-tailed)
TPRICE	-.0019306	.0071924	-0.27	0.789	
TRM	.0269492	.0087431	3.08	0.003	***
TPRICExTRM	-.001414	.0017747	-0.80	0.427	
MULTI	.0001283	.000635	2.13	.0239	**
GRO	.000356	.000076	4.68	0.000	***
LEV	-.0074067	.0073401	-1.01	0.315	

GDP	.0009932	.000313	3.17	0.002	***
COV	-.0031186	.0031329	-1.00	0.321	
Constant	.0319933	.0075462	4.24	0.000	
Observations	650				
Number of Firms	130				
Fixed Effects?	Firm, Year				
Clustered	Firm				
Standard Errors?					

*** $p < .01$, ** $p < .05$, * $p < .1$

Source: Processed by the authors (2025)

Based on Table 12, the interaction variable between international tax practices, measured by transfer pricing, and tax risk management has a coefficient of -0.0014 with a one-tailed p-value of 0.2135, which is greater than 10%. In testing Hypothesis 2, tax risk management, proxied by the Effective Tax Rate (ETR), showed a positive impact on earnings quality. However, in this hypothesis test, tax risk management does not influence the relationship between international tax practices and earnings quality, resulting in the rejection of H3.

International Tax Practices Have No Influence on Earnings Quality

The hypothesis testing results disproved the first hypothesis, showing that international tax practices, measured by transfer pricing, do not significantly influence earnings quality. One possible explanation for this result is that the implementation of transfer pricing strategies often transcends the sole objective of tax minimization. While reducing tax liabilities is indeed a common motivation, transfer pricing can also serve a variety of strategic purposes. For instance, it may be used to support affiliated entities within a multinational group, helping to ensure financial stability across different jurisdictions. In addition, transfer pricing can function as a performance measurement tool by providing benchmarks that facilitate the evaluation of a subsidiary's efficiency and profitability. These broader objectives suggest that transfer pricing is not exclusively designed for tax avoidance, but may play a more constructive role in internal management and group coordination.

This aligns with the perspective of agency theory, which posits that agency conflicts arise from the divergence of interests between principals (e.g., shareholders or the parent company) and agents (e.g., managers or subsidiary directors). Even though both parties work towards shared organizational goals, their motivations and priorities can differ. For instance, a parent company may view tax optimization as a method to enhance consolidated profitability, while subsidiary management may prioritize operational metrics or local compliance over tax

savings. Consequently, tax minimization is not always aligned with the pursuit of higher earnings quality. Managers may choose not to aggressively exploit international tax practices if such strategies conflict with long-term business goals, ethical considerations, or risk tolerance (Olanda & Marietza, 2024). However, this study's findings are in contrast to previous research by Masri (2021), who found that international tax practices negatively affect earnings quality. Masri argued that such practices involve a high degree of managerial discretion, which can be used opportunistically, thereby deteriorating the quality of reported earnings. According to Masri, aggressive international tax planning enables earnings manipulation, masking the firm's true economic performance.

Tax Risk Management Positively Influence Earnings Quality

The results of the second hypothesis testing confirm that tax risk management has a significant positive effect on earnings quality. This supports the acceptance of the second hypothesis, indicating that firms with robust tax risk management practices are more likely to report high-quality earnings. Companies that engage in proactive tax risk management are better positioned to optimize their tax burden without violating prevailing tax laws. This approach enhances transparency, reduces earnings volatility, and contributes to the credibility of financial reporting. Guenther et al. (2014) provide supporting evidence by showing that firms with effective tax risk management tend to exhibit characteristics of superior earnings quality. Their study emphasizes that such firms are not necessarily engaging in aggressive tax avoidance, but are strategically managing tax obligations in a way that supports sustainable financial performance.

This finding is also consistent with the signaling theory, which suggests that high-quality earnings signal better firm performance and lower information asymmetry. Firms that effectively manage tax risks send a positive signal to investors and stakeholders about their commitment to compliance and long-term value creation. However, contrasting evidence is provided by Prasetyo (2018), who found that a lower ETR is associated with lower earnings quality. According to this view, a reduced tax burden may stem from aggressive tax strategies that can inflate short-term earnings at the expense of long-term sustainability. This suggests that the relationship between ETR and earnings quality may depend on how tax risk is managed, responsibly versus aggressively.

Tax Risk Management Does Not Have Moderating Effect on the Relationship Between International Tax Practices and Earnings Quality

The results of hypothesis testing indicate that tax risk management does not moderate the relationship between international tax practices and earnings quality. This finding leads to the rejection of the third hypothesis, which proposed that the presence of tax risk management would alter the impact of international tax practices on earnings quality. In essence, whether a company engages in tax risk management or not, the effect of international tax practices on earnings quality remains statistically unchanged. This outcome contrasts with prior studies that emphasize the strategic role of tax risk management in mitigating adverse tax behaviors. For instance, Masri (2021) found that effective tax risk management can reinforce the negative effect of aggressive international tax practices, such as transfer pricing, on the quality of reported earnings. According to the study, firms that actively manage their tax risks are often more adept at structuring their tax strategies in ways that exacerbate income manipulation, thereby reducing earnings quality.

The absence of a moderating effect in this study may be attributed to several contextual and methodological factors. In Southeast Asian countries, particularly developing economies like Indonesia and the Philippines, tax risk management practices are often underdeveloped and primarily driven by regulatory compliance rather than strategic oversight, thereby limiting their impact on earnings quality (Hanlon & Heitzman, 2010). Moreover, inadequate transparency in identifying and controlling tax risks, coupled with weak corporate governance, further diminishes the role of tax risk management. In many cases, it is implemented reactively to fulfill documentation requirements or mitigate audit penalties, rather than proactively curbing aggressive tax practices. Consequently, its ability to moderate the relationship between international tax practices and earnings quality remains ineffective.

5. CONCLUSION

The findings of this study reveal three key points. First, international tax practices does not significantly affect earnings quality. Second, tax risk management positively influences earnings quality. Third, tax risk management does not moderate the relationship between international tax practices and earnings quality. The findings provide several practical implications. For investors, the positive effect of tax risk management on earnings quality underscores the importance of evaluating tax strategies when making investment decisions. For companies, implementing robust tax risk management practices ensures business continuity, efficient tax strategies, and high-quality earnings without compromising compliance. For academics, the findings suggest that transfer pricing may not be an effective proxy for international tax practices, highlighting the need to explore alternative measures. Finally, for

tax authorities, the study emphasizes the importance of enhanced monitoring and comprehensive data availability to ensure that corporate tax risk management aligns with regulatory requirements.

This study has several limitations that should be addressed in future research. The sample is limited to manufacturing companies due to data constraints, restricting the generalizability of findings. Only transfer pricing was used as a proxy for international tax practices, excluding other important proxies such as tax haven usage and multinationality. Earnings quality was measured solely through earnings persistence, without considering other dimensions like earnings informativeness. Lastly, tax risk management was proxied using ETR, which may not fully reflect the complexity of corporate tax strategies due to limited disclosure.

Future studies should expand the sample to include industries beyond manufacturing to obtain more diverse insights across sectors. Researchers are encouraged to explore alternative proxies, such as income shifting or multinationality, to better capture international tax practices, particularly through affiliate transactions. Moreover, tax risk management measurement can be improved by referring to established disclosure frameworks, such as those by Price Waterhouse Coopers (PwC), to enhance the accuracy and relevance of findings..

6. REFERENCES

- Almustafa, H., Nguyen, Q. K., Liu, J., & Dang, V. C. (2023). The impact of COVID-19 on firm risk and performance in MENA countries: Does national governance quality matter? *PloS One*, 18(2), e0281148. <https://doi.org/10.1371/journal.pone.0281148>.
- An, Z., & Tan, C. (2014). Taxation and income shifting: Empirical evidence from a quasi-experiment in China. *Economic Systems* 38(4), 588–596. <https://doi.org/10.1016/j.ecosys.2014.10.002>.
- Bakker, A., Kloosterhof, S., & -, I. B. of F. D. T. A.-T. T. (2010). Tax risk management: from risk to opportunity (NV-1 o). IBFD Amsterdam, The Netherlands. <https://worldcat.org/title/648872578>.
- Bellovary, J. L., Giacomino, D. E., & Akers, M. D. (2005). Earnings Quality: It's Time to Measure and Report. *CPA JOURNAL* 75(11), 32–37. <https://worldcat.org/title/192661823>.
- Blouin, J. (2014). DEFINING AND MEASURING TAX PLANNING AGGRESSIVENESS. *National Tax Journal* 67(4), 875–899. <https://worldcat.org/title/9989480014>.
- Choudhary, P., Koester, A., & Shevlin, T. (2016). Measuring income tax accrual quality. *Review of Accounting Studies*, 21(1), 89–139. <https://doi.org/10.1007/s11142-015-9336-9>
- Damayanti, D. (2022). The Effect of Deferred Tax and Tax to Book Ratio on Company Financial Performance. *Kontigensi: Jurnal Ilmiah Manajemen* 10(2), 363–370. <https://doi.org/10.56457/jimk.v10i2.297>.

- Das, P. T. A.-T. T.-. (2019). *Econometrics in Theory and Practice: Analysis of Cross Section, Time Series and Panel Data with Stata 15. 1* (NV-1 o). Springer Singapore. <https://worldcat.org/title/1119630068>.
- Desai, M. A., Dharmapala, D., & , N. B. of E. R. (2004). *Corporate tax avoidance and high-powered incentives* (NV-1 o). National Bureau of Economic Research Cambridge, MA. <https://worldcat.org/title/56338455>.
- Desai, M. A., Foley, C. F., & Hines, J. R. (2006). Do tax havens divert economic activity? *Economics Letters* 90(2), 219–224. <https://doi.org/10.1016/j.econlet.2005.08.007>.
- Dita Arisandi, N. N., & Putra Astika, I. B. (2019). Pengaruh Tingkat Utang, Ukuran Perusahaan dan Kepemilikan Manajerial pada Persistensi Laba. *E-Jurnal Akuntansi* 1845. <https://doi.org/10.24843/EJA.2019.v26.i03.p07>.
- Ernst & Young. (2021). How do you adapt to the changing tax risk landscape? Ernst & Young. https://assets.ey.com/content/dam/ey-sites/ey-com/en_lu/topics/tax/the-tax-leader-imperative-how-do-you-adapt-to-the-changing-tax-risk-landscape.pdf?mkt_tok=NTIwLVJYUC0wMDMAAAGJBgzeiCblo9O2HYPBDhilh2c0wDsd7HuXauO_IWW6JjKqIIfcIgl9377kK1m6Xu9jKAwim3tsdXd5tT8x96Ok4VO-SAYEHZGQUDEa0ebv9OcYQ.
- Firmansyah, A., & Muliana, R. (2018). The Effect of Tax Avoidance and Tax Risk on Corporate Risk. *Jurnal Keuangan Dan Perbankan*, 22(4), 643–656. <https://doi.org/10.26905/jkdp.v22i4.2237>.
- Floropoulos, S., Tsipouridou, M., & Spathis, C. (2023). Book-tax conformity and earnings management: recent research. *International Conference on Business and Economics - Hellenic Open University* 1(1). <https://doi.org/10.12681/icbe-hou.5303>.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate SPSS 25* (9th ed.). In *Jurnal Ilmiah Ekonomi Bisnis* (Issue 1). Universitas Diponegoro.
- Guenther, D. A., Krull, L. K., & Williams, B. (2014). Are “Tax Aggressive” Firms Just Inflating Earnings? (NV-1 O). SSRN [S.l.]. <https://doi.org/10.2139/ssrn.2409688>.
- Guenther, D. A., Matsunaga, S. R., & Williams, B. M. (2017). Is Tax Avoidance Related to Firm Risk? *The Accounting Review* 92(1), 115–136. <https://worldcat.org/title/9971643547>.
- Hanlon, M. (2005). The Persistence and Pricing of Earnings, Accruals, and Cash Flows When Firms Have Large Book-Tax Differences. *The Accounting Review* 80(1), 137–166. <https://worldcat.org/title/9971534236>.
- Hoechle, D. (2007). Robust Standard Errors for Panel Regressions with Cross-Sectional Dependence. *The Stata Journal* 7(3), 281–312. <https://doi.org/10.1177/1536867X0700700301>.
- Hoenen, A. K., & Kostova, T. (2015). Utilizing the broader agency perspective for studying headquarters-subsidiary relations in multinational companies. *Journal of International Business Studies* 46(1), 104–113. <https://worldcat.org/title/9971691824>.
- Hutchens, M., & Rego, S. O. (2015). Does Greater Tax Risk Lead to Increased Firm Risk? In SSRN. <https://doi.org/10.2139/ssrn.2186564>.
- Hutchens, M., Rego, S. O., & Williams, B. (2019). Tax Avoidance, Uncertainty, and Firm Risk. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3348559>.

- Krull, L. K. (2004). Permanently Reinvested Foreign Earnings, Taxes, and Earnings Management. *The Accounting Review* 79(3), 745–767. <https://worldcat.org/title/9989262948>.
- Kubata, A., Lietz, G. M., & Watrin, C. (2013). Does Corporate Tax Avoidance Impair Earnings Informativeness? (NV-1 O). SSRN [S.I.]. <https://doi.org/10.2139/ssrn.2363873>.
- Lang, M. (2021). *Introduction to the Law of Double Taxation Conventions - 3rd Edition (3rd ed NV)*. IBFD Publications USA, Incorporated Amsterdam. <https://worldcat.org/title/1263873290>.
- Lubis, A. M. (2022). Pengaruh Book Tax Differences, Tingkat Hutang, dan Volatilitas Penjualan Terhadap Persistensi Laba (Studi Kasus Pada Perusahaan Manufaktur Sektor Property dan Real Estate Yang Terdaftar Di Bursa Efek Indonesia Tahun 2017-2019). <https://worldcat.org/title/1382608352>
- Masri, I. (2021). International Tax Avoidance Practice in Asean-4 Multinational Company. In *THE INTERNATIONAL JOURNAL OF BUSINESS REVIEW (THE JOBS REVIEW)* (Vol. 4, Issue 2).
- Mills, L. F., & Newberry, K. J. (2001). The Influence of Tax and Nontax Costs on Book-Tax Reporting Differences: Public and Private Firms. *Journal of the American Taxation Association* 23(1), 1–19. <https://doi.org/10.2308/jata.2001.23.1.1>.
- Muhammad Nur Hidayah, & Nila Firdausi Nuzula. (2019). PENGARUH TRANSFER PRICING DAN PERENCANAAN PAJAK TERHADAP MANAJEMEN LABA. *Jurnal Administrasi Bisnis*.
- Novira, A. R., Suzan, L., & Asalam, A. G. (2020). Pengaruh Pajak, Intangible Assets, dan Mekanisme Bonus Terhadap Keputusan Transfer Pricing. *Journal of Applied Accounting and Taxation* 5(1), 17–23. <https://doi.org/10.30871/jaat.v5i1.1852>.
- Omar, N., & Zolkafil, S. (2015). Profit Shifting and Earnings Management through Tax Haven Subsidiaries: An Exploratory Analysis of Multinational Companies. *Procedia Economics and Finance* 28, 53–58. [https://doi.org/10.1016/S2212-5671\(15\)01081-3](https://doi.org/10.1016/S2212-5671(15)01081-3).
- Plesner Rossing, C. (2013). Tax strategy control: The case of transfer pricing tax risk management. *Management Accounting Research* 24(2), 175–194. <https://doi.org/10.1016/j.mar.2013.04.008>.
- Prasetyo, A. H. (2018). Pengaruh Book Tax Differences, Effective Tax Rate, dan Deferred Tax Expense Terhadap Persistensi Laba pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2013-2016.
- Richardson, G., & Taylor, G. (2015). Income Shifting Incentives and Tax Haven Utilization: Evidence from Multinational U.S. Firms. *International Journal of Accounting* 50(4), 458–485. <https://doi.org/10.1016/j.intacc.2015.10.001>.
- Sikka, P., & Willmott, H. (2010). The dark side of transfer pricing: Its role in tax avoidance and wealth retentiveness. *Critical Perspectives on Accounting* 21(4), 342–356. <https://doi.org/10.1016/j.cpa.2010.02.004>.
- Taha, R., & Colombage, S. R. (2011). The Effect of Economic Growth on Taxation Revenue: The Case of a Newly Industrialized Country. In *International Review of Business Research Papers* (Vol. 7, Issue 1).

- Taj, S. A. (2016). Application of signaling theory in management research: Addressing major gaps in theory. *European Management Journal* 34(4), 338–348. <https://doi.org/10.1016/j.emj.2016.02.001>.
- Tang, T. Y. H., & Firth, M. (2012). Earnings Persistence and Stock Market Reactions to the Different Information in Book-Tax Differences: Evidence from China. *International Journal of Accounting* 47(3), 369–397. <https://doi.org/10.1016/j.intacc.2012.07.004>.
- Wang, D. (2006). Founding Family Ownership and Earnings Quality. *Journal of Accounting Research* 44(3), 619–656. <https://worldcat.org/title/9971464341>.
- Wunder, H. F. (2009). Tax risk management and the multinational enterprise. *Journal of International Accounting, Auditing and Taxation* 18(1), 14–28. <https://doi.org/10.1016/j.intaccudtax.2008.12.003>.