

## The effect of real earnings management on tax avoidance with company size as a moderating variable

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### Abstract

This study aims to determine the effect of real earnings management on tax avoidance with company size as a moderating variable. The population used in this study are property and real estate sector companies listed on the Indonesia Stock Exchange (IDX) from 2020-2022. The type of data used in this study is secondary data taken from [www.idx.co.id](http://www.idx.co.id). The sample of this study was taken using purposive sampling method and obtained 28 companies with 84 data processed financial statements. Outlier data as much as 10 financial statement data, so that there are 74 financial statement data that are used as research samples. This research technique uses simple regression analysis and Moderated Regression Analysis (MRA) analysis. The results showed that real earnings management has a positive effect on tax avoidance with a significance value of 0.029 and a calculated t value of 2.225 and the existence of company size cannot weaken the positive effect of real earnings management on tax avoidance with a significance value of 0.836 and a calculated t value of -0.208.

Keywords: Real Earnings Management, Tax Avoidance, Company Size

### INTRODUCTION

Taxes play an important role in the Indonesian economy because taxes are the main source of state revenue. Based on the provisions of Law Number 16 Year 2009, tax is a mandatory contribution to the state owed by individuals or entities that are compelling based on law by not obtaining direct rewards and used for the benefit of the state for the greatest prosperity of the people.

**Table 1.** Percentage of Tax Revenue in the 2020 - 2022 State Budget  
(In Billion Rupiah)

Year	Tax Revenue	Non-Tax Revenue	Grants	Total	Tax Proportion
2020	1.285.136,32	343.814,21	18.832,82	1.647.783,35	77,99%
2021	1.547.841,10	458.493,00	2.700,00	2.011.347,10	76,96%
2022	1.924.937,50	510.929,60	1.010,70	2.436.877,80	78,99%

Source : Badan Pusat Statistik, 2022 ([www.bps.go.id](http://www.bps.go.id))

Table 1 shows that revenue from the tax sector is the largest share of state revenue. The State Budget (APBN) in 2022 reached IDR 2,436,877.80 trillion. Taxes contributed IDR 1,924,937.50 trillion or equivalent to 78.99% of other revenue sources. Although tax revenue increases every year, it is still not optimal (Badan Pusat Statistik, 2022). One of the challenges in optimising tax revenue is the existence of tax avoidance efforts, both legally and illegally. The government is currently trying to take continuous improvement steps to increase tax revenue with the aim of encouraging taxpayers to be compliant in paying taxes. The steps taken are to improve the tax system so that the tax payment process becomes easier (Wardani & Ngali, 2022).

Tax avoidance is still a big problem in Indonesia. This makes Indonesia ranks 4th in the highest tax avoidance cases in Asia after China, India, and Japan. The Tax Justice Network report states that tax avoidance in Indonesia is estimated to have caused losses of up to US\$ 4.86 billion or IDR 68.7 trillion. The Tax Justice Network entitled The State of Tax Justice 2020: Tax Justice In The Time of Covid-19 stated that IDR 67.6 trillion of this figure of tax evasion came from companies in Indonesia and the rest from individual tax payments of IDR 1.1 trillion. The tax paid by companies is lower than the actual. At

the same time, wealthy individuals are more likely to hide their wealth and income. The estimated value of tax evasion at the end of the year is 5.7% of the target. The estimated value of tax evasion is 5.16% compared to the realisation of tax revenue at the end of 2019 of IDR 1,332 trillion (Pajakku, 2020).

Tax avoidance is a legal practice undertaken by individuals or companies to reduce their tax liabilities by exploiting gaps or weaknesses in the tax system without explicitly violating rules. This differs from tax evasion, which involves illegal actions to avoid paying taxes in ways that violate the law. Companies engaging in tax avoidance practices are not necessarily avoiding participating in national cooperation, but are rather oriented towards managing the amount of tax payments (Susanto, 2022). From an ethical standpoint prevalent in society, tax avoidance is considered unethical (Suyanto et al., 2022). Based on the presented phenomenon, one of the factors influencing companies to undertake tax avoidance actions is real earnings management.

Roychowdhury, (2006) states that real earnings management is a real activity carried out by a manager in managing his company's income that violates a form of normal business practice, such as: accelerating the timing of sales, large discounts, waivers in credit terms, lower cost of goods sold, through increased production and reduced discretionary costs with the aim of increasing current period income. Earnings manipulation techniques will be carried out by management through the company's daily activities during the accounting period. Real earnings management activities use the operating cash flow approach, production costs and discretionary costs (Wardani & Kusuma, 2012). Real earnings management activities using the operating cash flow approach involve manipulating cash flow to influence financial statements (Dechow & Sweeney, 1995). Production costs can be manipulated to change earnings by adjusting variable and fixed costs (Jones, 1991). Meanwhile, discretionary pay involves management decisions in controlling costs that can affect profits (Healy, P. M., & Wahlen, 1999).

Company size is expected to provide relevant information related to tax avoidance. Access to this information is considered by investors as one of the important indicators that can influence the assessment and investment decisions of a company. Large company size is associated with higher financial complexity, indicating that the company has the resources and capacity to carry out more sophisticated and potential tax planning (Dyreng, S.D. & Maydew, 2008). Real earnings management refers to practices undertaken by company management to influence the real amount of reported earnings, such as through investment decisions, selling prices, research and development expenditures, and so on (Healy, P. M., & Wahlen, 1999). When companies realise that taxes are a significant burden, they may try to manipulate real reported earnings to achieve certain goals. Large companies tend to have more opportunities to create financial structures that allow them to avoid taxes in ways that may not be available to smaller companies. Company size can provide investors with a clearer picture of the company's possible involvement in aggressive tax avoidance practices that could potentially affect the company's long-term performance.

As an innovation in this research, the selected sample of companies is from the property and real estate sector. This choice is based on their rapid growth each year, both in terms of financial reports and market share. The complex financial structure and high value of property assets provide opportunities for more intricate tax management. The subjective valuation of property assets also allows for the use of assessment methods that can influence tax obligations. Additionally, property companies often operate in various jurisdictions, opening up opportunities for cross-border tax planning (Dyreng, S.D. & Maydew, 2008). Therefore, research in this sector can provide insights into the extent to which companies employ tax avoidance strategies to optimize their tax burdens.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### Literatur Review

#### Positive Accounting Theory

Positive accounting theory is a positive and actual theory that can provide an explanation of accounting practices that have been carried out over time by predicting actions based on the selection of accounting policies that are beneficial to stakeholders in a company to maximise profits (Watts & Zimmerman, 1990). Positive accounting theory in this study assumes that accounting behaviour can be predicted based on

the economic motivations and interests of the parties involved. The political cost hypothesis is one of the hypotheses underlying this theory. This hypothesis states that companies can use certain accounting practices to manage political parties' perceptions of the company, thereby reducing the potential for regulation or political pressure. Real earnings management can be considered as a strategy used by companies to optimise taxes by managing real business activities. Management uses earnings manipulation techniques to influence and intervene in the information contained in the financial statements to reduce the tax burden paid (Wardani & Ngali, 2022).

### **Agency Theory**

Agency theory views the relationship between shareholders (principals) and management (agents) as an agent-principal relationship that can involve conflicts of interest (Jensen & Meckling, 1976). Real earnings management can be a tool used by management to pursue their interests and reduce conflicts with shareholders or other stakeholders. Real earnings management can be thought of as the behaviour of agents (management) motivated by their interest to manage the perception and performance of tax-related firms in order to maximise profits or reduce negative impacts. Company size as a moderating variable affects the relationship between real earnings management and tax avoidance. Larger firm sizes may have stronger internal control mechanisms, so the impact of real earnings management on tax avoidance may vary with firm size.

### **Tax Avoidance**

Tax avoidance is a practice undertaken by individuals or companies that aims to reduce the amount of tax by legal means or exploiting loopholes in tax regulations. It involves tax planning strategies that are carefully designed to minimise the amount of tax payable (Aulia & Purwasih, 2023). While tax avoidance is legitimate, it often comes under scrutiny and can raise ethical questions depending on the manner and extent to which the practice is used. Ethics and corporate social responsibility can be important considerations in managing taxes efficiently. Tax avoidance emphasises compliance with the law. The practice should be within the boundaries of tax law and should not involve any breach of the law or unethical practices.

### **Real Earnings Management**

Real earnings management is a practice that involves managing a company's operational or real activities to influence financial statements with specific objectives, such as manipulating earnings (Roychowdhury, 2006). This practice can include customised operational decisions to influence financial figures, such as revenues or costs, in order to create a more favourable image for interested parties. Real earnings management can involve decisions relating to production, investment or management of company assets in a way that affects the financial statements (Healy & Wahlen, 1999).

### **Company Size**

Company size can be measured in various ways such as total assets, market capitalisation, revenue, or number of employees (Mailia & Apollo, 2020). Firm size can influence management behaviour, including investment decisions, capital structure and earnings management practices. Larger companies may have different organisational structures and supervisory mechanisms. High revenue reflects a company's capacity to generate revenue from its operations. In earnings management practices, large companies may choose more complex accounting policies and real earnings management may be part of the company's financial strategy.

### **Hypothesis Development**

#### **The Effect of Real Earnings Management on Tax Avoidance**

Roychowdhury, (2006) states that real earnings management is a real activity carried out by a manager in managing his company's income that violates a form of normal business practice, such as: accelerating sales time, large discounts, waivers in credit terms, lower cost of goods sold, by increasing production

and reducing discretionary costs with the aim of increasing current period income. Real earnings management activities use the operating cash flow approach, production costs and discretionary costs (Wardani & Kusuma, 2012). The practice of real earnings management can influence corporate tax avoidance. This strategy involves manipulation in investment decisions, capital structure, and transaction arrangements to optimize tax liabilities. Based on the description described above, the research hypothesis can be formulated as follows:

### **H1 : Real Earnings Management Has a Positive Effect on Tax Avoidance.**

### **Company Size Can Weaken the Positive Effect of Real Earnings Management on Tax Avoidance**

Company size is a scale that classifies the size of the company and shows the number of transactions in obtaining profits. The size of a company can weaken the positive influence of real earnings management on tax avoidance because larger companies tend to face stricter tax scrutiny. Consequently, efforts to manage real earnings may become more constrained and challenging to conceal in larger companies. This can diminish the effectiveness of tax avoidance efforts through earnings management practices. Based on the description described above, the research hypothesis can be formulated as follows:

### **H2 : Company Size Can Weaken the Positive Effect of Real Earnings Management on Tax Avoidance**

## **METHODS**

### **Research Method**

The research used is quantitative research. The data used in this study are secondary data (in the form of numbers) and data processing using SPSS software version 25. The sample of this study uses property and real estate sector companies listed on the Indonesia Stock Exchange in 2020 - 2022.

### **Operational Definition**

#### **Tax Avoidance**

Tax avoidance is measured by Cash Effective Tax Rate (CETR). Cash Effective Tax Rate (CETR) is the company's cash expenditure to pay taxes compared to profit before tax (Ayem & Tarang, 2022). If the CETR is greater than 25%, it indicates a low level of tax avoidance and vice versa (Hifnalisa, 2022). The formula used to calculate CETR is as follows:

#### **Real Earnings Management**

Real earnings management refers to activities carried out by company management by changing financial statements. This practice is usually carried out by managers who have the aim of influencing stakeholders' perceptions of the company's performance. This study uses abnormal cash flow from operations (Abn CFO), abnormal production costs (Abn prod), and abnormal discretionary costs (Abn Disc Exp).

#### **Calculate Abnormal Cash Flow from Operations**

##### **Norma Operating Cash Flow**

Calculate operating cash flow from sales and changes in sales.

##### **CFO Abnormal**

Abnormal CFO is the difference between actual cash flow and normal cash flow.

#### **Calculate Abnormal Production Costs**

##### **Normal Production Costs**

Calculate normal production costs as the sum of cost of goods sold (COGS) and changes in inventory.

### Abnormal Production Costs

Abnormal production costs are the difference between actual production costs and normal production costs.

### Calculate Abnormal Discretionary Expenses

#### Normal Discretionary Costs

#### Abnormal Discretionary Costs

Abnormal discretionary costs are the difference between discretionary costs and normal discretionary costs.

#### Description:

CFO<sub>t</sub>: Operating cash flow of company *i* in year *t*

Asset-1 : Total assets of company *i* in year *t*-1

Sale<sub>t</sub> : Total sales of company *i* in year *t*

ΔSale<sub>t</sub> : Total sales of company *i* in year *t*

COGS<sub>t</sub> : Cost of goods sold

ΔINV<sub>t</sub> : Change in inventory

Prod<sub>t</sub> : Production cost of company *i* in year *t*

DiscExpt : Discretionary cost of company *i* in year *t*

#### Company Size

Company size can be measured by the total value of assets it owns at the end of the year (Prabowo & Sahlan, 2021), with the following formula:

## RESULTS AND DISCUSSIONS

The sample return selection process is based on predetermined criteria:

**Tabel 2.** Sample Selection Data

No	Kriteria	Jumlah
1	Property and real estate sector companies listed on the Indonesia Stock Exchange in 2020 - 2022.	84
2	Companies that publish financial statements in foreign currencies Foreign currency.	(0)
3	Property and real estate sector companies listed on the Indonesia Stock Exchange in 2020 - 2022 and suffered losses during the study year.	(51)
4	Companies that do not have complete information data needed according to the criteria.	(5)
5	Number of companies that fulfil the criteria.	28
6	Observation Period 3 X 28	84
7	Outlier Data	10
	Sample Quantity	74

Source: Data processed

The sample data that has been taken is 28 companies with complete data, namely 74 annual financial reports of the company during the 3-year research period which will then be tested to provide a clearer and easier understanding, especially for each research variable used, namely real earnings management, tax avoidance and company size.

### Descriptive Statistical Test

Table 3 shows the results of descriptive statistical tests for each variable of real earnings management, tax avoidance and company size. The tax avoidance variable (*Y*) proxied by CETR has a minimum value

of 0.001 which comes from PT Duta Pertiwi Tbk in 2022. The maximum value of the tax avoidance variable (Y) is 6.985 which comes from PT Rockfields Properti Indonesia Tbk in 2020. The tax avoidance variable (Y) has an average (mean) value of 0.399, which means that property and real estate sector companies listed on the Indonesia Stock Exchange in 2020 - 2022 do tax avoidance of 39.9%. The standard deviation has a value of 0.973, which means it is higher than the average value.

**Tabel 3.** Descriptive Statistics

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
CETR_Y	74	.001	6.985	.39953	.973676
CI_X1	74	.001	89.012	1.28682	10.33837
MLR_X2	74	-.649	.955	.00585	.281208
KP_X3	74	.000	1.000	.45946	.501756
UP_Z	74	25.250	31.810	28.724	1.747892
Valid N ( <i>listwise</i> )	74				

Source: Data processed

The real earnings management variable (X1) has a minimum value of -0.649 which comes from PT Metropolitan Land Tbk in 2022. The maximum value of the real earnings management variable (X1) is 0.955 which comes from PT Urban Jakarta Propertida Tbk in 2020. The real earnings management variable (X1) has an average (mean) value of 0.005. The standard deviation has a value of 0.281, which means it is higher than the average value (mean).

The firm size variable (Z) has a minimum value of 25.250 which comes from PT Trimitra Prawara Goldland Tbk in 2021. The maximum value of the company size variable (Z) is 31.810 which comes from PT Bumi Serpong Damai Tbk in 2022. The company size variable (Z) has an average (mean) value of 28.724, which means that property and real estate sector companies listed on the Indonesia Stock Exchange in 2020-2022 tend to be large in scale. The standard deviation has a value of 1.747, which means it is lower than the average (mean) value.

### Hypotesis Testing Analysis

Previously, a classic assumption test consisting of normality test, multicollinearity test, heteroscedasticity test and autocorrelation test had passed the test and it was stated that this research was suitable for further testing (Ghozali, 2018).

**Tabel 4.** Simple Linear Regression Analysis Test

Model	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>		
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t</i>	<i>Sig.</i>
1 (Constant)	.394	.110		3.577	.001
MLR_X	.878	.395	.254	2.225	.029

Source: Data processed

In table 4, it can be seen that the real earnings management variable has a significance value of 0.029 (<0.05) with a t value of 2.225 and a B value of 0.878. This can be concluded from the significance value and the t value, it means that real earnings management has a positive influence on company size. Thus, the hypothesis stating that real earnings management has a positive effect on company size can be accepted. Real earnings management can be viewed as a rational response by companies to the complex economic environment. Companies may use earnings management to achieve specific goals, such as increasing the size of the company to appear more favorable to stakeholders or financial markets (Healy & Wahlen, 1999; Dechow et al., 1995). From the perspective of positive accounting, these practices are interpreted as the company's adaptive efforts to external policies and demands, aiming to enhance sustainability and performance in a dynamic business environment. Real earnings management practices

that continue over a long period of time can have an impact on the company's credibility and reputation. If this practice is discovered and deemed unethical, it could harm the company's image in the eyes of interested parties such as investors.

### Analysis of Moderating Variable

**Tabel 5.** Moderated Regression Analysis (MRA)

Model	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>		
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>T</i>	<i>Sig.</i>
1 (Constant)	3.281	1.831		1.792	.078
MLR_X	2.322	7.094	.671	.327	.744
UP_Z	-.101	.064	-.180	-1.579	.119
XZ	-.052	.252	-.426	-.208	.836

Source: Data processed

In Table 5, it can be seen that the real earnings management variable has a significant value of 0.744 ( $>0.05$ ) with a t value of 0.327 and a B value of 2.322. The moderation variable XZ has a significant value of 0.836 ( $>0.05$ ) with a t value of -0.208 and a B value of -0.052. This can be concluded that the company size variable is not able to moderate the positive effect of real earnings management on tax avoidance. Thus, the hypothesis stating that company size is able to weaken the positive effect of real earnings management on tax avoidance is not supported. Large companies are not always constrained by their size in implementing real earnings management for tax avoidance purposes. Greater resources and operational flexibility can provide significant advantages for large companies in effectively employing these practices. In addition, the level of transparency and tax monitoring of large companies can be a factor that enhances the effectiveness of tax avoidance through real earnings management.

### CONCLUSIONS

This research examines the influence of real earnings management on tax avoidance with company size as a moderating variable. Based on the data analysis and discussion conducted, it can be concluded that real earnings management has a positive impact on tax avoidance. Real earnings management variable has a significance value of 0.029 ( $<0.05$ ) with a t value of 2.225 and a B value of 0.878. This suggests that real earnings management motivates companies to utilize existing fiscal policies to maximize the potential reduction of corporate tax liabilities. Company size does not weaken the positive influence of real earnings management on tax avoidance. The moderation variable has a significance value of 0.836 ( $>0.05$ ) with a t-value of -0.208 and a B value of -0.052. This is because the influence of real earnings management practices and tax avoidance relies more on management decisions, business strategies, and corporate governance.

The limitations of this study include its focus on one factor influencing tax avoidance, which is real earnings management, with company size as a moderating variable. The research is confined to the property and real estate sector, limiting generalization to other types of companies in Indonesia. Additionally, the study spans a short period of three years (2020-2022), potentially not fully capturing the actual conditions of the companies. This research is expected to serve as a guide for future studies related to tax avoidance. For companies, adherence to government tax regulations is encouraged to maintain a positive reputation with the government and society. Investors are advised to consider tax-related aspects before investing, ensuring companies comply with tax regulations and implement good governance practices.

## RECOMMENDATIONS

Future research could consider adding or utilizing other independent variables such as audit committees, sales growth, management compensation, managerial ownership, and fiscal loss compensation, or exploring other variables with stronger influences on tax avoidance. It is advisable for subsequent studies to explore sectors with potential high tax avoidance, like Multinational Corporations (MNCs), or other sectors such as mining, infrastructure, utilities, and transportation. Extending the research duration would contribute to achieving research consistency.

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