



Determinants of Income Smoothing and the Moderating Role of Managerial Ownership

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ABSTRACT

This study examines the effects of profitability, leverage, firm age, company size, and stock price on income smoothing practices, with managerial ownership serving as a moderating variable. The research focuses on companies in the financial sector listed on the Indonesia Stock Exchange during the 2020–2024 period. The sample comprises 22 firms observed over five years, yielding 110 observations. Data were analysed using logistic regression and moderated regression analysis. The results indicate that company size has a significant negative effect on income smoothing, suggesting that larger firms are less likely to engage in income smoothing due to stronger external monitoring. Meanwhile, profitability, leverage, firm age, and stock price do not show a significant effect on income smoothing. Managerial ownership strengthens the relationship between firm age and income smoothing, while weakening the influence of profitability, leverage, and stock price. However, managerial ownership does not moderate the effect of company size on income smoothing. These findings suggest that managerial ownership can reduce opportunistic income smoothing behaviour. Nevertheless, in more mature firms, managerial ownership may encourage management to maintain stable earnings in order to preserve investor confidence.

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1. INTRODUCTION

According to Suwaldiman & Lubis (2023), financial statements are written documents that provide details about a company's financial position over a given period and are utilised by internal and external parties. According to Yesi & Wahidahwati (2021), income statements, which are a component of financial statements, help users forecast future cash flows and assess creditworthiness, profitability, and investment value. Income statements might be used for both internal and external parties in this situation. Garel et al. (2021) state that investors and creditors prefer stable profits over fluctuating ones. Given that investors and creditors prioritise large and stable profits, management, which plays a crucial role in preparing financial statements, often engages in dysfunctional behaviour or income smoothing practices to manipulate profits and improve company performance.

According to Fabio et al. (2021) Banks respond to supervisory pressure by smoothing income. To appear stable to investors and regulators, strict prudential oversight encourages banks to smooth profits by booking loan-loss provisions. This indicates that regulatory pressure and the need for stable performance make income smoothing common in the financial sector, particularly in banks. Based on CNBC Indonesia data from January to June 2024, Indonesian banks also experienced positive performance growth, with net banking profits reaching IDR

126.53 trillion, a 5.46% year-over-year increase from the previous period of IDR 119.7 trillion. PT Bank Rakyat Indonesia (Persero) Tbk (net profit of IDR 29.7 trillion), PT Bank Central Asia Tbk (net profit of IDR 26.88 trillion), and PT Bank Mandiri (Persero) Tbk (net profit of IDR 26.55 trillion) were the top three banks that saw an increase. It's notable that, despite achieving the highest profit, PT Bank Rakyat Indonesia (Persero) Tbk. recorded growth of only 0.95%.

High profit growth and stability are more sought by investors and creditors than fluctuating profits (Garel et al., 2021). According to Angelista et al. (2021), income smoothing practices can cause profit information to fail to reflect actual financial conditions, thereby harming external parties in their decision-making. According to Lestari & Aprilia (2020), income smoothing can be achieved by manipulating company transactions or adjusting other accounting variables, whereby management attempts to increase reported profits when actual profits decline relative to the previous period. All financial sector businesses, including banks, insurance providers, capital markets,

and financial services firms, are included in this study. The emphasis on the banking sector is due to its higher profitability compared to other financial institutions. This aligns with Saragih (2024). This demonstrates that the banking industry is one of the most significant financial organisations in the Indonesian economy. According to Laela & Latif (2023), the banking sector is vulnerable to fluctuations in profitability and public trust, so management seeks to maintain stable financial performance to preserve investor confidence.

Several studies have identified factors that influence companies' decisions to engage in income smoothing practices from both an agency theory and positive accounting theory perspective. According to Jensen & Meckling (1976), agency theory can explain the disparity in interests between managers who function as agents and stockholders who serve as

principals. Syahputri & Nawirah (2023) explain that this theory describes a contractual relationship in

which managers have the authority to manage the company. Additionally, according to Sari et al. (2022), shareholders expect managers to profit from the capital they have invested; however, agency conflicts may arise when the parties have different goals. According to positive accounting theory, to foresee and explain accounting procedures, businesses must adapt their accounting policies to the circumstances they encounter (Watts & Zimmerman, 1986). According to Bhaskoro & Suhardianto (2020), opportunistic managerial behaviour, such as seeking bonuses or promotions under a bonus plan, can drive income smoothing. However, when managers hold company shares, they become more cautious about manipulating financial reports, so managerial ownership helps reduce such behaviour.

Profitability is the first variable that has been used extensively in earlier research. Because the financial sector typically exhibits high profit levels, this study examines profitability to assess whether managers are incentivised to employ income smoothing techniques. This assertion is consistent with Laela & Latif (2023), which suggests that fluctuations in data stability and public confidence may affect the financial sector, particularly the banking sector. Previous studies have demonstrated that profitability enhances income smoothing (Jam'ah et al., 2023; Musyafa & Kholilah, 2023; Suwaldiman & Lubis, 2023). To retain the company's positive reputation and, from an investor's perspective, to smooth earnings, management often smooths profits when a company's profit level rises. Contrary to these findings, additional research indicates that profitability negatively impacts income smoothing (Nathania & Nugroho, 2023; Pratami et al., 2024). Management does not engage in income smoothing when a company's profit level rises because the company's performance can be regarded as good or, from the investors' perspective, as increasing investor confidence, without the need to manipulate the company's profit level.

Leverage is the second variable. Leverage is included in this study because creditors place greater pressure on businesses with high leverage to maintain stable financial statements. Income smoothing is encouraged by this circumstance. actions in an attempt to placate outside parties (Maryanti et al., 2023). In line with this statement, Darma et al. (2023) management seeks to control the level of corporate debt because high debt will increase the cost of capital from external funds, which ultimately reduces after-tax profits and results in a decrease in bonuses and an increase in the share value received by top management. Therefore, debt control is implemented to maximise management's income. According to Suwaldiman & Lubis (2023), leverage improves income smoothing. Businesses with high debt levels frequently employ revenue smoothing techniques to maintain creditors' confidence and present a stable financial performance, thereby creating the impression that they can meet their long-term commitments. Leverage has little effect on income smoothing, according to Pratami et al. (2024).

Firm age is the third variable. This study uses firm age because it indicates a company's stability and operational experience (Tyasa & Taqwa, 2023). According to Fiona and Sufiyati (2023), firm age is positively associated with income smoothing. Long-standing businesses are urged to balance profit fluctuations to appear consistent, since they typically possess more

sophisticated managerial expertise, a thorough understanding of profit reporting techniques, and a strong concern for long-term reputation. In the meantime, Tjundjung's (2021) research indicates that income smoothing is negatively impacted by firm age. There is less room for profit manipulation in older businesses since they often have stronger internal control mechanisms, better governance, and greater transparency.

Company size is the fourth variable. This study utilises company size because it reflects a high level of visibility and public scrutiny, leading management of large companies to prioritise maintaining profit stability to preserve the trust of external parties (Rosdini et al., 2021). In addition, according to Nadhani et al. (2025), stakeholders and investors often put greater pressure on large companies, which can encourage income smoothing. According to Maotama & Astika (2020), income smoothing is positively associated with company size. Because large firms receive greater attention from the public, investors, and regulators, management is more likely to employ income-smoothing techniques to maintain stable profit reports. In the meantime, studies by Pratami et al. (2024) suggest that income smoothing is negatively affected by a company's size. Large businesses usually have strong internal control mechanisms and higher levels of openness, which lessens management's propensity to manipulate profits. This discrepancy in results indicates that the company's internal circumstances and external forces can affect the impact of company size on income smoothing.

The last variable is the stock price. This study uses stock prices because they reflect market perceptions of prospects for profit performance (Kusno et al., 2022). Angreini & Nurhayati (2022) claim that income smoothing is negatively impacted by the stock price. This occurs because stable, high stock prices indicate solid performance and investor confidence, which deters management from manipulating earnings to preserve the company's reputation. In addition, strong stock prices are often followed by scrutiny from investors and market analysts, reducing the likelihood of income smoothing by management. According to research by Kusno et al. (2022), income smoothing is unaffected by stock price. The studies mentioned above demonstrate differences in research results. This occurs because a company's internal accounting practices often have less impact on stock price changes than external factors such as macroeconomic conditions, interest rates, and market sentiment. Therefore, although stock prices are often used as a performance indicator, they are not always the primary driver of management decisions regarding income smoothing practices.

The study's results on the effects of the five variables on income smoothing differ in both significance and direction of influence. This difference is a gap in this study, so researchers are interested in conducting similar studies with three main differences as a point of novelty. The addition of a moderating variable, different sector, stock price and firm age as independent variables. The reason for choosing managerial ownership is to strengthen managers' motivation to stabilise profits, thereby maintaining the value of the shares they also own (Maotama & Astika, 2020). This study focuses on the financial sector because of the strict supervision by the OJK and Bank Indonesia, which could favour income-smoothing tactics. This study focuses on this industry.

Ditiya & Sunarto (2019) claim that while low profitability can prompt management to use income smoothing to maintain their position, higher profitability is associated with better management performance. This assertion is supported by Wirawan et al. (2023), who explain that unsustainable profit increases can harm management in the subsequent period, despite increasing short-term bonuses. However, research by Maotama & Astika (2020) also suggests that income smoothing techniques are triggered by low profitability, thereby creating the impression that financial conditions are stable and appealing to investors. Setyaningsih et al. (2021) stress that, in accordance with agency theory, higher profitability reduces managers' incentives to engage in income smoothing. When profits are already high and stable, managerial performance appears strong, owner pressure decreases, and conflicts of interest are minimised. As a result, managers have less need to manipulate earnings; therefore, greater profitability reduces the tendency to smooth income. This is in line with the statement that profitability has a negative effect on income smoothing practices found in studies conducted by Nathania & Nugroho (2023) and Pratami et al. (2024)

H1: Profitability has a negative effect on income smoothing.

Agitia & Dillak (2021) describe how businesses that use substantial leverage risk difficulty repaying their debt. According to Febria (2020), the debt-to-assets ratio increases with leverage, which motivates management to use income smoothing to preserve creditor confidence. When a company's profits fluctuate or decline, creditors may limit loan facilities or raise interest rates, prompting managers to present a stable performance. Angelista et al. (2021) highlight that businesses with high debt typically smooth profits to reduce default risk. According to the positive accounting theory's debt covenant idea, Maryanti et al. (2023) contend that, to avoid violating debt covenants and preserve a good financial reputation, management is more motivated to engage in income smoothing the higher the leverage level. This finding is reinforced by the research of Suwaldiman & Lubis (2023). It demonstrates how leverage improves income smoothing.

H2: Leverage has a positive effect on income smoothing.

Safitri et al. (2020) explain that long-established companies tend to smooth profits to reduce the risk of future profit fluctuations. Income smoothing strategies are strongly influenced by a company's age, as well-established businesses typically have a stronger reputation and greater investor trust. Furthermore, Rakhmawati & Chunni'mah (2020) emphasise that the reputation of long-established companies can reduce costs and increase production efficiency, resulting in more stable profits. Maryana & Carolina (2021) also note that older companies have greater experience in reporting and can maintain stakeholder trust. This is consistent with agency theory, which holds that managers should maintain stable profit performance to reduce information asymmetry and promote shareholder trust. Numerous studies demonstrate that income smoothing is positively impacted by firm age. (Fiona & Sufiyati, 2023; Rakhmawati & Chunni'mah, 2020).

H3: Firm age has a positive effect on income smoothing

Angreini & Nurhayati (2022) elucidate how a firm's size can be understood as the amount of wealth it possesses. According to Bleszynski et al. (2020), a company's stock price tends to rise in proportion to its profits, thereby increasing its market value. Angreini &

Nurhayati (2022) explain that, under the positive accounting theory of the political cost hypothesis, managers will predominantly select the appropriate accounting method for large companies when dealing with high political costs because such companies receive greater attention from external parties. This condition makes management more cautious in selecting accounting methods to avoid arousing suspicion or regulatory or public pressure. Therefore, the larger the company, the lower the likelihood that managers will engage in income smoothing, because the political and reputational risks they face are greater. Research by Pratami et al. (2024) supports this view, showing that company size negatively affects management's tendency to engage in income smoothing.

H4: Company size has a negative effect on income smoothing.

Angreini & Nurhayati (2022) explain that stock prices reflect investors' assessments of a company's value as capital providers. In line with this, Kusno et al. (2022) elucidate the connection between stock prices and agency theory, which holds that agents who engage in income smoothing are motivated to stabilise firm profits so that they appear favourable to investors, thereby attracting more investors. Agents strive to achieve their goals by manipulating reported profits in financial statements through income-smoothing practices. In this context, Kusno et al. (2022) further explain that a low stock price increases the likelihood that management will engage in income smoothing. This is because it makes the company's profits appear consistent, thereby raising the stock price and attracting investors. On the other hand, when a company's stock price is strong, management is less motivated to engage in income smoothing because the business has earned investors' trust and is perceived as performing well. This is corroborated by Angreini & Nurhayati (2022), who show that stock price negatively affects income smoothing.

H5: Stock Price has a negative effect on Income Smoothing.

Lestari et al. (2024) demonstrate that management ownership, a moderating element, strengthens the detrimental effect of profitability on income smoothing techniques. This is consistent with agency theory, which posits that as profitability increases, managers' shareholdings may align their interests with those of shareholders, thereby influencing financial reporting choices and reducing income-smoothing strategies. Musyafa & Kholilah (2023) explain how managerial ownership encourages management to enhance their performance for the benefit of both themselves and shareholders. Therefore, the higher the level of managerial ownership in a company, the less managerial discretion over financial reporting, because managers' interests are aligned with those of shareholders, thereby reducing the likelihood of income smoothing. According to a study by Lestari et al. (2024), management ownership amplifies the detrimental effect of profitability on income-smoothing strategies. This description leads to the formulation of the following hypothesis.

H6: Managerial ownership weakens the association between profitability and income smoothing.

Pande & Suryanawa (2017) elucidate how managerial choices about income smoothing techniques can be influenced by a company's high debt level. Setyaningsih et al. (2021) show that, in accordance with agency theory, managers have greater access to internal corporate information than external parties, resulting in information asymmetry between

managers and creditors and investors. Under the risk-averse assumption, a low leverage ratio makes creditors and investors more willing to lend or invest. Under these conditions, managers can use the information they have to manipulate the company's financial statements, thereby maximising their own welfare by smoothing profits. In a study by Lestari et al. (2024), managerial ownership is shown to moderate the relationship between financial leverage and income smoothing practices, both in companies with high and low leverage. Although companies with high leverage face pressure from creditors and investors to show stable profits, managerial share ownership restrains this pressure because profit manipulation can harm share value and managerial reputation. Meanwhile, in companies with low leverage, external pressure may be smaller, but managers are still encouraged to maintain the quality of financial reports and the company's reputation, thereby minimising income smoothing practices. Thus, an increase in managers' share ownership tends to reduce the company's incentive to engage in income smoothing, particularly when leverage is high or low. This description leads to the formulation of the following hypothesis:

H7: Managerial ownership weakens the effect of leverage on income smoothing.

Wahyuni et al. (2022) used company age as a benchmark to assess the ability to survive and capitalise on business opportunities in economic competition. In line with this, Fiona & Sufiyati (2023) explain that even though sophisticated governance systems and supervisory mechanisms can prevent manipulative actions on profits, long-established companies are more likely to engage in income smoothing practices because they tend to have a strong reputation in the eyes of the public and investors and strive to maintain profit stability to maintain market confidence. explains that although sophisticated governance systems and supervisory mechanisms can prevent manipulative actions on profits, long-established companies are more likely to engage in income smoothing practices because they tend to have a strong reputation with the public and investors and strive to maintain profit stability to maintain market confidence. According to agency theory, managers are motivated to maintain stable financial performance to preserve their professional reputations and secure optimal compensation when they possess more information than owners (Jensen & Meckling, 1976). This condition can change if there is significant managerial ownership. Previous research findings indicate that managerial ownership is positively associated with income smoothing practices because managers who are shareholders have a direct incentive for profit stability (Amarsanaa et al., 2019). Therefore, a high level of managerial ownership strengthens the relationship between company age and income smoothing practices, as profit stability provides managers with direct benefits from their shareholdings. Income smoothing strategies are influenced by managerial ownership, according to research by Maotama & Astika (2020)

H8: Managerial ownership strengthens the association between company age and income smoothing.

According to Angreini & Nurhayati (2022), a company's size can be understood as the magnitude of its assets. Companies with larger assets tend to have higher tax obligations, so management often practices income smoothing to manage company profits. Bora & Iswara (2023) explain that in large companies, management ownership creates a dual incentive to

smooth earnings because their dual role as owners and managers affords them greater control over financial reporting. The complexity of large companies' operations provides greater opportunities for earnings manipulation through accounting policies. Management with share ownership tends to exploit information asymmetry to meet market expectations and secure its investment interests. Managers will select accounting policies within the parameters of positive accounting theory, such as income smoothing practices, not solely for technical reasons, but as a strategy to minimise political risk, maintain external relationships, and preserve their image. This practice reflects how financial reporting can be used strategically, not merely to present objective information. Thus, managerial ownership has the potential to strengthen the influence of company size on income smoothing practices, because the higher the managers' shareholdings, the greater the incentive to maintain profit stability to preserve the value of their shares. Recent empirical findings also support this moderating effect, where managerial ownership has been shown to strengthen the relationship between company size and income smoothing.

H9: Managerial ownership strengthens the association between company size and income smoothing.

According to Evanjeline (2021), stock prices are a crucial signal for investors, as they reflect how the market views a company's performance. To offset earnings swings and preserve the company's reputation, managers promote income smoothing when stock prices are low (Angreini & Nurhayati, 2022). The relationship between stock price and agency theory is that managers are motivated to engage in income smoothing to stabilise profits, thereby making them appear more attractive to investors. When the stock price is low, management is more likely to use income smoothing to make profits appear stable and attract investors (Kusno et al., 2022). Managers are encouraged to focus more on the integrity of financial reporting and the sustainability of business performance when managerial ownership is high, thereby suppressing income-smoothing practices without reducing investor confidence (Boen & Bangun, 2024). Research by Maotama & Astika (2020) demonstrates how managerial ownership affects income smoothing strategies.

H10: The impact of the stock price on income smoothing is mitigated by managerial ownership.

2. METHODS

This quantitative study tested the effects of independent and moderating variables on the dependent variable using data from the Indonesian Stock Exchange. Of 104 financial companies, 22 were selected through purposive sampling.

Table 1. Purposive Sampling

No	Description	Total
	Total Population	104
1	Companies in the financial industry that failed to regularly submit their financial statements between 2020 and 2024	(5)
2	Financial sector companies that incurred losses during the years 2020–2024	(40)

3	Financial sector companies that did not have managerial ownership during the years 2020–2024	(37)
	Sample Size	22
	Research Period 2020–2024	5
	Number of Research Data (22 × 5)	110

Income smoothing is the study's dependent variable, whereas profitability, leverage, firm age, company size, and stock price are its independent variables. Managerial ownership is another moderating variable used in this study.

Income Smoothing

Angelista et al. (2021) note that income smoothing adjusts the timing of revenue or expense recognition so that reported profits appear more stable than actual financial performance. According to Pratami et al. (2024), the Eckel index is used to measure income smoothing. The Eckel Index can be greater than or less than 1. A higher value indicates a lower level of income smoothing, while a lower value indicates a higher level of income smoothing. In this instance, a dummy variable equal to 1 is assigned to businesses that use income smoothing with an index less than 1. Businesses with an index > 1 that do not use income smoothing are given a dummy variable of 0.

$$\text{Income Smoothing Index (Eckel Index)} = \frac{CV \Delta I}{CV \Delta S}$$

Angelista et al. (2021) explain that CVΔI and CVΔS can be calculated using the following formula:

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

Description:

$CV \Delta I$: Coefficient of variation for profit changes

$CV \Delta S$: Coefficient of variation for sales changes

Δx : Change in profit (I) or sales (S) between year n-1 and year n

$\bar{\Delta x}$: Average change in profit (I) or sales (S) between year n and year n n: The number of years observed

Profitability

Rahayu (2020) explains that a company's profitability is a measure of how effectively it uses its assets, capital, and sales. ROA, computed by dividing net profit after taxes by total firm assets, can be used to assess profitability (Setyaningsih et al., 2021).

$$ROA = \frac{\text{Earnings After Tax}}{\text{Total Assets}} \times 100\%$$

Leverage

Ramadhani et al. (2021) describe leverage as a measure of how effectively a business uses its debt. Leverage can be measured using DER, which is calculated by dividing the company's total liabilities by its total equity (Sitompul et al., 2024).

$$DER = \frac{\text{Total Debt}}{\text{Total Equity}} \times 100$$

Firm Age

Rakhmawati et al. (2020) note that firm age is calculated as the number of years between a company's founding and the study year, minus the year the business was founded, and is used to measure firm age (Anggraini & Kusumawati, 2024).

$$\text{Firm age} = \text{Year of research} - \text{The year the business was founded}$$

Company Size

Angreini & Nurhayati (2022) assert that the size or quantity of a company's assets can be used to determine its size. The company's total assets are used to measure its size. (Angreini & Nurhayati, 2022).

$$\text{Company size} = \ln(\text{Total assets})$$

Stock Price

Evanjeline (2021) explains that stock prices are the prices recorded on the exchange at a specific point in time, which can fluctuate significantly over a short period. The closing stock price for each period is used to calculate the stock price (Sutisman et al., 2025).

$$\text{Stock Price} = \text{Closing price}$$

Managerial Ownership

According to Angelista et al. (2021) The number of shares that the company's management owns is known as managerial ownership. Managerial ownership is calculated as the number of shares held by managers divided by the total number of outstanding shares (Nurhaliza & Azizah, 2023).

$$\text{Managerial Ownership} = \frac{\text{Number of Shares Owned by Managers}}{\text{Total Outstanding Shares}} \times 100$$

This study uses logistic regression, moderated regression analysis, and descriptive statistics. Logistic regression is essential because the dependent variable is a dummy, coded 1 for firms that engage in income smoothing and 0 for those that do not (Pratami et al., 2024). The equation model utilised in this investigation is as follows:

$$\ln\left(\frac{IMS}{1-IMS}\right) = \alpha + \beta_1 PRS + \beta_2 LVG + \beta_3 FMG + \beta_4 CSZ + \beta_5 STP \dots \text{ (Model 1)}$$

The moderation test equation for this study can be explained as follows:

$$\ln\left(\frac{IMS}{1-IMS}\right) = \alpha + \beta_1 PRS + \beta_2 LVG + \beta_3 FMG + \beta_4 CSZ + \beta_5 STP + \beta_6 MLP + \beta_7 PRS \times MLP + \beta_8 LVG \times MLP + \beta_9 FMG \times MLP + \beta_{10} CSZ \times MLP + \beta_{11} STP \times MLP \dots$$

(Model 2)

3. RESULTS AND DISCUSSION

Purposive sampling identified 22 companies that met the 2020–2024 criteria, yielding 110 observations. The data were processed using Eviews, and the descriptive statistics for each variable are presented below.

Table 2. Descriptive Statistics

	PRS	LVG	FMG	CSZ	STP	IMS
Mean	0.028	2.801	61.091	31.357	2,597.699	0.500
Median	0.019	2.566	58.000	31.153	1,227.500	0.500
Maximum	0.100	8.068	129.000	35.426	14,600.00	1.000
Minimum	0.002	0.057	22.000	26.508	74.000	0.000
Std. Dev	0.022	2.016	29.277	2.509	3,117.632	0.502
Skewness	1.149	0.487	0.995	-0.095	1.995	0.000
Kurtosis	3.532	2.314	3.188	1.953	6.905	1.000
Jarque-Bera	25.543	6.503	18.343	5.180	142.928	18.333
Probability	0.000	0.038	0.000	0.075	0.000	0.000
Observations	110	110	110	110	110	110

Description

PRS : Profitability LVG : Leverage
 FMG : Firm Age CSZ : Company Size
 STP : Stock Price IMS : Income smoothing

Table 2, which presents descriptive statistics, reports 110 research observations. The profitability variable has a standard deviation of 0.022, a minimum of 0.002 (Bank China Construction in 2020), a maximum of 0.100 (Mandala Multifinance in 2022), and an average of 0.028. This suggests that, with only minor fluctuations, the company's profitability level is comparatively low. The leverage variable has a mean of 2.801, a minimum of 0.057 for Trust Finance Indonesia Tbk in 2024, a maximum of 8.068 for Bank Tabungan Negara (Persero) in 2020, and a standard deviation of 2.016. The leverage variable indicates that most businesses have a relatively high debt-to-total-assets ratio. With a firm age of 61.091, a minimum of 22.000 Bank Mandiri (Persero) Tbk in 2020, a maximum of 129.000 Bank Rakyat Indonesia (Persero) in 2024, and a standard deviation of 29.277, according to the firm age variable, most of the sample's companies have been in business for a considerable amount of time.

The majority of businesses are categorised as large-scale, according to the company size variable, which has an average value of 31.357, a minimum value of 26.509 (Trust Finance Indonesia Tbk in 2020), a maximum value of 35.426 (Bank Mandiri (Persero) Tbk in 2024), and a standard deviation of 2.509. With an average stock price of 2,597.699, a minimum value of

74.000 Bank China Construction Bank I in 2024, a highest stock price of 14,600.000 Sinarmas Multiartha Tbk in 2024, and a standard deviation of 3,117.632, the stock price variable shows a considerable difference in stock prices among companies.

Table 3. Results of Descriptive Statistics IMS

	Count	Percent	Cumulative	
			Count	Percent
No income Smoothing	55	50.00	55	50.00
Income Smoothing	55	50.00	110	100.00

Descriptive statistics show 110 observations, with 55 engaging in income smoothing and 55 not. This balanced distribution indicates that income smoothing occurs equally across the sample and that there is sufficient variation for further analysis. The significance level exceeds 0.05, as indicated by the Hosmer and Lemeshow test (HL = 7.831, $p = 0.450$). The model fits the data, and the Likelihood Ratio test ($p = 0.008$, < 0.05) indicates that the regression model is statistically significant. Thus, income smoothing is influenced by the independent variables: profitability, leverage, firm age, firm size, and stock price. The R-squared value of 0.102 indicates that the model explains 10.2% of income smoothing, with the remaining 89.8% attributable to factors not examined in this study. A low R-Square value is acceptable because income smoothing practices in the financial sector are influenced not only by financial ratios but also by external factors such as the level of supervision and the quality of regulations that constrain management discretion. Ozili & Arun's (2023) research shows that income smoothing in financial institutions is strongly driven by institutional strength, transparency, and strict regulations, rather than by financial indicators alone. Therefore, the model's low explanatory power is reasonable, as profit smoothing in the financial sector is more influenced by structural factors than financial variables alone.

Table 4. Correlation Matrix

	STP	LVG	FMG	CSZ	STP	MLP	IMS
STP	1						
LVG	-0.559	1					
FMG	-0.377	0.670	1				
CSZ	-0.410	0.772	0.378	1			
STP	-0.138	0.260	-0.070	0.458	1		
MLP	0.374	-0.365	-0.183	-0.490	0.227	1	
IMS	-0.035	-0.044	0.099	-0.238	0.273	0.158	1

The results indicate that leverage has the strongest correlation with company size ($r = 0.772$), indicating that larger firms tend to use more debt. Earnings stability is positively correlated with managerial ownership (0.374), suggesting that greater managerial ownership is associated with greater earnings stability. Income smoothing shows very weak correlations with all variables, indicating it is not significantly affected by internal company factors.

Table 5. Multicollinearity Test

	PRS	LVG	FMG	CSZ	STP	MLP	IMS
PRS	1.000	-0.559	-0.377	-0.410	-0.138	0.374	-0.035
LVG	-0.559	1.000	0.670	0.772	0.260	-0.365	-0.044
FMG	-0.377	0.670	1.000	0.378	-0.070	-0.183	0.099
CSZ	-0.410	0.772	0.378	1.000	0.458	-0.490	-0.238
ZTP	-0.138	0.260	-0.070	0.458	1.000	-0.227	-0.273
MLP	0.374	-0.365	-0.183	-0.490	-0.227	1.000	0.158
IMS	-0.035	-0.044	0.099	-0.238	-0.273	0.158	1.000

The correlation matrix indicates that all correlations among the independent variables are well below the multicollinearity threshold, indicating that the model is free of multicollinearity. Each variable contributes uniquely, so the regression coefficients remain accurate and interpretable.

Table 6. Logistic Regression

Variable	Coefficient	Std. Error	z-Statistic	Prob
C	9.951	4.413	2.254	0.024
PRS	-7.326	10.822	-0.676	0.498
LVG	0.210	0.218	0.964	0.334
FMG	0.005	0.010	0.571	0.567
CSZ	-0.331	0.151	-2.198	0.028
STP	-0.000	-0.000	-1.370	0.170

Table 6 indicates that the first variable has a significance value of 0.498 and a coefficient of -7.326. This outcome indicates that H1 is rejected, as the p-value exceeds 0.05. This suggests that income smoothing techniques are not significantly impacted by profitability. In other words, although profitability varies across companies, this does not significantly affect management's decision to smooth profits. This condition can occur because companies with high and low profitability have other considerations in income smoothing practices. The findings of this study are consistent with research by Nurani & Maryanti (2021) and Widiasmara et al. (2022), which claims that businesses with high profit levels do not engage in income smoothing by lowering profits because they are careful in managing profits and use profits efficiently due to the many parties that monitor management actions. However, the results of this study do not support agency theory or the empirical basis for the hypothesis that high profitability reduces the tendency toward income smoothing. Theoretically, profitability is an indicator of managerial performance; when profits are stable and high, conflicts of interest between principals and agents decrease, and the need for earnings management is reduced. However, the findings of this study indicate that these conditions are not empirically supported in the research sample, suggesting that profitability is not a determinant of income smoothing practices among financial sector companies during the 2020–2024 period.

The second variable displays a significance value of 0.334 and a coefficient value of 0.210. This outcome indicates that H2 is rejected, as the p-value exceeds 0.05. In this instance,

income smoothing techniques are not much impacted by leverage. Because businesses with high or low leverage may employ diverse tactics to manage profits for both internal and external goals, this condition implies that leverage is not a key determinant of income smoothing practices. This study is inconsistent with the debt covenant hypothesis in positive accounting theory. Maryanti et al. (2023) state that the higher the leverage ratio, the greater the incentive for management to engage in income smoothing to avoid violating debt agree maintain financial reputation. This may be due to tighter creditor oversight in the financial sector during 2020–2024, particularly post-pandemic, which limited highly leveraged firms' ability to manipulate reports. Moreover, funding in this sector relies largely on long-term loans with flexible terms, reducing pressure to meet strict debt covenants. The results of this study are consistent with Angreini & Nurhayati (2022), who find that high levels of leverage or corporate debt are not factors that prompt managers to engage in income smoothing.

The third variable has a significance value of 0.567 and a coefficient value of 0.005. This outcome indicates that H3 is rejected, as the p-value exceeds 0.05. In this instance, income smoothing techniques are not much impacted by firm age. This indicates that management decisions regarding income smoothing are not strongly influenced by a business's years of operation. This condition suggests that income smoothing practices are not dependent on firm age, as both newly established and long-established firms may exhibit the same tendency to manage profits for specific purposes, such as safeguarding the firm's reputation among investors and maintaining earnings stability. The results of this study are inconsistent with the basic hypothesis and theory used, namely, the agency theory view, which posits that older companies tend to maintain profit stability to preserve stakeholder trust and their established reputation. However, the empirical findings of this study provide a different picture. In the context of financial-sector companies, this is because long-established firms lack an incentive to engage in income smoothing. Companies that have been around for a long time can compete by relying on innovation and creativity to meet consumer demand without engaging in income-smoothing practices. Therefore, newly established companies must innovate and be attuned to the public's desires and needs (Rahim & Martilova, 2024). This is consistent with research by Safitri et al. (2020), which finds that long-established companies do not exhibit income smoothing. This statement is supported by Wahyuni et al. (2023), who find that a company's age does not affect profit smoothing.

The fourth variable has a significance value of 0.028 and a coefficient value of -0.331. This indicates that H4 is supported, as the p-value is less than 0.05. In this case, company size has a significant negative effect on income smoothing practices. This means that the larger the company, the less likely managers are to engage in income smoothing, because the political and reputational risks they face are greater. The study's findings support the notion put forth by Angreini & Nurhayati (2022), which maintains that, in accordance with the positive accounting theory of the political cost hypothesis, Managers will predominantly determine the appropriate accounting method for large companies in the face of high political costs due to increased attention from external parties. These conditions make management more cautious in selecting accounting methods to avoid arousing suspicion or regulatory or

public pressure. Research by Pratami et al. (2024) supports this view, showing that company size negatively affects management's tendency to engage in income smoothing.

The fifth variable has a significance value of 0.170 and a coefficient value of -0.000. This suggests that H5 is rejected because the p-value exceeds 0.05. In this instance, income smoothing techniques are not much impacted by the stock price. This indicates that management's choice to smooth profits is not greatly impacted by changes in a company's stock price. This condition suggests that income smoothing practices are not dependent on stock prices, as both companies with high and low stock prices exhibit a similar tendency to manage profits to maintain performance stability and a positive investor perception. The study's findings contradict agency theory, which holds that managers' ownership of shares might align their interests with those of shareholders, hence affecting managers' financial reporting decisions. The results of this study show that empirically, stock prices do not have a significant effect on income smoothing practices. This indicates that, in the 2020–2024 financial sector research sample, stock price movements are not a major determinant of management's decision to smooth profits. The results of this investigation align with studies conducted by Angreini & Nurhayati (2022), which indicate that income smoothing is not partially impacted by stock prices.

Table 7. Moderation Test

Variable	Coefficient	Std. Error	z-Statistic	Prob
PRS*MLP	-1326.859	471.458	-2.814	0.004
LVG*MLP	-36.587	12.894	-2.837	0.004
FMG*MLP	0.567	0.267	2.119	0.034
CSZ*MLP	5.457	4.760	1.146	0.251
STP*MLP	-0.022	0.008	-2.663	0.007

A coefficient value of -1326.859 and a significance value of 0.004 were found based on the PRS*MLP moderation variable. This suggests that managerial ownership reduces the negative correlation between profitability and income smoothing techniques, meaning that the more managerial ownership there is, the less impact profitability has on management choices regarding income smoothing. This implies that businesses with greater managerial ownership have greater control over financial reporting, thereby reducing the impact of profitability on income smoothing strategies. According to Lestari et al. (2024), management ownership moderates the inverse relationship between profitability and income smoothing strategies. This is consistent with agency theory, which posits that shareholders' interests can be aligned by management who own shares, thereby influencing their financial reporting choices and reducing income-smoothing strategies as profitability increases. Musyafa & Kholilah (2023) explain how managerial ownership encourages management to enhance their performance for the benefit of both themselves and shareholders. Consequently, management has greater latitude in handling financial reports when managerial ownership is higher within an organisation. This is also supported by research by Lestari et al. (2024), which finds that managerial ownership weakens the association between profitability and income smoothing practices.

A coefficient value of -36.587 and a significance value of 0.004 were found based on the LVG*MLP moderating variable. This suggests that managerial ownership mitigates the negative effects of leverage on income-smoothing strategies, such that greater managerial ownership reduces leverage's impact on management's income-smoothing choices. This suggests that businesses with higher managerial ownership have greater control over financial reporting, thereby reducing the impact of debt on income smoothing strategies. This is consistent with agency theory, which posits that managers face information asymmetry when they possess more internal firm information than external stakeholders, such as creditors and investors. Lestari et al. (2024) reported findings that differ from those of this study. In line with the results of this study, managerial ownership weakens the effect of leverage on income smoothing.

A coefficient value of 0.567 and a significance value of 0.034 were found based on the FMG*MLP moderation variable. This implies that the association between firm age and Managerial ownership strengthens income-smoothing practices, indicating that as managerial ownership increases, the impact of firm age on management choices related to income smoothing grows. This result is consistent with agency theory, which maintains that conflicts of interest arise when managers possess greater knowledge than owners, prompting managers to maintain stable financial performance in order to preserve their professional reputation and secure optimal compensation (Jensen & Meckling, 1976). Long-running businesses typically have a solid reputation and extensive operational knowledge, which helps management efficiently manage earnings and preserve financial stability (Wahyuni et al., 2023). This study aligns with research by Amarsanaa et al. (2021), which shows that managerial ownership is positively associated with income smoothing, as managers who are also shareholders have incentives to maintain profit stability. Thus, high managerial ownership strengthens the relationship between company age and income smoothing because stable profits increase the value of the shares they hold.

A coefficient value of 5.457 and a significance value of 0.251 were found based on the CSZ*MLP moderation variable. This suggests that the connection between company size and management choices in income smoothing is unaffected by the degree of managerial ownership. In other words, large and small companies exhibit similar income-smoothing practices, regardless of the proportion of managerial ownership. This condition suggests that factors beyond managerial ownership, such as management strategy, market pressure, or regulation, exert greater influence on the implementation of income smoothing strategies across businesses of different sizes. The study's findings contradict the premise of positive accounting theory, which holds that managers select accounting policies, such as income smoothing practices, not solely for technical reasons but also as a strategy to minimise political risk, maintain external relationships, and preserve their self-image. The study of Abbas et al. (2025), which demonstrates that managerial ownership can mitigate the impact of business size on income smoothing, contradicts this claim.

A coefficient value of -0.022 with a significance level of 0.007 based on the STP*MLP moderation variable. These findings indicate that managerial ownership weakens the effect of stock prices on income smoothing. As managerial ownership increases, managers become

less likely to engage in earnings smoothing when stock prices fluctuate because their interests are aligned with those of shareholders, making them more careful in managing earnings. This finding is consistent with the agency theory of Jensen & Meckling (1976), which posits that managerial ownership can reduce agency conflicts between managers and shareholders. The results of this investigation corroborate those of Boen & Bangun (2024), who demonstrate that managerial ownership can inhibit income smoothing, and Maotama & Astika (2020), who confirm that managerial ownership affects income smoothing.

4. CONCLUSION

The study's results indicate that only company size affects income smoothing practices. This reflects the fact that the financial sector is highly regulated, so large companies with stronger oversight tend to engage in less income smoothing. In addition, larger companies typically exhibit greater transparency and face stakeholder pressure to present accurate financial reports. Managerial ownership has been shown to play an important moderating role in income smoothing practices. Managerial ownership weakens the influence of profitability, leverage, and stock price on income smoothing, indicating that shareholder managers tend to be more cautious in adjusting profits. Conversely, managerial ownership strengthens the influence of company age, so that older companies with shareholder managers make more consistent and controlled profit adjustments. The implications of this study emphasise the importance of strict supervision in the financial sector to maintain the transparency of financial reports, especially in large companies. For companies, these results indicate the need for an effective internal control system to support reliable and accurate financial reporting. Furthermore, managerial ownership, as a moderating variable, could be the focus of future research examining other factors that influence managers' financial reporting decisions.

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