INTERNATIONAL JOURNAL
OF ACCOUNTING AND FINANCE
UNIVERSITAS SEMARANG

P-ISSN: XXXX-XXXX
E-ISSN: XXXX-XXXX
https://journals.usm.ac.id/index.php/ijacfi/id

FACULTY OF ECONOMICS
UNIVERSITAS SEMARANG
INTERNATIONAL JOURNAL of ACCOUNTING and FINANCE

THE EFFECTS OF PROFITABILITY, FINANCIAL RISK, AND FIRM VALUE ON INCOME SMOOTHING PRACTICES

Nadia Ekatheana Rachmadanti[1], Tri Rinawati[2*]
[1,2] *Accounting Department, Faculty of Economic, Universitas Semarang, Semarang, Indonesia*

Abstract
This study empirically investigates the effects of profitability, financial risk, and firm value on income smoothing practices within the food and beverage manufacturing subsector. Utilizing a quantitative explanatory design, the research analyzes a sample of 19 companies listed on the Indonesia Stock Exchange (IDX) over the 2018–2021 observation period, yielding a total of 95 firm-year observations selected through purposive sampling. The data were evaluated using multiple regression analysis. The empirical findings reveal that profitability, measured by Return on Assets (ROA), exerts a positive and statistically significant effect on income smoothing practices. Conversely, financial risk, proxied by financial leverage, demonstrates a negative and significant influence on a firm's propensity to smooth earnings. In contrast, firm value, measured by the Price-to-Book Value (PBV) ratio, does not exhibit a statistically significant impact on income smoothing. Furthermore, the results indicate that profitability, financial risk, and firm value simultaneously influence income smoothing behavior, explaining approximately 10% of the variation in these practices. This research contributes to the existing literature by highlighting that managerial decisions to stabilize reported earnings in this sector are predominantly driven by internal financial performance and debt-related risk exposures, rather than external market valuations.

Article History
Submitted: 21th January 2026
Revised: 29th February 2026
Accepted: 17th March 2026
Published: 30th April 2026

Keywords
Profitability; Financial Risk; Firm Value; Income Smoothing; Financial Leverage

Corresponding email: tri_rinawati@usm.ac.id*
DOI:

INTRODUCTION

Financial statements serve as a primary source of information for investors, creditors, and other stakeholders when assessing a company's financial performance and condition. Reported earnings are particularly significant, as they are commonly used to evaluate managerial performance and inform economic decision-making. This reliance on reported earnings can incentivize

management to engage in opportunistic behavior, such as earnings management, with income smoothing being one notable form.

Income smoothing is a type of earnings management that reduces fluctuations in reported earnings to align with predetermined or expected targets, achieved through accounting methods or transaction-based decisions (Toni et al., 2021). This practice typically involves manipulating the timing of revenue or expense recognition or selecting specific accounting policies. The objectives often include fostering the perception of stable company performance and meeting the expectations of investors and other stakeholders. Previous research shows that income smoothing remains prevalent among companies listed on the Indonesia Stock Exchange (IDX).

Agency theory provides a framework for understanding income smoothing. The principal-agent relationship between shareholders and management can result in conflicts of interest and information asymmetry. Management typically has greater access to information about the company's internal conditions, which enables decisions that may prioritize managerial interests. When reported earnings are a primary metric for evaluating corporate performance, management may be incentivized to present stable earnings to enhance the company's perceived performance among shareholders and external stakeholders. Profitability is anticipated to influence income smoothing practices. It reflects a company's capacity to generate earnings from its available resources and, in this study, is represented by Return on Assets (ROA). ROA, calculated as the ratio of earnings before tax to total assets, evaluates management's effectiveness in generating profits from the assets used (Fawzi, 2023). Highly profitable companies are more likely to indicate signs of income smoothing practices. Companies with low profitability are more likely to engage in income smoothing because they often face greater challenges in attracting external stakeholders. In these situations, presenting stable earnings can serve as a strategic approach for management to sustain favorable perceptions among external parties (Cecilia, 2013).

Companies with low profitability often face increased pressure to demonstrate improved performance. In contrast, highly profitable companies may seek to maintain earnings at a consistent level to avoid setting unrealistically high expectations for future periods. Therefore, the relationship between profitability and income smoothing remains an empirical issue requiring further investigation. Studies in Indonesia have produced inconsistent results; some report a significant effect of profitability on income smoothing, while others find no statistically significant relationship. Financial risk, in addition to profitability, can influence managerial decisions related to income smoothing. Financial risk is typically linked to a company's reliance on debt financing, often measured by financial leverage. Higher leverage increases managerial pressure due to obligations to meet interest and principal repayments, as well as compliance with financial covenants set by creditors. These circumstances may incentivize management to report stable earnings. However,

empirical evidence regarding the impact of leverage on income smoothing is inconclusive. Some studies report a significant relationship, while others find no statistically significant effect.

Firm value is another relevant factor, as it reflects market perceptions of a company's prospects and performance. Companies with high market valuations may experience increased pressure to sustain investor confidence and uphold their corporate reputation, potentially incentivizing management to stabilize reported earnings. Nevertheless, empirical evidence on the relationship between firm value and income smoothing is mixed. Research on companies listed on the Indonesia Stock Exchange (IDX) indicates that firm value does not consistently have a statistically significant effect on income smoothing practices. Previous studies leave a research gap regarding the role of moderating variables in the relationship between corporate financial factors and earnings management and income smoothing practices. This gap is reflected in inconsistent findings on whether managerial ownership and firm size function as moderating variables. Sari & Khafid (2020) found that managerial ownership moderates the effect of leverage on earnings management among state-owned enterprises (SOEs). This result indicates that management's share ownership may influence the relationship between leverage and a company's propensity to engage in earnings management, potentially aligning management and shareholder interests. In contrast, Dewi & Nurhayati, (2022), reported that managerial ownership did not moderate the effect of financial leverage on income smoothing. These divergent findings indicate that the effectiveness of managerial ownership as a corporate governance and monitoring mechanism remains inconclusive. These inconsistencies may result from variations in research settings, firm characteristics, observation periods, or the proxies used to measure leverage and earnings management practices. Consequently, the role of managerial ownership in moderating the effect of leverage on earnings management practices remains an open research question. Further investigation is necessary to clarify whether managerial ownership strengthens or weakens the relationship between financial leverage and income smoothing.

A research gap exists concerning the role of firm size as a moderating variable in the relationship between profitability and income smoothing. Rohmah (2019) found that firm size moderates the effect of profitability on income smoothing through a pure moderation mechanism. This result implies that firm size can influence the strength or direction of the relationship between profitability and a company's propensity to engage in income smoothing. Firms of varying sizes may encounter different levels of external pressure, transparency requirements, and monitoring mechanisms, which could lead to differences in the relationship between profitability and income smoothing practices. Conversely, Wardana et al., (2024) found that firm size did not moderate the relationship between profitability and income smoothing. This result indicates that differences in firm size do not significantly alter the relationship between profitability and income smoothing practices. The contrasting findings of Rohmah, (2019) dan Wardana et al., (2024) suggest that the

role of firm size as a moderating variable remains empirically inconclusive. This inconsistency highlights the need for further investigation, particularly by considering different research settings, observation periods, and firm characteristics. Accordingly, future research can provide additional empirical evidence that may clarify the specific conditions or firm characteristics under which managerial ownership and firm size can—or cannot—function as moderating variables in earnings management practices. Such evidence may contribute to a more nuanced understanding of how corporate governance and firm characteristics explain managerial incentives to engage in income smoothing.

Recent studies indicate that the effects of profitability, firm size, and leverage differ across sectors, observation periods, and measurement approaches. These findings suggest that the relationships between corporate financial characteristics and income smoothing are context-dependent and require further empirical investigation. Income smoothing practices warrant particular attention because they can affect the quality and reliability of reported earnings, potentially leading users of financial statements to make decisions based on information that does not accurately reflect a firm's underlying economic conditions. Accordingly, this study examines the effects of profitability, financial risk, and firm value on income smoothing practices among manufacturing companies listed on the Indonesia Stock Exchange (IDX). The findings are expected to provide empirical evidence that contributes to the literature on the determinants of income smoothing and to offer insights for investors and other stakeholders in assessing the quality and reliability of corporate earnings. This phenomenon is exemplified by the profitability-related issues observed in PT Akasha Wira International Tbk (ADES) and PT Tiga Pilar Sejahtera Food Tbk (AISA).

Table 1. Case Phenomena in Companies (2019–2020)

Company Name	2019 Profit	2020 Profit
PT Akasha Wira Internasional Tbk (ADES),	IDR 83,885 in billion	IDR 135,78 in billion
PT Tiga Pilar Sejahtera Food Tbk (AISA)	IDR 459 in billion	IDR 447 in billion

Source: Processed data

The table indicates profitability-related issues in the companies under consideration. These conditions may affect the companies' income smoothing practices, particularly at PT Akasha Wira International Tbk (ADES) and PT Tiga Pilar Sejahtera Food Tbk (AISA). The reported earnings of these companies appear relatively similar or stable across consecutive years, which may indicate income smoothing practices. Such conditions may be associated with the overstatement or manipulation of revenues in financial reporting, although this possibility requires further empirical examination. Based on this background, the research problem is the potential relationship between declining profitability and income smoothing practices. Accordingly, the main research question is:

"How do profitability, financial risk, and firm value affect income smoothing practices among manufacturing companies listed on the Indonesia Stock Exchange during the 2019–2020 period?" The specific research questions are as follows: (1) How does profitability affect income smoothing practices among manufacturing companies listed on the Indonesia Stock Exchange? (2) How does financial risk affect income smoothing practices among manufacturing companies listed on the Indonesia Stock Exchange? (3) How does firm value affect income smoothing practices among manufacturing companies listed on the Indonesia Stock Exchange?

LITERATURE REVIEW

Agency Theory

Agency theory explains the contractual relationship between the principal, represented by the owner or shareholders, and the agent, represented by the party entrusted with managing the company (Hamdani, 2016). his relationship may create conflicts of interest because the two parties may pursue different objectives. Shareholders generally seek to maximize firm value and investment returns, whereas management may be incentivized to secure compensation, maintain their positions, and demonstrate favorable managerial performance. These divergent interests may be exacerbated by information asymmetry, which arises when management possesses greater information about the company's internal conditions than shareholders (Santosa & Rasyid, 2022). Information asymmetry may give management opportunities to engage in opportunistic behavior, including earnings management. In this study, income smoothing can be viewed as a form of managerial behavior intended to present relatively stable earnings, thereby creating a more favorable perception of the company's performance among shareholders and external stakeholders. Accordingly, agency theory provides a theoretical foundation for explaining the relationship between corporate financial characteristics, such as profitability, financial risk, and firm value, and management's propensity to engage in income smoothing practices.

Positive Accounting Theory

Positive Accounting Theory posits that managerial accounting policy choices may be influenced by a firm's economic interests and contractual arrangements. (Watts & Zimmerman, 1990) identify three major hypotheses within this framework: the bonus plan hypothesis, the debt covenant hypothesis, and the political cost hypothesis. The bonus plan hypothesis suggests that managers whose compensation is tied to performance may have incentives to select accounting policies that increase reported earnings. The debt covenant hypothesis proposes that firms with relatively high debt may face greater pressure to comply with contractual debt requirements, creating incentives for management to increase or stabilize reported earnings. Meanwhile, the political cost hypothesis suggests that large firms may face greater political and social scrutiny, which may encourage

management to adopt particular accounting policies to mitigate external attention associated with relatively high reported earnings.

In this study, the debt covenant hypothesis is particularly relevant for explaining the relationship between financial risk and income smoothing. The greater a firm's reliance on debt financing, the greater the pressure management may face to maintain financial performance and fulfill contractual obligations. Such conditions may create incentives for management to engage in earnings management, including income smoothing practices.

Income Smoothing

Income smoothing refers to managerial efforts to reduce fluctuations in reported earnings across periods so that earnings appear relatively stable over time (Beidleman, 1973). It represents one form of earnings management that may be undertaken through accounting policy choices or operational decisions that affect the timing of revenue and expense recognition. Income smoothing can generally be classified as real or artificial. Real smoothing involves decisions concerning actual transactions or economic activities. In contrast, artificial smoothing is achieved by selecting or modifying accounting procedures that affect the timing of revenue and expense recognition (Almubaydeen et al., 2024). From an agency theory perspective, such practices may arise from divergent interests and information asymmetry between management and firm owners (Wibowo & Febriani, 2023). The objectives of income smoothing may include maintaining perceptions of stable corporate performance, meeting investor expectations, preserving relationships with creditors, and reducing earnings fluctuations that could affect market assessments of the firm (Abogun et al., 2021). However, income smoothing may also impair the quality and usefulness of reported earnings when it causes financial statements to deviate from a faithful representation of the firm's underlying economic conditions.

Motivations for Income Smoothing

Hepworth (1953) suggests that income smoothing may stem from a desire to improve relationships with creditors, investors, and employees, as well as to smooth the business cycle through psychological processes. Meanwhile, Beidleman (1973) identifies two principal rationales underlying management's decision to engage in income smoothing. The first assumes that a stable stream of earnings may support higher dividends than a highly fluctuating earnings stream. Accordingly, income smoothing is expected to have a favorable effect on the firm's share value because it may reduce perceived corporate risk. The second rationale relates to the effort to smooth the firm's capacity to anticipate patterns of periodic earnings fluctuations and potentially reduce the correlation between the firm's expected returns and those of the market portfolio.

Furthermore Hepworth (1953) argues that income smoothing may be undertaken for several purposes: (1) reducing the tax burden, (2) enhancing investor confidence, as investors generally perceive earnings stability as being associated with greater stability in dividend policies, and (3) maintaining favorable relationships between management and employees, particularly by minimizing potential tensions arising from substantial increases in reported earnings. A significant increase in reported earnings may lead employees to expect corresponding increases in wages or salaries, which could create additional pressure on management. Overall, these perspectives suggest that income smoothing may be motivated by both external considerations, such as investor, creditor, and tax-related pressures, and internal considerations, including managing employee expectations and organizational relationships.

Dimensions of Income Smoothing Practices

The dimensions of income smoothing encompass the mechanisms employed to achieve a stable pattern of reported income (Yunengsih et al., 2018). Management may utilize various approaches to smooth reported earnings. Atmini, as cited in (uwito & Herawaty (2012), classifies income smoothing into two categories: intentional income smoothing and naturally occurring income smoothing. Natural income smoothing results from the inherent process of generating stable earnings, while intentional income smoothing arises from managerial actions implemented through real or artificial smoothing techniques. Dascher and Malcom, as cited in Belkaoui (2007, p. 195), differentiate income smoothing into two forms: real smoothing and artificial smoothing. Real smoothing involves transactions that managers execute or avoid based on their expected impact on the stability of reported income. In contrast, artificial smoothing involves using accounting procedures to shift costs or revenues between reporting periods. Therefore, real smoothing is linked to managerial decisions regarding economic activities, while artificial smoothing pertains to accounting choices and the timing of recognition.

Furthermore, (Munika et al., 2025) identify several dimensions through which income smoothing can be implemented. The first dimension, smoothing through the timing of events or recognition of transactions, occurs when management exercises discretion over the timing of transactions or their recognition to distribute their effects on reported income more evenly across periods. The second dimension, smoothing through allocation across periods, involves distributing revenues, expenses, or other accounting amounts over different reporting periods to minimize fluctuations in reported earnings. The third dimension involves management's discretion over measuring and recognizing specific events, which influences the amount of income reported in affected periods. Finally, classificatory smoothing refers to classifying or reclassifying items within the income statement. When components other than net income are subject to smoothing,

management may classify or reclassify these components to reduce variations in reported income across periods.

Targets of Income Smoothing

The targets of income smoothing practices generally include activities over which management can influence the flow of accounting data or financial information. To present financial statements that align with managerial objectives, managers may include information about future events in the current reporting period or, conversely, defer current-period information to subsequent reporting periods. Several financial and accounting instruments may be used in income smoothing practices, including revenue, dividends, changes in accounting policies, pension costs, extraordinary items, investment tax credits, depreciation and fixed costs, foreign currency adjustments, accounting classifications, and provisions. These instruments give management varying degrees of discretion in determining the timing, recognition, measurement, or classification of accounting items, potentially affecting the pattern of reported earnings across periods. Furthermore, broadly classifies the financial statement elements that may become targets of income smoothing into two major categories: sales-related items and cost-related items. Both categories can influence the level and variability of reported earnings and, consequently, may provide opportunities for management to reduce fluctuations in reported income across reporting periods.

Factors Influencing Income Smoothing

Numerous studies have examined the factors influencing income smoothing practices; however, researchers have not yet reached a consensus regarding the specific determinants that drive managerial decisions to engage in income smoothing. Budiasih (2007), for example, identifies firm size, profitability, and the Dividend Payout Ratio (DPR) as factors associated with income smoothing practices. Firm size has a significant positive effect on income smoothing, suggesting that larger firms are more likely to engage in income smoothing. This may be attributable to the greater complexity of their operations and the stronger incentives management faces to maintain stable earnings.

Profitability is also considered an important determinant of income smoothing. Firms with higher Return on Assets (ROA) tend to engage in income smoothing more frequently than firms with lower profitability because management has greater confidence in the firm's ability to generate future earnings. This condition may give management greater flexibility to defer or accelerate earnings recognition across reporting periods (R. P. Sari & Kristanti, 2015). Similarly, the Dividend Payout Ratio is positively associated with income smoothing practices. Firms with a higher Dividend Payout Ratio may have stronger incentives to smooth earnings because dividend payouts are closely tied to the profits the firm generates. Consequently, management may seek to maintain relatively stable

reported earnings to support the continuity and predictability of dividend payments. (Milaedy et al., 2022) identify a broader range of factors that may influence income smoothing, including firm size, profitability, business group affiliation, nationality, stock price, Dividend Payout Ratio, differences between actual and normal earnings, accounting policies concerning earnings, debt contracts, and operating leverage. These factors reflect both firm-specific characteristics and external or contractual considerations that may incentivize management to stabilize reported earnings.

In contrast, Yulvinda (2022), proposes that income smoothing may be influenced by several organizational and market-related factors, including (1) competitive market mechanisms, which may constrain the range of choices available to management; (2) management compensation schemes, particularly those directly linked to firm performance; and (3) the threat of managerial replacement, which may motivate managers to present more stable financial performance in order to maintain their positions. Building on prior findings, the present study focuses on three factors that may influence income smoothing practices: profitability, firm size, and the proportion of independent commissioners. These variables represent important aspects of a firm's financial performance, organizational characteristics, and corporate governance mechanisms, respectively.

Profitability

Profitability reflects a firm's ability to generate earnings by utilizing the resources under its control. It is an important indicator for assessing the effectiveness and efficiency of a firm's management. In general, higher profitability indicates that management is more effective at using the firm's assets and resources to generate earnings. In this study, profitability is measured using Return on Assets (ROA), which is calculated as the ratio of net income after tax to total assets. ROA reflects the firm's ability to generate earnings from its overall asset base. A higher ROA indicates greater efficiency in utilizing the firm's assets to generate profits. Profitability is closely related to income smoothing because earnings are a key indicator investors and creditors use to assess a firm's financial performance. Firms with certain levels of profitability may have incentives to maintain relatively stable earnings so their reported performance does not fluctuate excessively across reporting periods. Nevertheless, the relationship between profitability and income smoothing remains inconclusive in the existing literature. Some studies have documented a significant association between profitability and income smoothing, whereas others have found that profitability does not have a significant effect. The formula for calculating ROA is as follows:

ROA = Net Income After Tax / Total Assets × 100%

Financial Risk

Financial risk results from debt-based financing, which imposes contractual obligations to pay interest and principal. More debt increases financial pressure and heightens the firm's risk

exposure. Financial risk is measured using the Debt-to-Asset Ratio (DAR), which represents the proportion of assets financed by debt. A higher DAR reflects increased financial risk. The Debt-to-Asset Ratio (DAR) is calculated as follows:

DAR = (Total Debt / Total Assets) × 100%

The debt covenant hypothesis explains the relationship between financial risk and income smoothing. Firms with high debt face greater pressure to meet obligations and comply with debt agreements. This environment may incentivize management to engage in earnings management, including income smoothing, to present stable financial performance and mitigate the risk of covenant violations. However, empirical evidence regarding the relationship between financial risk and income smoothing remains inconclusive. Radiyanti et al. found that financial risk negatively affects income smoothing, whereas other studies report that leverage significantly influences these practices. These inconsistencies indicate that the relationship may depend on firm-specific characteristics and the broader institutional or economic context.

Firm Value

Firm value reflects the market's perception of a firm's success and future prospects, as reflected in its market valuation, particularly the market value of its shares. Firm value matters to shareholders because increases in firm value are generally associated with greater shareholder wealth. Accordingly, firm value is often regarded as an important indicator of a firm's overall market performance and attractiveness to investors. In this study, firm value is measured using the Price-to-Book Value (PBV) ratio. PBV compares the market price per share with the book value per share and reflects how the market values a firm relative to the book value of its equity. A higher PBV indicates a higher market valuation of the firm, suggesting that investors have relatively favorable expectations regarding the firm's performance and future prospects. The formula for calculating PBV is as follows:

PBV = Market Price per Share/Book Value per Share

Firm value is often linked to income smoothing, as firms with higher market valuations typically attract more investor attention and face higher expectations for future performance. In these situations, management may be incentivized to sustain a favorable market perception by reporting stable earnings. Income smoothing thus becomes a managerial strategy to manage market expectations, especially when earnings volatility could negatively affect investors' assessments of firm performance.

Nevertheless, empirical findings regarding the relationship between firm value and income smoothing remain inconclusive. Radiyanti et al. found that firm value does not significantly affect income smoothing, whereas other studies report a positive relationship between firm value and

income smoothing practices. These divergent findings indicate that the extent to which firm value influences income smoothing may vary across firms and institutional contexts.

Review of Prior Research on Income Smoothing

Prior research on income smoothing has investigated factors influencing firms' decisions to engage in this practice, such as profitability, financial risk, firm value, firm size, financial leverage, and dividend payout ratio. Lathifah et al., (2018) conducted an empirical study of manufacturing firms listed on the Indonesia Stock Exchange (IDX) from 2013 to 2015 using a quantitative research approach. The study examined financial risk, profitability, and firm value as independent variables. The results indicate that profitability and firm value significantly influence income smoothing, while financial risk does not. These findings suggest that profitability and market value are important considerations in management's decision to engage in income smoothing.

Furthermore, Utari et al., (2024) investigated manufacturing firms listed on the Indonesia Stock Exchange during 2015–2017 using a quantitative approach. The study examined profitability, financial leverage, and dividend payout ratio as independent variables. The results show that profitability and financial leverage do not significantly affect income smoothing, whereas dividend payout ratio does. These findings suggest that dividend distribution policies may be associated with a firm's propensity to smooth earnings, while profitability and financial leverage may not be determining factors. Another study by Maranis et al., (2016) examined manufacturing firms listed on the Indonesia Stock Exchange. The study investigated firm size, firm value, profitability, and financial leverage as factors associated with income smoothing. The findings show that firm size, firm value, and financial leverage significantly affect income smoothing, whereas profitability does not. These results further indicate that firm-specific characteristics, particularly firm size, firm value, and financial leverage, may play an important role in explaining variations in income smoothing practices among manufacturing firms. Based on previous studies, empirical evidence on the factors influencing income smoothing remains inconclusive. The most notable inconsistencies concern profitability and financial leverage. Lathifah et al. (2018) found that profitability significantly affects income smoothing, whereas Utari et al. (2017), Maranis et al. (2016), reported no significant effect of profitability on income smoothing. Similarly, findings on financial leverage have been inconsistent. Utari et al. (2017) found no significant relationship between financial leverage and income smoothing, while Maranis et al. (2016) found that financial leverage significantly affects income smoothing.

These divergent findings indicate the existence of a research gap that warrants further investigation. The inconsistencies in the empirical evidence may stem from differences in sample characteristics, study periods, firm-specific conditions, and the variables examined across studies. Furthermore, prior research has predominantly focused on manufacturing firms, with varying

observation periods. This context provides an opportunity to re-examine the determinants of income smoothing using a more recent and relevant observation period, as well as firm characteristics that are appropriate to the specific research setting.

Research Gap and Novelty of the Study

Based on the foregoing review of previous studies, several research gaps emerge that provide the rationale for the present study. First, previous empirical findings regarding the effect of profitability on income smoothing remain inconsistent. Lathifah et al., (2018) reported a significant effect of profitability on income smoothing, whereas Utari et al., (2024), Maranis et al., (2016), and Prasditya, (2022) found that profitability does not significantly affect income smoothing. Second, prior studies have also produced divergent findings regarding the effect of financial leverage on income smoothing. Utari et al., (2024) found no significant effect, while Maranis (2016) and Rahim & Martilova (2024) reported a significant effect of financial leverage on income smoothing. Third, differences in the observation periods across previous studies may reflect changes in economic conditions and firm-specific circumstances. Consequently, findings from earlier periods may not capture the conditions firms face in more recent periods. Therefore, further investigation is warranted to provide additional empirical evidence concerning the factors that influence income smoothing practices.

The novelty of the present study lies in its effort to re-examine variables that have yielded inconsistent findings in previous research by employing a more recent observation period and research setting that reflects contemporary conditions. In this regard, the study is expected to contribute more up-to-date empirical evidence regarding the determinants of income smoothing practices. The study's novelty also lies in developing an empirical model that simultaneously examines the selected independent variables, identified based on findings from previous studies and the research gaps in the literature. The earlier discourse on previous research and the recognized gaps lays the foundation for establishing the connections between the variables analyzed in this study. The independent factors are anticipated to correlate with companies' inclination to smooth income. Profitability indicates a company's capacity to produce income, whereas financial leverage denotes the degree to which debt is utilized within the company's capital framework. These two factors may generate particular motivations or factors for management when establishing profit reporting policies.

Consequently, this research investigates the impact of the chosen independent factors on income smoothing. The theoretical framework delineates the proposed connections among the variables and demonstrates the anticipated interactions between the independent and dependent variables. In accordance with this theoretical framework, the research hypotheses are developed to direct future empirical investigations.

Logical Relationships Among Variables and Hypothesis Development

The Relationship between Profitability and Income Smoothing

Profitability reflects a company's ability to generate earnings by efficiently utilizing its available resources. One common measure of profitability is Return on Assets (ROA), which indicates how well a company generates profits from its total assets. A higher ROA generally reflects better corporate performance and may benefit shareholders through higher dividends and potential share price appreciation. Profitability has also become an important consideration for external stakeholders, particularly investors and creditors, as it indicates a firm's financial performance and prospects. Given this increased attention, managers of highly profitable firms may face greater pressure to maintain consistent financial performance and preserve the company's reputation. Consequently, managers may be more cautious in engaging in income smoothing practices that could potentially undermine the credibility and reliability of reported financial information.

In this regard, firms with higher levels of profitability may have less incentive to engage in income smoothing because their strong financial performance is already visible to the public and other stakeholders. Moreover, highly profitable firms are likely to receive greater public scrutiny, which may discourage managers from adopting accounting practices that could adversely affect the firm's credibility and long-term sustainability. Therefore, profitability is expected to influence managerial decisions about income smoothing.

H1: Profitability has a significant effect on income smoothing practices.

The Effect of Financial Risk on Income Smoothing

Financial risk represents an additional risk borne by common shareholders as a consequence of a firm's use of financial leverage. In this study, we measure financial risk using leverage, proxied by the Debt-to-Asset Ratio (DAR). DAR is a financial ratio that assesses the proportion of a company's total assets financed through debt by comparing total liabilities with total assets. A higher DAR indicates greater reliance on debt financing and, consequently, higher financial risk. In other words, firms with a high DAR are more dependent on debt to finance their assets, which may increase the financial risk associated with their operations. This condition may raise concerns regarding the firm's ability to meet its debt obligations using the assets available to it. As financial risk increases, managers may have stronger incentives to engage in income smoothing practices to maintain relatively stable reported earnings and reduce the likelihood of violating debt covenant requirements. Income smoothing may therefore be a managerial response to financial pressure from high leverage. Accordingly, firms facing higher financial risk are expected to be more likely to engage in

income smoothing practices. Based on this argument, financial risk is expected to affect income smoothing positively.

H2: Financial risk has a positive effect on income smoothing practices.

The Effect of Firm Value on Income Smoothing

Firm value refers to the condition achieved by a company that reflects the level of public and market confidence in its performance and prospects. It represents the market's assessment of a company based on its activities and performance over time, from its establishment to the present. A high firm value generally indicates that investors have positive perceptions of the company's financial performance, prospects, and ability to generate sustainable returns. In this study, firm value is measured using the Price-to-Book Value (PBV) ratio. PBV is calculated by comparing the market value of a company's equity with its book value of equity. A higher PBV indicates that the market values the company more than its accounting net assets. Therefore, a high PBV may reflect favorable market expectations regarding the company's future performance. A higher firm value may also create greater managerial incentives to engage in income smoothing. This is because a favorable market valuation may be associated with expectations of stable and sustainable earnings. When a company has established a strong reputation and received favorable assessments from investors, management may seek to maintain such perceptions by presenting relatively stable earnings over time. Income smoothing may consequently be viewed as a managerial strategy to preserve the company's favorable market image and investor confidence.

Furthermore, maintaining high firm value is strategically important because it may give companies greater access to external financing and capital market opportunities. A favorable market valuation can facilitate the acquisition of additional capital from existing or prospective investors, either through increased trading volume or higher share prices. In addition, a high firm value may provide greater strategic flexibility, enabling companies to undertake long-term investment and business decisions that may be more difficult for firms with lower market valuations. These considerations may incentivize managers of highly valued firms to maintain stable reported earnings to preserve investor confidence and protect the company's market position. Accordingly, firms with higher levels of firm value are expected to have a greater tendency to engage in income smoothing practices. Therefore, firm value is expected to affect income smoothing positively.

H3: Firm value has a positive effect on income smoothing practices.

METHODS

This study uses a quantitative explanatory research approach and secondary data from manufacturing companies listed on the Indonesia Stock Exchange (IDX) during 2019–2021, using 2018 as the base year to calculate changes in earnings and sales. The sample was selected using purposive sampling based on predetermined criteria, including data completeness and consistent company observations throughout the study period.

The independent variables consist of profitability, measured by Return on Assets (ROA); financial risk, measured by the Debt-to-Asset Ratio (DAR); and firm value, measured by the Price-to-Book Value (PBV) ratio. The dependent variable is income smoothing, measured using the Eckel Index and operationalized as a binary dummy variable: 1 indicates that the company engages in income smoothing practices, and 0 indicates otherwise. The data were obtained from companies' financial statements, annual reports, and stock price data.

The data analysis comprises descriptive statistics, a multicollinearity test, binary logistic regression, model goodness-of-fit assessment, the Wald test, and the Likelihood Ratio Test. The regression model's explanatory power is assessed using Pseudo R^2, specifically the Nagelkerke R^2 statistic. Binary logistic regression is used because the dependent variable, income smoothing, is categorical and dichotomous. This study's population comprises manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2019 to 2021.

RESULTS AND DISCUSSION

Descriptive Analysis

The data analyzed in this study cover 2018 to 2021 and were obtained from food and beverage subsector manufacturing companies listed on the Indonesia Stock Exchange (IDX). The descriptive statistics presented in this study include the minimum value, maximum value, mean, and standard deviation for one dependent variable, namely income smoothing, and three independent variables, namely profitability, financial risk, and firm value. Table 2 presents the descriptive statistics for each variable.

Table 2. Descriptive Statistics Results

	N	Minimum	Maximum	Mean	Std. Deviation
ROA (X1)	95	-9,71	52,67	6,7957	10,50730
LEV (X2)	95	,04	,84	,4764	,17850
PBV (X3)	95	,00	184,02	7,2540	20,73348
Perataan Laba	95	-4,30	6,29	,3116	2,10417
Valid N (listwise)	**95**				

Based on 95 firm-year observations of manufacturing companies in the food and beverage subsector listed on the Indonesia Stock Exchange (IDX) during 2018–2021, descriptive statistics show that the mean Return on Assets (ROA) is 6.7957, with a standard deviation of 10.50730. The mean value of leverage (LEV) is 0.4764, with a standard deviation of 0.17850, while the mean value of Price-to-Book Value (PBV) is 7.2540, with a standard deviation of 20.73348. Meanwhile, income smoothing has a mean value of 0.3116 and a standard deviation of 2.10417. These findings indicate considerable variation across the variables observed in the study.

Autocorrelation Test

Table 3. Autocorrelation Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,317[a]	,100	,071	2,02855	,567

1. Predictors: (Constant), PBV (X3), ROA (X1), LEV (X2)
2. Dependent Variable: Income Smoothing

The autocorrelation test yielded a Durbin–Watson (DW) statistic of 0.567. This value was compared with the Durbin–Watson critical values at the 5% significance level, based on 95 observations and four variables: three independent and one dependent. Based on these parameters, the upper bound (DU) was 1.7316. Since the DW statistic of 0.567 is below the upper bound (DU) of 1.7316, the results do not provide sufficient evidence to conclude that the model is free from autocorrelation. Therefore, interpret the autocorrelation result with caution, and further diagnostic testing may be needed to confirm the presence or absence of autocorrelation.

Table 4. Multicollinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1,235	,607		2,036	,045		
	ROA (X1)	,047	,020	,235	2,357	,021	,993	1,007
	LEV (X2)	-2,531	1,179	-,215	-2,148	,034	,989	1,011
	PBV (X3)	-,005	,010	-,052	-,514	,609	,985	1,016

a. Dependent Variable: Income Smoothing

The multicollinearity test results indicate that all independent variables have Variance Inflation Factor (VIF) values below 10 and tolerance values above 0.10. As shown in the table, each independent variable has a relatively low VIF and a tolerance value above the recommended threshold. These findings suggest no evidence of problematic multicollinearity among the independent variables in the regression model. Therefore, the independent variables are sufficiently distinct for subsequent statistical analysis.

Multiple Linear Regression Analysis

Table 5. Multiple Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1,235	,607		2,036	,045		
	ROA (X1)	,047	,020	,235	2,357	,021	,993	1,007
	LEV (X2)	-2,531	1,179	-,215	-2,148	,034	,989	1,011
	PBV (X3)	-,005	,010	-,052	-,514	,609	,985	1,016

a. Dependent Variable: Income Smoothing

Regression Analysis Results

The regression analysis yields the following equation:

Income Smoothing = 1.235 + 0.047 ROA − 2.531 LEV − 0.005 PBV + e

The results indicate that profitability (ROA) positively affects income smoothing, whereas leverage (LEV) and firm value (PBV) have negative effects. More specifically, the partial test results show that ROA has a positive and statistically significant effect on income smoothing (t = 2.357; p = 0.021). In contrast, LEV has a negative and statistically significant effect on income smoothing (t = −2.148; p = 0.034). Meanwhile, PBV exhibits a negative but statistically insignificant effect on income smoothing (t = −0.514; p = 0.609). These findings suggest that profitability and leverage significantly determine income smoothing in the observed sample, although their effects run in opposite directions. In contrast, firm value does not appear to significantly influence income smoothin

Simultaneous Test (F-test)

Table 6. F-statistic Test

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	41,722	3	13,907	3,380	,022[b]
	Residual	374,466	91	4,115		
	Total	416,188	94			

a. Dependent Variable: Income Smoothing

Predictors: (Constant), PBV (X3), ROA (X1), LEV (X2)

The ANOVA (F-test) results indicate that profitability, financial risk, and firm value jointly have a statistically significant effect on income smoothing. This finding is supported by the significance value of 0.022, which is lower than the 5% significance level (α = 0.05). Therefore, we reject the null hypothesis, indicating that the three independent variables, when considered simultaneously, significantly explain variation in income smoothing practices.

Partial Test (t-test)

Table 7. Statistical t-test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,235	,607		2,036	,045
	ROA (X1)	,047	,020	,235	2,357	,021
	LEV (X2)	-2,531	1,179	-,215	-2,148	,034
	PBV (X3)	-,005	,010	-,052	-,514	,609

a. Dependent Variable: Income Smoothing

The regression coefficient for profitability, proxied by Return on Assets (ROA), is positive at 2.357, indicating a positive relationship. This finding suggests that profitability, as measured by ROA, is positively associated with income smoothing. Furthermore, the significance level is 0.021, which is below the 5% significance threshold (α = 0.05). Therefore, we reject the null hypothesis, indicating that profitability has a statistically significant effect on income smoothing. Accordingly, profitability, as proxied by ROA, has a positive and statistically significant effect on income smoothing practices.

Coefficient of Determination (R^2)

Table 8. Coefficient of Determination Test Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,317[a]	,100	,071	2,02855

1. Predictors: (Constant), PBV (X3), ROA (X1), LEV (X2)
2. Dependent Variable: Income Smoothing

The statistical results indicate that the coefficient of determination (R^2) is 0.100. This value shows that the model explains about 10% of the variation in the dependent variable, income smoothing, based on the independent variables of profitability, financial risk, and firm value. The remaining 90% of the variation likely reflects factors not examined in this study, such as firm size, managerial ownership, public ownership, and other relevant determinants of income smoothing.

CONCLUSION

This study examines the effects of profitability, financial risk, and firm value on income smoothing practices among food and beverage subsector companies listed on the Indonesia Stock Exchange (IDX) during 2018–2021. Based on an empirical analysis of 19 companies and 95 firm-year observations, the study yields the following conclusions.

First, profitability has a positive and statistically significant effect on income smoothing practices among food and beverage subsector companies listed on the IDX during 2018–2021. This finding indicates that changes in profitability are significantly associated with changes in income smoothing practices.

Second, financial risk has a negative and statistically significant effect on income smoothing practices. This finding suggests that lower financial risk is associated with higher income smoothing practices. Conversely, higher financial risk is associated with lower income smoothing practices.

Third, firm value has a negative but statistically insignificant effect on income smoothing practices. This result indicates that higher firm value tends to be associated with lower income smoothing practices, although the relationship is not statistically significant. Conversely, a decrease in firm value tends to be associated with an increase in income smoothing practices, although this relationship likewise lacks statistical significance. Overall, the findings demonstrate that profitability and financial risk are significant determinants of income smoothing practices, whereas firm value does not exhibit a statistically significant relationship with income smoothing in the context of food and beverage subsector companies listed on the IDX.

REFERENCES

Abogun, S., Adigbole, E. A., & Olorede, T. E. (2021). Income smoothing and firm value in a regulated market: the moderating effect of market risk. *Asian Journal of Accounting Research*, *6*(3), 296–308.

Almubaydeen, T. H., Akel, A. H., alkabbji, R., Alkhatib, A., & Binsaddig, R. (2024). The effect of applying forensic accounting techniques in revealing income smoothing practices in Jordanian commercial banks. In *Artificial Intelligence and Economic Sustainability in the Era of Industrial Revolution 5.0* (pp. 511–519). Springer.

Beidleman, C. R. (1973). Income smoothing: The role of management. *The Accounting Review*, *48*(4), 653–667.

Cecilia, C. (2013). *Pengaruh Ukuran Perusahaan, Profitabilitas, Dan Leverage Operasi Terhadap Perataan Laba Pada Perusahaan Manufaktur Di Bei*. Widya Mandala Catholic University Surabaya.

Chairunnisa, S., Lestari, D. F., & Rahayu, I. (2025). Pengaruh Debt to Equity Ratio dan Current Ratio terhadap Return on Asset pada Perusahaan Rokok di Bursa Efek Indonesia Tahun 2015–2024. *Jurnal Mahasiswa Manajemen Dan Akuntansi*, *4*(2), 165-178.

Dewi, E. P., & Nurhayati, I. (2022). Pengaruh Leverage Dan Profitabilitas Terhadap Manajemen Laba Dengan Kepemilikan Manajerial Sebagai Variabel Moderasi. *Jurnal GeoEkonomi*, *13*(1), 40–54.

Fawzi, D. A. (2023). *Analisis Pengaruh Rasio Profitabilitas terhadap Pertumbuhan Laba pada Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia (BEI)(Studi Kasus PT. BTPN Syariah Tbk di Tahun 2017-2021)*. UIN Fatmawati Sukarno Bengkulu.

Hamdani, M. (2016). Good corporate governance (GCG) dalam perspektif agency theory. *Semnas Fekon*, *2016*, 279–283.

Hepworth, S. R. (1953). Smoothing periodic income. *The Accounting Review*, *28*(1), 32–39.

Lathifah, L., Hidayati, N., & Malikah, A. (2018). PENGARUH RISIKO KEUANGAN, PROFITABILITAS, DAN NILAI PERUSAHAAN TERHADAP PRAKTIK PERATAAN LABA (Income Smoothing)(Studi Empiris Terhadap Perusahaan Manufaktur yang Terdaftar di BEI tahun) 2013-2015. *E_Jurnal Ilmiah Riset Akuntansi*, *7*(03).

Maranis, C., Cahyono, Y. T., & MM, A. (2016). *Pengaruh Ukuran Perusahaan, Nilai Perusahaan, Profitabilitas, Dan financial leverage Terhadap Praktik perataan laba (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Periode 2011-2014)*. Universitas Muhammadiyah Surakarta.

Milaedy, V., Nuswandari, C., & Ma'sum, M. A. (2022). Faktor-faktor yang Mempengaruhi Perataan Laba. *E-Bisnis: Jurnal Ilmiah Ekonomi Dan Bisnis*, *15*(2), 244–254.

Munika, R., Helmiati, H., & Ikhsan, W. N. (2025). ANALISIS UKURAN PERUSAHAAN, PROFITABILITAS DAN PENGARUHNYA TERHADAP PERATAAN LABA. *Jurnal Akuntansi Kompetif*, *8*(3), 906–914.

Prasditya, D. M. (2022). *Pengaruh profitabilitas, risiko keuangan, bonus plan, dan nilai perusahaan terhadap perataan laba: Studi pada perusahaan makanan dan minuman yang terdaftar di Bursa*

Efek Indonesia periode 2017-2020. Universitas Islam Negeri Maulana Malik Ibrahim.

Rahim, C. K., & Martilova, N. (2024). Pengaruh Profitabilitas, Financial Leverage dan Umur Perusahaan Terhadap Income Smoothing Pada Perusahaan Manufaktur Sektor Industri Barang Konsumsi. *Journal of Islamic Accounting Competency*, *4*(2), 1–22.

Rohmah, V. M. (2019). *Pengaruh rasio profitabilitas terhadap nilai perusahaan dengan ukuran perusahaan sebagai variabel moderasi: Studi pada perusahaan makanan dan minuman yang terdaftar di Bursa Efek Indonesia periode 2015-2018*. Universitas Islam Negeri Maulana Malik Ibrahim.

Santosa, C., & Rasyid, S. (2022). Pengaruh asimetri informasi, financial distress, dan komite audit terhadap manajemen laba. *Akrual: Jurnal Bisnis Dan Akuntansi Kontemporer*, *15*(1), 12–22.

Sari, N. P., & Khafid, M. (2020). Peran Kepemilikan Manajerial dalam Memoderasi Pengaruh Profitabilitas, Leverage, Ukuran Perusahaan, Kebijakan Dividen Terhadap Manajemen Laba pada Perusahaan BUMN. *Jurnal Akuntansi Dan Keuangan*, *7*(2), 222–231.

Sari, R. P., & Kristanti, P. (2015). Pengaruh umur, ukuran, dan profitabilitas perusahaan terhadap perataan laba. *Jurnal Riset Akuntansi Dan Keuangan*, *11*(1), 77–88.

Suwito, E., & Herawaty, A. (2012). *Analisis pengaruh karakteristik perusahaan terhadap tindakan perataan laba yang dilakukan oleh perusahaan yang terdaftar di Bursa Efek Jakarta*.

Toni, N., MM, C., Simorangkir, E. N., Hebert Kosasih, S. E., & Ak, M. (2021). *Praktik perataan laba (Income smoothing) perusahaan: Strategi peningkatan profitabilitas, financial leverage, dan kebijakan dividen bagi perusahaan*. Penerbit Adab.

Utari, L. P. D. P., Kumalasari, P. D., & Endiana, I. D. M. (2024). Pengaruh Profitabilitas, Dividend Payout Ratio, Ukuran Perusahaan, Net Profit Margin, Resiko Keuangan Terhadap Praktik Perataan Laba Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia (BEI) Tahun 2020-2022. *Kumpulan Hasil Riset Mahasiswa Akuntansi (KHARISMA)*, *6*(1), 129–142.

Wardana, D. N., Kusbandiyah, A., Hariyanto, E., & Amir, A. (2024). Peran kepemilikan manajerial dalam memoderasi pengaruh Profitabilitas Leverage dan Ukuran Perusahaan Terhadap Manajemen Laba. *Owner: Riset Dan Jurnal Akuntansi*, *8*(2), 1508–1521.

Watts, R. L., & Zimmerman, J. L. (1990). Positive accounting theory: A ten year perspective. *The Accounting Review*, *65*(1), 131–156.

Wibowo, L. E., & Febriani, N. (2023). implementasi teori agensi, efisiensi pasar, teori sinyal dan teori kontrak dalam pelaporan akuntansi pada pt. Eskimo wieraperdana. *Researchgate. Net*.

Yulvinda, Y. (2022). *Analisis Faktor–Faktor yang Mempengaruhi Praktik Perataan Laba pada Perusahaan Manufaktur yang terdaftar di BEI Tahun 2016–2020/Yulvinda/30189117/Pembimbing: Carmel Meiden*.

Yunengsih, Y., Icih, I., & Kurniawan, A. (2018). Pengaruh Ukuran Perusahaan, Net Profit Margin, Debt To Equity Ratio, Kepemilikan Manajerial Dan Reputasi Auditor Terhadap Praktik Perataan Laba (Income Smoothing). *ACCRUALS (Accounting Research Journal of Sutaatmadja)*, *2*(2), 31–52.