

## THE EFFECT OF FINANCIAL PERFORMANCE, CASH HOLDING, AND TAX AVOIDANCE ON INCOME SMOOTHING WITH COMPANY GROWTH AS A CONTROL VARIABLE

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### Abstract

This study aims to determine the effects of financial performance, cash holdings, and tax avoidance on income smoothing, with company growth as a control variable. In this study, income smoothing is measured using the Eckel index, while financial performance is proxied by Return on Assets (ROA) to measure profitability and by the Debt to Equity Ratio (DER) to measure leverage. From a population of 93 property and real estate companies listed on the Indonesia Stock Exchange during the 2020–2023 period, 22 were selected as samples using purposive sampling, yielding 88 observations. Using logistic regression, this study finds that financial performance, as measured by profitability, has a negative effect on income smoothing, while financial performance, as measured by leverage, along with cash holding and tax avoidance, does not affect income smoothing. The results of this study indicate that profitability, as measured by ROA, is a factor influencing income smoothing practices. In practice, these findings may be a consideration for investors and regulators in assessing the potential for income-smoothing practices, given greater attention to the company's profitability.

**Keywords:** *Income Smoothing; Financial Performance; Cash Holding; Tax Avoidance; Company Growth; Property and Real Estate Companies*

### Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh kinerja keuangan, *cash holding*, dan *tax avoidance* terhadap *income smoothing* dengan pertumbuhan perusahaan sebagai variabel kontrol. Dalam penelitian ini, *income smoothing* diukur menggunakan indeks Eckel, sedangkan kinerja keuangan diprosikan dengan *Return on Assets* (ROA) untuk mengukur profitabilitas dan *Debt to Equity Ratio* (DER) untuk mengukur *leverage*. Populasi sebanyak 93 perusahaan

properti dan real estat yang terdaftar di Bursa Efek Indonesia selama periode 2020 – 2023 dan sebanyak 22 perusahaan dipilih sebagai sampel melalui teknik *purposive sampling* sehingga diperoleh 88 sampel. Dengan menggunakan regresi logistik, hasil penelitian menunjukkan bahwa kinerja keuangan yang diukur dengan profitabilitas berpengaruh negatif terhadap *income smoothing*, sedangkan kinerja keuangan yang diukur dengan *leverage*, *cash holding*, dan *tax avoidance* tidak berpengaruh terhadap *income smoothing*. Hasil penelitian ini mengindikasikan bahwa profitabilitas yang diukur dengan ROA merupakan faktor yang memengaruhi praktik *income smoothing*. Secara praktis, temuan ini dapat menjadi pertimbangan bagi investor dan regulator dalam menilai potensi praktik *income smoothing* dengan memberikan perhatian lebih pada tingkat profitabilitas perusahaan.

**Kata Kunci:** *Income Smoothing; Kinerja Keuangan; Cash Holding; Tax Avoidance; Pertumbuhan Perusahaan; Perusahaan Property and Real Estate.*

## INTRODUCTION

Financial statements are prepared in accordance with established accounting principles to ensure that the information presented is both relevant and reliable for decision-making purposes. Companies that show the ability to maintain stable profits are generally perceived by investors as organizations capable of withstanding changing economic conditions. Gondokusumo and Susanti (2022) argue that profit stability reflects managerial effectiveness and enhances the prospects of obtaining returns on investment. Nevertheless, the strong incentive to maintain stable financial performance may also encourage dysfunctional managerial behavior, particularly in the form of earnings management. Beidleman (1973) defined income smoothing as a form of earnings management in which managers attempt to reduce fluctuations in reported profits to create the impression of stable financial performance. However, Kusuma (2023) argues that income smoothing may represent a form of creative accounting that has the potential to deviate from the principles of honest, fair, and transparent financial reporting.

Kantor Pelayanan Kekayaan Negara dan Lelang Tarakan (2021) stated that the Indonesian economy experienced a slowdown in 2020 due to the global pandemic of the Coronavirus (COVID-19). The economic slowdown also had an unfavourable impact on various sectors in Indonesia, including the property and real estate sector. As stated by the Direktorat Jenderal Kekayaan Negara (2023), Indonesia's economic growth declined from 5.02% in 2019 to 2.97% in 2020. The period between 2020 and 2023 was characterized by significant economic uncertainty, particularly during the pandemic and the subsequent transition period associated with the spread of the virus. Rori et al. (2021) argue that the property and real estate sector plays a pivotal role in promoting national economic growth. Consequently, maintaining market confidence by disseminating stable financial reports is of paramount importance. Patmawati et al. (2021) state that 64.58% of companies in this sector are indicated to be practising income smoothing. The property and real estate sector exerts a substantial influence on the macroeconomy, encompassing job creation and its ramifications on the construction and banking sectors. It is imperative to acknowledge the role of property price fluctuations in influencing people's purchasing power. This sector is of significant importance when analyzing income smoothing, a factor that can influence market perceptions and investment decisions.

Several financial characteristics may influence a company's tendency to engage in income smoothing, including profitability, leverage, cash holding, and tax avoidance. Companies

experiencing declining profitability may be more inclined to smooth income to preserve a positive corporate image. Sari and Rudy (2020) explain that high leverage reflects greater reliance on debt financing, which may encourage income smoothing because companies with substantial debt obligations often face pressure to maintain stable financial performance to reduce default risk and maintain the trust of creditors. Furthermore, Andini and Agustina (2020) argue that high levels of liquid cash provide managers with greater flexibility in managing financial resources, thereby facilitating adjustments to reported earnings. Tax avoidance may also be associated with income-smoothing practices, as reducing tax expenses can help stabilize reported profits and create the impression of stronger financial performance. Taofik et al. (2022) note that tax avoidance may be achieved by manipulating the recognition of income and expenses, allowing companies to maintain consistency in their reported earnings.

Theoretical perspectives such as positive accounting theory, agency theory, and signaling theory provide important foundations for understanding the motivations underlying income smoothing practices. Positive accounting theory suggests that managers tend to select accounting practices that are advantageous to the company, including income smoothing, particularly during periods of economic instability such as those experienced by the property and real estate sector during 2020–2023. Agency theory further explains that conflicts of interest between principals and agents may lead managers to manipulate financial information to maintain investor confidence. Meanwhile, signaling theory suggests that companies may use income smoothing to convey signals of financial stability to the market and investors, despite volatile economic conditions.

Previous studies examining the effects of cash holding, leverage, and profitability on income smoothing have produced inconsistent results. Sari and Rudy (2020) found that profitability had no significant effect, whereas leverage had a positive effect. Suarnaningsih and Indraswarawati (2021) found that cash holding had no effect, whereas Andini and Agustina (2020) reported that leverage had no significant effect, but cash holding and profitability had positive effects. The use of tax avoidance as an independent variable in the context of income smoothing represents a novel aspect of this study. Dewi and Djohar (2023) found that tax avoidance significantly affected earnings management, and that income smoothing, a form of earnings management associated with taxation, was also significant. Company growth is also used as a control variable because Hanisa and Rahmi (2021) and Adithian and Setijaningsih (2024) found a significant effect of company growth on earnings management.

This study contributes to the income smoothing literature by integrating agency theory, positive accounting theory, and signaling theory to better explain managerial behavior. It examines the effects of profitability, leverage, cash holding, and tax avoidance in the property and real estate sector during the 2020–2023 period of economic uncertainty. Furthermore, this study extends prior research by incorporating tax avoidance and including a control variable in the form of company growth

## LITERATURE REVIEW

### Agency Theory

Jensen and Meckling (1976) define an agency relationship as a contractual arrangement in which one or more parties, referred to as principals, engage another party, known as an agent, to perform services on their behalf while delegating a certain degree of decision-making authority to the agent. Within the framework of agency theory, conflicts of interest may arise between principals

and agents due to differences in their respective objectives. Agents typically possess greater access to information regarding the company's internal conditions and operations than principals, resulting in information asymmetry.

Financial performance, commonly assessed by profitability, is a key indicator of managerial performance, as managers are often perceived as successful when the company achieves a high level of profit. In the context of leverage, managers usually have more comprehensive information about the company's financial condition than creditors, which may motivate them to adjust reported income to maintain stable profitability and create the impression that the company can meet its debt obligations. Similarly, high levels of cash holding give agents greater discretion to manage cash flows and determine the timing of revenue recognition, thereby creating opportunities to manipulate earnings for personal benefit. Moreover, tax avoidance practices may allow agents to reduce the company's tax burden, however, such strategies are frequently accompanied by the withholding of material information from principals, thereby further intensifying agency conflicts and increasing the risk of opportunistic managerial behavior.

### **Positive Accounting Theory**

According to Deegan (2014, p. 273), positive accounting theory focuses on explaining how accounting practices regulate interactions among stakeholders who participate in the allocation and distribution of a company's resources to facilitate efficient contractual relationships. Rather than prescribing how accounting should be practiced, positive accounting theory seeks to explain and predict the accounting methods that managers are likely to choose under particular economic circumstances. Watts and Zimmerman (1978) further argue that managerial incentives play a central role in shaping accounting choices, as managers may manipulate financial information to present favorable corporate performance and thereby increase the likelihood of receiving higher compensation or bonuses.

Deegan (2014, p. 24) explains that when accounting regulations do not strictly limit the selection of accounting methods, managerial accounting choices can be predicted through the perspective of positive accounting theory. Importantly, this theory does not assess whether the selected accounting methods are normatively right or wrong, instead, it seeks to understand the economic motivations behind such choices. Gondokusumo and Susanti (2022) highlight three major hypotheses in positive accounting theory that explain managerial decisions regarding accounting method selection. First, the bonus plan hypothesis suggests that managers are likely to adopt accounting policies that increase or stabilize reported earnings to meet predetermined performance targets and maximize bonus compensation. Second, the debt covenant hypothesis posits that companies with higher debt levels may encourage managers to select accounting methods that improve the appearance of financial performance to avoid violating debt agreements. Third, the political cost hypothesis suggests that companies experiencing unusually high profits may attract greater attention from regulators, labor unions, or taxation authorities, thereby motivating managers to adopt accounting methods that reduce reported earnings to minimize potential political costs.

These theoretical perspectives help explain managerial incentives to engage in income smoothing as a strategic accounting practice. Income smoothing may occur when fluctuations in profitability or leverage become excessively volatile, prompting managers to adjust reported earnings to make financial performance appear more stable and predictable. In this context, cash holding provides managers with greater flexibility to manage liquidity and determine the timing of revenue recognition, thereby facilitating the stabilization of reported earnings. Similarly, tax avoidance

may represent another managerial strategy in which accounting methods are utilized to minimize tax expenses while simultaneously maintaining the stability of reported earnings. Consequently, the flexibility inherent in accounting practices may create opportunities for managers to adjust financial information to align with their personal incentives and contractual motivations.

### Signaling Theory

Signaling theory explains how corporate management conveys information about the company's future prospects to external stakeholders through various strategic actions and disclosures. According to Ehrhardt and Brigham (2011, p. 615), signaling theory is a means by which principals assess a company's future prospects based on management's actions. Through these signals, information asymmetry between principals and agents can be reduced. Wulan and Nabhan (2021) state that one form of such information disclosure is financial reporting, which can provide signals to external parties.

Management, as the agent, may use income smoothing in accounting to adjust financial statements to convey positive signals to principals. Consistent profitability can signal strong managerial capability and promising future prospects to investors and other stakeholders. Furthermore, a high cash holding indicates sufficient liquidity reserves. These reserves can be used to address market uncertainty or to capitalize on future investment opportunities. Within the framework of signaling theory, management must be cautious in conveying signals through tax avoidance, as the interpretation of such signals may vary depending on.

### Income Smoothing

Tucker and Zarowin (2006) argue that income smoothing can enhance the informativeness of earnings when management uses its discretion to convey assessments regarding future earnings, but it can also reduce earnings accuracy if management deliberately manipulates reported earnings figures. The calculation of this variable produces a dummy outcome. In measuring income smoothing using the Eckel index, a value of 1 is assigned when the calculation result is less than 1, indicating that the company engages in income smoothing. Conversely, a value of 0 is assigned when the calculation result exceeds 1, indicating that the company does not engage in income smoothing. Eckel (1981) states that income smoothing is calculated using the following formula:

$$\text{Eckel Index} = \frac{\text{CV}\Delta I}{\text{CV}\Delta S}$$

Explanation:

CV $\Delta$ I = Coefficient of variation of changes in profit

CV $\Delta$ S = Coefficient of variation of changes in sales

The values of CV $\Delta$ I and CV $\Delta$ S can be calculated using the following formulas:

$$\text{CV}\Delta I \text{ dan } \text{CV}\Delta S = \sqrt{\frac{\sum (\Delta x - \Delta \bar{x})^2}{n-1}} : \Delta \bar{x}$$

Explanation:

$\Delta x$  : Change in profit or sales between year n and year n-1

$\Delta \bar{x}$  : Average change in profit/sales between year n and year n-1

n : Research period

### Financial Performance

This study uses profitability and leverage as indicators for measuring financial performance. According to Kieso et al. (2014, p. 213), profitability is an indicator of how effectively a company manages its operations over a given period, measured by the income it generates.

$$\text{ROA} = \frac{\text{Net profit}}{\text{Total assets}}$$

In this study, financial performance is also measured using leverage as an indicator. According to Oktiviasari and Hapsari (2020), the ratio of a company's capital to funds provided by creditors is known as the Debt to Equity Ratio (DER).

$$\text{DER} = \frac{\text{Total debt}}{\text{Total equity}}$$

### **Cash Holding**

Cash holding refers to the cash reserves maintained by a company to support operational continuity and strengthen its financial security. Tami and Pohan (2023) state that adequate cash reserves enable a company to cope with uncertainties, such as declining revenues or short-term obligations, without relying on external sources of financing.

$$\text{Cash Holding} = \frac{\text{Cash} + \text{Cash equivalents}}{\text{Total assets}}$$

### **Tax Avoidance**

According to Saputra and Agustin (2022), tax avoidance is a practice aimed at maximizing profits by minimizing tax obligations. Although this practice is legal, it is often regarded as unethical and may pose long-term reputational risks to the company.

$$\text{CETR} = \frac{\text{Cash taxes paid}}{\text{Pre-tax income}}$$

### **Company Growth**

According to Wulanningsih and Agustin (2020), changes in a company's asset levels can be used to describe its growth and indicate its position in economic activities.

$$\text{Company Growth} = \frac{\text{Total assets } t - \text{total assets } t-1}{\text{Total assets } t - 1}$$

### **The Effect of Financial Performance on Income Smoothing**

According to agency theory, agents often feel pressured to demonstrate stable financial performance to principals. In this study, company performance is represented by profitability and leverage. Company performance can also be used as a means of conveying positive signals to enhance external parties' confidence in the company's performance, as explained by signaling theory. Based on the bonus plan hypothesis in positive accounting theory, management tends to choose certain accounting methods to maintain profitability stability. This step is taken to enable the company to achieve targets that serve as the basis for determining management bonuses. In addition, the debt covenant hypothesis explains that management will choose certain accounting methods to keep the debt-to-equity ratio at a reasonable level. The political cost hypothesis in positive accounting theory suggests that companies with very high profitability tend to face greater external pressure, such as higher tax burdens. Taofik et al. (2022) state that profitability is often used by both management and investors as a tool to assess and measure the effectiveness of a company's operations. This occurs because bonus compensation may be determined based on the level of earnings achieved. Sari and Rudy (2020) state that the application of income smoothing can reduce earnings fluctuations, create an impression of stability, and indicate that the company continues to operate well even when profitability is low. Taofik et al. (2022) found that income smoothing is positively and significantly affected by profitability and leverage. Angreini and

Nurhayati (2022) also found that profitability significantly and positively affects income smoothing. Therefore, the researcher formulates the following hypothesis:

**H1a:** Financial performance, as measured by profitability, has a positive effect on income smoothing.

Ekadjaja et al. (2020) state that leverage also reflects a company's performance in terms of the use of borrowed funds invested to expand the business and generate returns on that capital. Based on agency theory, conflicts of interest between agents and principals may raise concerns among creditors regarding the company's ability to fulfill its debt obligations. Signaling theory supports this view by suggesting that management attempts to provide positive signals about the company's financial stability to reassure creditors. Sari and Darmawati (2021) state that, as a necessary step to convince creditors, income smoothing is important because earnings stability across periods may indicate that the company can meet its debt obligations and avoid violations of debt agreements. According to positive accounting theory, particularly within the debt covenant hypothesis framework, management tends to engage in income smoothing to ensure the company remains within the limits set by debt agreements. The studies conducted by Taofik et al. (2022), Sari and Rudy (2020), and Sari and Darmawati (2021) found that leverage has a positive and significant effect on income smoothing because the level of leverage reflects the company's ability to repay its debt obligations, thereby pressuring management to increase company earnings. Therefore, the researcher formulates the following hypothesis:

**H1b:** Financial performance, as measured by leverage, has a positive effect on income smoothing.

### **The Effect of Cash Holding on Income Smoothing**

According to Tami and Pohan (2023), the presence of cash indicates that a company has available funds that can be used for income-smoothing practices. They also found in their study that cash holding has a positive effect on income smoothing because it provides management with flexibility in determining the timing of revenue recognition. Adequate cash reserves increase the likelihood that a company can delay or accelerate revenue recognition, thereby presenting a more stable financial condition. This is consistent with signaling theory, which suggests that management seeks to convey signals regarding the company's financial stability. The study by Angreini and Nurhayati (2022) also found that cash holding has a positive effect on income smoothing. They explain that agency theory supports this finding by indicating that management tends to maintain control over corporate cash. In the practice of income smoothing, cash holding provides additional flexibility for management to choose the optimal timing of revenue recognition. This can be explained by positive accounting theory, which focuses on how management uses resources and accounting policies to pursue specific interests. Therefore, the researcher formulates the following hypothesis:

**H2:** Cash holding has a positive effect on income smoothing.

### **The Effect of Tax Avoidance on Income Smoothing**

Agency theory explains that conflicts of interest between principals and agents often arise, including one related to tax avoidance. Long-term risks may arise when tax avoidance is disclosed, harming principals, damaging the company's reputation, reducing market value, and leading to sanctions from tax authorities. According to Pambudi et al. (2021), the calculation of taxable income is strictly regulated under tax law, and therefore, every company must comply with these regulations. Taufiq (2022) found that tax avoidance positively affects earnings management in companies. This finding supports the argument that management may minimize tax expenses and use tax avoidance to manage company earnings. Based on positive accounting theory,

management tends to choose accounting methods that minimize taxes, including tax avoidance. This study seeks to explore the role of tax avoidance in income smoothing as part of earnings management. Saputra and Agustin (2022) reveal that tax avoidance aims to increase profit by minimizing tax expenses. From a signaling-theoretic perspective, management may use tax-related strategies to smooth income and create an impression of favorable financial performance among external parties. Therefore, the researcher formulates the following hypothesis:

**H3:** Tax avoidance has a positive effect on income smoothing.

## METHOD

This study adopted a quantitative research design and utilized secondary data. Data were collected through documentation techniques and analyzed using SPSS version 27. The property and real estate sector was selected because of its significant contribution to the Indonesian economy. Out of a population of 93 companies, 22 companies were selected as the research sample after applying certain criteria, with the elimination process as follows:

**Table 1. Results of Sample Selection**

No.	Criteria	Total
	<b>Population</b>	<b>93</b>
1.	Property and real estate sector companies that were not listed on the Indonesia Stock Exchange for four consecutive years during the 2020–2023 period.	(14)
2.	Property and real estate sector companies that did not publish annual financial statements for four consecutive years during the 2020–2023 period.	(10)
3.	Property and real estate sector companies that did not incur losses during the 2020–2023 period.	(45)
4.	Property and real estate sector companies did not have complete financial statements in accordance with the data required for the research variables.	(2)
<b>Total of Sample Companies</b>		<b>22</b>
Research Period		4
<b>Total of Research Samples</b>		<b>88</b>

Source: Data processed (2025)

## RESULTS AND DISCUSSION

### Descriptive Statistics Test

**Table 2. Results of the Descriptive Statistics Test**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Return on Assets	88	.00	.20	.0391	.03798
Debt to Equity	88	.00	1.74	.6026	.40647
Cash Holding	88	.00	.48	.0950	.08702
Tax Avoidance	88	.00	7.08	.4158	.89277
Income Smoothing	88	0	1	.45	.501
Company Growth	88	-.13	.58	.0489	.08864
Valid N (listwise)	88				

Source: Output SPSS 27 (2025)

The descriptive statistics test shows that ROA has a mean value of 0.0391 with low variation, indicating that the profitability of property and real estate companies tends to be low and relatively homogeneous. DER has a mean value of 0.6026, indicating that companies rely more on equity financing than debt. Cash holdings have a mean of 0.0950, indicating a relatively small and uniform cash-to-total-assets ratio. Tax avoidance has a mean of 0.4158, with low variation, reflecting the dominance of fixed assets in this sector. Income smoothing has a mean of 0.45,

while company growth has a mean of 0.0489, indicating that the growth rate of company assets is relatively homogeneous.

### Classical Assumption (Multicollinearity)

**Table 3. Results of Classical Assumption (Multicollinearity)**

Coefficients <sup>a</sup>			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Return on Assets	.752	1.329
	Debt to Equity	.819	1.221
	Cash Holding	.864	1.158
	Tax Avoidance	.904	1.106
	Company Growth	.923	1.083

a. Dependent Variable: Income Smoothing

Source: Output SPSS 27 (2025)

Based on the table above, all variables have tolerance values greater than 0.100 and VIF values less than 10. This indicates that the independent variables used in this study's regression model are not multicollinear. The VIF values range from 1,083 to 1,329, reflecting that the relationships among the independent variables in this regression model are relatively low.

### Overall Model Fit Test

**Table 4. Results of the Overall Model Fit Test**

Iteration History <sup>a,b,c</sup>			
Iteration		-2 Log likelihood	Coefficients
			Constant
Step 0	1	121.266	-.182
	2	121.266	-.182

Iteration History <sup>a,b,c,d</sup>								
Iteration		-2 Log likelihood	Coefficients					
			Constant	Return on Assets	Debt to Equity	Cash Holding	Tax Avoidance	Company Growth
Step 1	1	108.226	.102	-15.487	-.606	4.566	.173	3.700
	2	107.487	.230	-21.572	-.724	5.647	.184	4.542
	3	107.468	.258	-22.838	-.738	5.827	.178	4.668
	4	107.468	.259	-22.879	-.738	5.832	.178	4.671
	5	107.468	.259	-22.879	-.738	5.832	.178	4.671

Source: Output SPSS 27 (2025)

Based on the likelihood test results, the value of -2 Log Likelihood in block 0 is 121.266, while in block 1 it decreases to 107.468 after the independent variables are included. This decrease indicates that the model with independent variables performs better than the model that uses only a constant.

### Goodness-of-Fit Test

**Table 5. Results of Goodness-of-Fit Tests**

Hosmer and Lemeshow Test			
Step	Chi-square	df	Sig.
1	11.732	8	.164

Source: Output SPSS 27 (2025)

Based on the Hosmer and Lemeshow test, the significance value obtained is 0.164 ( $>0.05$ ), thus  $H_0$  is accepted. This indicates that the model predicts the observed data well and meets the goodness-of-fit criteria.

### Coefficient of Determination Test

**Table 6. Results of the Coefficient of Determination Test**

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	107.468 <sup>a</sup>	.145	.194

Source: Output SPSS 27 (2025)

Based on the table above, the coefficient of determination test yielded a Nagelkerke R-Square value of 0.194, or 19.4%. This figure indicates that the independent variables in this study can only explain 19.4% of the dependent variable, while the remaining 80.6% is explained by variables outside the research model.

This may be attributed to the complexity of income smoothing, which is affected by various factors beyond those included in this model. Although ROA is an important indicator of profitability, it does not fully capture the full range of managerial decisions related to income smoothing. Companies with high profitability may not rely heavily on income smoothing, however, external factors such as market conditions or changes in the macroeconomic environment may influence such decisions and are not captured in this model. DER reflects financial stability, but it does not encompass the company's overall financial management strategy, which also includes managing cash holdings and tax avoidance. Cash holding provides flexibility in earnings management, but its effect may vary depending on market conditions and the company's broader financial strategy. Tax avoidance, although it may support income-smoothing practices, is also strongly affected by external factors such as tax policy and regulatory changes, which cannot be explained by this variable alone. Finally, company growth, as a control variable, is indeed relevant, but it is also highly dependent on broader market conditions and external factors.

### Classifications Matrix Test

**Table 7. Results of the Classifications Matrix Test**

Classification Table <sup>a</sup>					
	Observed		Predicted		Percentage Correct
			Income Smoothing		
			No	Yes	
Step 1	Income Smoothing	No	33	15	68.8
		Yes	22	18	45.0
	Overall Percentage				58.0

Source: Output SPSS 27 (2025)

Based on the classification matrix test results, the model correctly classified 33 of 48 companies that did not engage in income smoothing, with an accuracy rate of 68.8%. Meanwhile, in the category of companies that engaged in income smoothing, the model correctly classified only 18 of 40 samples, with an accuracy of 45.0%. Overall, the model achieved a classification accuracy rate of 58.0%.

## Logistic Regression Test

**Table 8. Results of Logistic Regression Test**

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a2</sup>	Return on Assets	-22.879	10.301	4.934	1	.026	.000
	Debt to Equity	-.738	.625	1.393	1	.238	.478
	Cash Holding	5.832	3.267	3.187	1	.074	341.206
	Tax Avoidance	.178	.330	.291	1	.589	1.195
	Company Growth	4.671	3.272	2.038	1	.153	106.821
	Constant	.259	.653	.157	1	.692	1.296

Source: Output SPSS 27 (2025)

### Analysis of Return on Assets (ROA) on Income Smoothing

The Return on Assets (ROA) variable in this study is used as a proxy for profitability, representing financial performance indicators. Based on the results of the logistic regression test, ROA has a significance value of 0.026 ( $<0.05$ ), indicating ROA has a significant effect on the likelihood of income smoothing. The regression coefficient (B) of -22.879 indicates a negative relationship between ROA and income smoothing. In the context of logistic regression, this value implies that an increase in ROA reduces the log-odds of income smoothing. In addition, the odds ratio (Exp(B)), which is very small (close to zero), indicates that an increase in ROA substantially reduces the probability of a company engaging in income smoothing. This suggests that companies with higher profitability tend to have a much lower likelihood of engaging in income-smoothing practices. Thus, although the effect of ROA is statistically significant, it is negative, indicating income smoothing. The negative relationship between ROA and income smoothing indicates that companies with better and more stable financial performance do not feel the need to manage earnings aggressively, as they can maintain earnings stability naturally. Therefore, the results of this study indicate that financial performance, as measured by profitability, negatively affects income smoothing. This finding contradicts hypothesis H1a, which states that financial performance, measured by profitability, has a positive effect on income smoothing, thus, hypothesis H1a is rejected.

Based on agency theory, management tends to engage in income smoothing to achieve profit targets and meet stakeholders' expectations. However, the results of this study show a negative relationship between profitability and income smoothing, indicating that such practices are not always carried out by companies with strong financial performance. The discrepancy between the results and the hypothesis can be explained by the possibility that agency conflicts are more prevalent in lower-performing companies, where management has greater incentives to engage in income smoothing to conceal earnings fluctuations. From the perspective of positive accounting theory, companies with high profitability may not feel the need to engage in income smoothing because their performance is already sufficient to maintain company value and attract investors. Meanwhile, companies with lower profitability tend to experience significant earnings fluctuations, prompting management to implement income smoothing to stabilize earnings and attract investors (Gondokusumo & Susanti, 2022). From a signaling-theoretic perspective, the negative relationship observed in the logistic regression results above can be interpreted as companies with high profitability tending to be more transparent in financial reporting and less reliant on income smoothing to maintain their reputation among stakeholders and in the market.

The results of this study are consistent with previous research by Wijaya et al. (2020) and Ekadjaja et al. (2020), which concluded that profitability has a negative and significant effect on income

smoothing practices, and both studies used Return on Assets as a proxy for measuring profitability. However, the findings of this study are inconsistent with those of Taofik et al. (2022) and Angreini and Nurhayati (2022), who found that profitability has a positive and significant effect on income smoothing practices. These differences may be attributed to variations in research objects, as the study by Taofik et al. (2022) focused on manufacturing companies. This study is also inconsistent with Arli et al. (2024), which showed that profitability does not affect income smoothing.

### **Analysis of Debt to Equity Ratio (DER) on Income Smoothing**

The results of the logistic regression test show that the Debt to Equity (DER) variable has a significance value of 0.238, which is greater than 0.05. This indicates that Debt to Equity does not have a statistically significant effect on income smoothing, although the direction of the relationship is negative, as shown by the regression coefficient (B) of -0.738. The Exp(B) value of 0.478 indicates that for every increase in Debt to Equity, there is a tendency for a decrease in the odds or likelihood of income smoothing in the property and real estate sector. However, the significance value greater than 0.05 suggests that this relationship is not statistically significant and is not sufficiently consistent to explain the effect of leverage on income-smoothing decisions. This result implies that leverage does not serve as a dominant factor influencing managerial decisions to engage in income smoothing. Companies with higher leverage are subject to stricter monitoring by creditors and are bound by debt covenants, which may limit managerial discretion in financial reporting. This finding contradicts hypothesis H1b, which states that leverage has an effect on income smoothing, therefore hypothesis H1b is rejected.

Based on agency theory, companies with high levels of debt generally face greater pressure from creditors to maintain financial performance. However, the results of this study show that DER does not affect income smoothing, indicating that such pressure does not consistently encourage management to engage in income-smoothing practices. This may occur due to effective monitoring by creditors and the company's relatively stable financial conditions. From the perspective of positive accounting theory, companies with high levels of debt tend to manage earnings to avoid violating debt covenants. However, when companies have good profitability and cash flow, management may not feel the need to engage in income smoothing because they can still meet their obligations. Conversely, in companies with weaker financial conditions, income smoothing practices may occur. These differences in conditions lead to inconsistent DER effects on income smoothing. From a signaling-theoretic perspective, companies with high levels of debt may use income smoothing to maintain investor and market confidence. However, companies may also use other strategies to convey positive signals, such as increasing transparency in financial reporting or demonstrating strong operational performance. Therefore, income smoothing is not the only mechanism companies use.

The results of this study are consistent with previous research by Wijaya et al. (2020), Nugroho et al. (2021), Ekadjaja et al. (2020), and Angreini and Nurhayati (2022), which conclude that leverage does not significantly affect income smoothing practices. However, these findings are not consistent with studies conducted by Taofik et al. (2022), Sari and Rudy (2020), and Sari and Darmawati (2021), which found that leverage has a positive and significant effect on income smoothing.

### **Analysis of Cash Holding on Income Smoothing**

The results of the logistic regression test show that the cash holding variable has a significance value of 0.074, which is greater than 0.05. This indicates that cash holding does not affect income

smoothing, although the direction of the relationship is positive, as shown in the results above, with a regression coefficient (B) of 5.832. The  $\text{Exp}(B)$  value of 341.206 indicates that for every increase in cash holding, there is a tendency for an increase in the odds or likelihood of income smoothing in the property and real estate sector. Although this figure is very large, the significance value greater than 0.05 indicates that this relationship is not statistically significant and is not sufficiently consistent to explain the effect of cash holdings on income-smoothing decisions. This condition may occur due to the characteristics of data in the property and real estate sector, which tend to fluctuate. In addition, the presence of extreme values in some companies may affect the magnitude of the model coefficients. Thus, although there is a tendency for a positive relationship between cash holding and income smoothing, the results of this study do not provide sufficient evidence to conclude a significant effect. This finding contradicts hypothesis H2, which states that cash holding has a positive effect on income smoothing, therefore hypothesis H2 is rejected.

Based on agency theory, a high level of cash holding can provide management with a sense of security against financial risk, so under certain conditions, management may not feel the need to engage in income smoothing. However, under other conditions, cash holding can also be used to maintain the stability of the company's performance. From the perspective of positive accounting theory, cash holdings may affect management decisions regarding earnings management, but they do not always directly encourage income-smoothing practices. Sari and Darmawati (2021) explain that not all companies have sufficient cash holdings to engage in income smoothing, so their influence on such practices is limited and inconsistent. From the perspective of signaling theory, the level of cash holding is not always used by management as a primary signal to the market. Management may use other ways to convey positive signals, such as through operational performance or project success. In the property and real estate sector, investors tend to pay more attention to asset value and project success than to cash holdings, so this variable is not a primary driver of income-smoothing practices.

The results of this study are consistent with previous research by Sari and Darmawati (2021), which concludes that cash holdings have no effect and exhibit a negative association with income-smoothing practices. However, these findings are inconsistent with studies by Tami and Pohan (2023) and Angreini and Nurhayati (2022), which found that cash holdings have a positive effect on income smoothing.

### **Analysis of Tax Avoidance on Income Smoothing**

The results of the logistic regression test show that the Tax Avoidance variable has a significance value of 0.589, which is greater than 0.05. This indicates that tax avoidance does not have a statistically significant effect on income smoothing, although the direction of the relationship is positive, as shown by the regression coefficient (B) of 0.178. The  $\text{Exp}(B)$  value of 1.195 indicates that for every increase in tax avoidance, there is a tendency for an increase in the odds of income smoothing in the property and real estate sector. However, the significance value greater than 0.05 suggests that this relationship is not statistically significant and is not sufficiently consistent to explain the effect of tax avoidance on income-smoothing decisions. This result implies that tax avoidance and income smoothing may represent two distinct managerial strategies that are not necessarily implemented simultaneously. Furthermore, regulatory scrutiny and tax compliance requirements may limit the extent to which tax avoidance can be used in conjunction with income smoothing. This finding contradicts hypothesis H3, which states that tax avoidance has an effect on income smoothing, therefore hypothesis H3 is rejected.

Based on agency theory, this study suggests that companies may not use tax avoidance practices as an earnings management strategy through income smoothing because they can adopt a more structured tax management policy to maintain relationships with their agents. From the perspective of positive accounting theory, tax minimization does not necessarily involve tax avoidance, as strict regulations govern such practices. From the perspective of signalling theory, companies that have engaged in tax avoidance will not undertake income smoothing, as they have already derived financial benefits from tax savings.

The findings of this study are consistent with previous research conducted by Taufiq (2022) and Puspito and Karlina (2024), which concluded that tax avoidance does not affect earnings management practices. Both studies indicate that not all forms of earnings management, including income smoothing, are affected by tax avoidance. However, the results of this study do not align with those of Dewi and Djohar (2023), who found that tax avoidance has a positive effect on earnings management. The results of this study are also inconsistent with those of Sanjaya and Murwaningsari (2023) and Saputra and Agustin (2022), who found that tax avoidance has a positive effect on income smoothing.

## **CONCLUSION, LIMITATIONS, AND RECOMMENDATIONS**

### **Conclusion**

Financial performance, as measured by profitability, has a negative effect on income smoothing in property and real estate companies during the 2020–2023 period. This means that the higher a company's profitability, the lower the likelihood that it will engage in income smoothing. Meanwhile, financial performance, as measured by leverage, cash holdings, and tax avoidance, does not significantly affect income smoothing. Leverage, although related to financial risk, does not directly encourage managers to engage in income smoothing, which may be due to strict creditor supervision or stable financial conditions. Likewise, although cash holding provides flexibility in cash flow management, it does not significantly encourage the practice of income smoothing. This result indicates that even when companies have larger cash reserves, they do not always use those reserves to stabilize earnings, as this may be affected by external factors such as internal company policies or long-term strategic decisions. Tax avoidance, often associated with tax-efficiency strategies, is also not shown to affect income smoothing in this study. These findings indicate that companies may engage in tax avoidance for tax efficiency purposes, but this practice is not directly related to the decision to manipulate earnings through income smoothing.

### **Limitations**

This study has several limitations. Based on the results of the coefficient of determination test (Nagelkerke R Square = 19.4%), the research model explains only 19.4% of the variability in income smoothing, while the remaining 80.6% is attributable to factors outside the scope of this model. In addition, this study only covers the 2020–2023 period. This time span is relatively short for observing long-term patterns of income smoothing.

### **Recommendations**

Future researchers are encouraged to expand the research object to other industrial sectors to enable cross-sectoral comparison. A longer research period is also recommended to capture income-smoothing dynamics more accurately.

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