

## **Uncovering the Factors that Influence Income Smoothing in the Consumer Goods Industry**

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**Abstract.** This study aimed to investigate the influence of profitability, financial leverage, and public accounting firm size on income smoothing practices, with firm size as a moderating variable. The research method used was quantitative, with a population of manufacturing companies in the consumer goods industry sector from 2018 to 2020. The sample was selected using purposive sampling, resulting in 72 companies. Data analysis was performed using Partial Least Square (PLS) with the SmartPLS 3 application. The results showed that profitability, financial leverage, and public accounting firm size had no effect on income smoothing practices. Firm size was found to moderate the effects of profitability and financial leverage, but not public accounting firm size. These findings have implications for understanding the factors that influence income smoothing practices in the consumer goods industry.

**Keywords:** Profitability · Financial Leverage · Public Accounting Firm Size · Income Smoothing Practices · Firm Size

#### Introduction

Reflection of the condition of the company can be seen from a financial statement, in the financial statements there is information needed by the party concerned with the company, namely the user of the financial statements. The most important information in measuring performance and decision making, one of which is profit. Investors often only observe the profit figures contained in the financial statements without thinking about how the process is carried out to get a profit so that management is motivated to take dysfunctional behavior. Undue behavior in relation to profit is called income smoothing practices.

One of the profit leveling practices that occurs is at PT Tiga Pilar Sejahtera Food Tbk (AISA). According to CNBC Indonesia (2019), the incident began during the investigation of PT Ernst and Young Indonesia (EY) related to the alleged inflated 2017 financial statements of the AISA group on accounts of receivables, inventories and fixed assets. This was conveyed by EY on March 12, 2019 to the new AISA management. After searching, it was found that the old directors had inflated receivables of IDR 4 trillion, then found inflated revenues of IDR 662 billion and other fund inflated amounting to IDR 329 billion in posts before interest, taxes and amortization (EBITDA), besides that there was also a flow of funds amounting to IDR 1.78 trillion such as a disbursement scheme to groups in collaboration with profit management. According to Kontan.co.id (2019), this was done by Joko Mogoginta and Budhi Istanto so that the company's profit was higher and the stock price rose. The case resulted in former PT AISA directors Joko Mogoginta and Budhi Istanto receiving 4 years in prison and a fine of 2M and 3 months in prison each. According to [1] Professor Budi Kagramanto (an expert in business law at Universitas Airlangga) assessed that the practice of window dressing often harms shareholders. According to him, if every company does this, everything will be messed up. Capital markets observer Adler Haymans said that engineering on financial statements in accounting is called income smoothing practices.

There are aspects that influence the practice of leveling profits. The first factor is profitability. Profitability is an important measure to know whether a company is in good health or not [2]. Profitability is measured using return on assets (ROA). The second aspect is financial leverage. Financial leverage is a source of funds from fixed expenses that are used with the assumption that later it will generate a greater profit than the fixed expenses incurred [3]. Financial leverage is measured using debt to total assets (DAR). The third aspect is the size of the Public Accounting Firm. The size of the Public Accounting Firm is the size of the Public Accounting Firm [4]. The Public Accounting Firm size is measured using dummy variables. There have been many studies on the effect of profitability, financial leverage and Public Accounting Firm size on profit leveling practices that have inconsistent results because there are different results from one researcher to another. According to the results of previous research by [5] profitability and financial leverage affect profit leveling practices. [4] The size of the Public Accounting Firm affects the practice of leveling profits. However, according to [6] profitability has no effect on the practice of leveling profits. According to [7] financial leverage has no effect on profit leveling practices.

Based on the phenomenon and inconsistency of the results of the research conducted, researchers think that there are variables that can strengthen and weaken the relationship between profitability, financial leverage and Public Accounting Firm size to profit leveling practices, namely making company size a moderation variable, because the larger the company size will be the greater the level of profit leveling practice, because the high profit rate makes managers even play profit in order to low tax payments. This research is the development of research conducted by [8] with the title "The Effect of Profitability and Financial Leverage on Income Smoothing with Company Size as a Moderation Variable". The development is carried out by adding the Public Accounting Firm size as an independent variable because this variable is still rarely studied, especially in the past 5 years. The research was conducted using the Partial Least Square (PLS) data analysis technique.

Table 1. Sample Selection Criteria

Criterion	Sum
Manufacturing companies in the consumer goods industry sector that publish financial statements and have been audited successively in 2018–2020	39
Manufacturing enterprises of the consumer goods industry sector that did not suffer losses in 2018–2020	24
Manufacturing companies in the consumer goods industry sector that have complete data that researchers use as research variables	24
Research Samples	24
Observation period	3
Number of observational data	72

## 2 Methodology

## 2.1 Typer of Research

This research method uses quantitative. The object of this study was carried out in a manufacturing company in the consumer goods industry sector listed on the IDX in 2018–2020 by taking a sample of data on the official IDX website www.idx.co.id.

## 2.2 Population and Sample

Based on Table 1 the population of this study was 162 companies. The sampling technique is purposive sampling.

#### 2.3 Research Indicators

The dependent variable in this study is the practice of income smoothing. Independent variables in this study used profitability, financial leverage and Public Accounting Firm. The moderation variable in this study is the size of the company. The following is a Table 2 of variable indicators:

## 2.4 Data Analysis Techniques

This study used the Partial Least Square (PLS) data analysis technique with the SmartPLS 3 software application. According to [20] PLS is often referred to as soft modeling meaning that it does not take into account the data must be with a certain measurement scale where the number of samples can be less than 100 samples. According to [21] PLS analysis consists of two measurement sub-models including the outer model and the inner model.

 Table 2. Operational Variables

Variable	Definisi	Indikator	Skala	
Income Smoothing Practices (Y)	Income Smoothing is the behavior of managers or directors that is carried out deliberately with the aim of reducing fluctuations in profit levels in the hope that this behavior can provide benefits to the company [9]	Indeks Eckel = $\frac{CV\Delta I}{CV\Delta S}$ $CV\Delta I$ dan $CV\Delta S$ can be taken into account through the formula: $\Delta \overline{x} : \sqrt{\frac{\sum (\Delta X - \Delta \overline{x})^2}{n-1}}$ Source: [10] & [11]	Nominal	
Profitability (X1)	Profitability is an indicator that is useful for measuring the performance or level of a company's ability to make a profit. The profitability ratio is connected with sales, total assets and personal capital [8].	ROA = (Net Income: Total Assets) × 100% Sumber: [12]	Ratio	
Financial Leverage (X2)	Financial Leverage is a ratio that serves to estimate the relationship of total assets with the capital used to fund the asset [13].	$DAR = \frac{\text{total Amoun of debt}}{\text{Total assets}}$ Source: [14] dan [2]	Ratio	
PAF Size (X3)	The size of the PAF is a body that has received approval from the minister of finance as a place for accountants to provide their services. The size of a public accounting firm is how small a public accounting firm is [15].	The dummy variable is related to the services used by the company, using the services of the Big Four PAF is given the number (1) one and if using the non Big Four PAF is given the number (0) zero Source: [16] & [15]	Ordinal	
Company Size (Z)	Company size is a scale that can be grouped into the size of the company in various ways, namely total assets, log size, company value and others [17]	Company Size = LN (Total Assets). Source: [18] & [19]	Ratio	

Source: Summarized by researchers

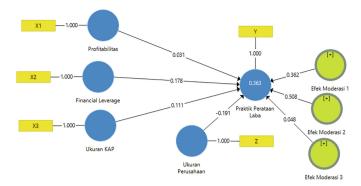


Fig. 1. SmartPLS Moderation Model Outer Output. Source: Data processed by SmartPLS 3

Table 3. Composite Realiability

	1	
	Composite Reliability	
Profitability	1.000	
Financial Leverage	1.000	
PAF size	1.000	
Income Smoothing Practices	1.000	
Company Size	1.000	
Moderation Effect 1	1.000	
Moderation Effect 2	1.000	
Moderation Effect 3	1.000	
Moderation Effect 3	1.000	

### 3 Results and Discussion

#### 3.1 Research Results

#### **Outer Model Evaluation Model**

According to [20] the outer model is used to assess the validity and reliability of the model. These measurements using reflexive indicators evaluated with the convergent and discriminatory validity of the latent construct formation indicators, composite reliability and Cronbach alpha for the measured constructs. Figure 1 are the results of the test.

#### **Convergent Validity**

Based on the results Table 3 and Table 4, the outer model results state that the composite reliability value contained in Table 3 for each construct above is very good, which is above 0.70. As for Cronbach's alpha in Table 4 for each construct, it is also

Table 4.	Cronbach's	Alpha
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	Cronbach's Alpha	
Profitability	1.000	
Financial Leverage	1.000	
PAF size	1.000	
Income Smoothing Practices	1.000	
Company Size	1.000	
Moderation Effect 1	1.000	
Moderation Effect 2	1.000	
Moderation Effect 3	1.000	

**Table 5.** Average Variance Extracted (AVE)

	Average Variance Extracted (AVE)
Profitability	1.000
Financial Leverage	1.000
PAF size	1.000
Income Smoothing Practices	1.000
Company Size	1.000
Moderation Effect 1	1.000
Moderation Effect 2	1.000
Moderation Effect 3	1.000

Source: output of SmartPLS

very good because the value of all constructs is above 0.70 so it can be concluded that each construct has a good reliability value.

## **Discriminant Validity**

Average Variance Extracted (AVE) measurement to test the validity of several existing constructs. A good construct result in this average variance extracted test should be above 0.5 [20]. In table 5, the results of the average variance extracted test have a value above 0.50, so it can be concluded that each construct has a good validity value.

#### Inner Model

According to [20] inner model, it is a test tool to determine the relationship between constructs, significance values and R-square values. The following is a Fig. 2 of the results of the inner moderation model (Table 6).

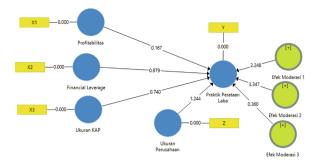


Fig. 2. Inner Model SmartPLS 3 Moderation. Source: Data processed by SmartPLS 3

Table 6. R-Square

	R-Square
Profit Alignment Practices	0.363

Based on the results of the R-square value, it means that the validity of the construct of the practice of flattening profits is 0. 363 or 36.3% means that the validity of the profitability construct, financial leverage and kap size can only have an effect of 36.3% on profit flattening practices and about 63.7% is influenced by other variables that are not hypothesized in this study.

#### 3.2 Discussion

Based on the Table 7, results of the test for significant that has been carried out by comparing the results of the statistical t test value with the p values contained in the bootstrapping calculation, where if the t-statistic > 1.96 and the p values value < 0.05 then the hypothesis is accepted. If the t-statistical value < 1.96 and the p value > 0.05 then the hypothesis is rejected. Here is a table of path coefficients resulting from significant tests:

Based on the explanation in Table 7, it can be seen that the test results in this study are as follows:

## The Effect of Profitability on Income Smoothing Practices

Based on Table 7, it is known that profitability has no effect on Income Smoothing Practices through statistical t < t table 1.96 (0.167 < 1.96) and p value (0.868 > 0.05). Companies that have a high level of profitability do not necessarily have a higher chance of carrying out Income Smoothing Practices when compared to companies that have a low level of profitability [22]. This shows that if there is an increase or decrease in the level of profitability in the company, there is no influence on the Income Smoothing Practices because not all investors look at the profitability aspect but can be seen from

Table 7. Path Coefficients

	Original sample (O)	Sample Mean (M)	Standart Error (STERR)	T Statistic (O/STERR)	P Values
Efek Moderasi 1 Income Smoothing Practices	0.362	0.350	0.161	2.248	0.025
Efek Moderasi 2 Income Smothing Practices	0.508	0.495	0.152	3.347	0.001
Efek Moderasi 3 Income Smoothing Practices	0.048	0.051	0.134	0.360	0.719
Financial Leverage Income Smothing Practices	0.178	0.134	0.182	0.979	0.328
Profitabilitas Income Smoothing Practices	0.031	-0.008	0.188	0.167	0.868
Ukuran KAP Income Smoothing Practices	0.111	0.104	0.150	0.740	0.460
Ukuran Perusahaan Income Smoothing Practices	-0.191	-0.178	0.153	1.244	0.214

other aspects such as liquidity or the company's debt level. The results of this study are in line with research conducted by previous researchers by [23].

### The Effect of Financial Leverage on Income Smoothing Practices

Based on Table 7, it is known that financial leverage has no effect on Income Smoothing Practices through statistical t < t table 1.96 (0.979 < 1.96) and p value (0.328 > 0.05). Investors often do not consider financial leverage because investors understand that loans from creditors are not the main source of the company's operations (Monica and Sufiyati, 2019). Because of this, the increase or decrease in financial leverage does not affect the Income Smoothing Practices. The results of this study are in line with research conducted by previous researchers by [10].

#### Effect of PAF Size on Income Smoothing Practices

Based on Table 7, it is known that the size of the PAF has no effect on the Income Smoothing Practices profits through statistical t < t table 1.96 (0.740 < 1.96) and p value (0.460 > 0.05). Companies sometimes do not consider being audited by big four

PAF or non big four PAF because even so all fraud can be known even though the company is audited by non big four PAF. Thus, managers are also not encouraged to carry out Income Smoothing Practices even though they are audited by big four or non-big four public accountants. The results of this study are in line with research conducted by previous researchers by [15].

# The Effect of Profitability on Income Smoothing Practices with Company Size as a Moderation Variable

Based on Table 7, it is known that the size of the company is able to moderate the relationship between profitability and Income Smoothing Practices because it has a statistical t value > t table (2,248 > 1.96) and p values < sig (0.025 < 0.05) with a regression coefficient of 0.362. Large companies with a high level of profitability are more likely to carry out Income Smoothing Practices, one of the reasons is that the larger a company is, the greater the attention of investors, so managers do various ways to make profits look stable from year to year so that managers will tend to carry out Income Smoothing Practices [8]. The results of this study are in line with research conducted by previous researchers by [24] which stated that the size of the company is able to moderate the relationship between profitability and Income Smoothing Practices.

# Effect of Financial Leverage on Income Smoothing Practices with Company Size as a Moderation Variable

Based on Table 7, it is known that the size of the company is able to moderate the relationship between financial leverage to Income Smoothing Practices because it has a statistical t value > t table (3,347 > 1.96) and p values < sig (0.001 < 0.05) with a regression coefficient of 0.508. The larger the company, the more funds needed to run the company's operations, one of the sources is debt. Large companies tend to have high Financial Leverage, Companies that have a high level of financial leverage are suspected to tend to carry out Income Smoothing Practices because the company is threatened with default so that management makes policies that can increase revenue [15]. The results of this study are in line with research conducted by previous researchers by [25] which stated that the size of the company is able to moderate the relationship between financial leverage and Income Smoothing Practices.

# Effect of PAF Size on Income Smoothing Practices with Company Size as a Moderation Variable

Based on Table 7, it is known that the size of the company is unable to moderate the relationship between the size of the PAF to the practice of flattening profits because it has a statistical t value < t table (0.360 < 1.96) and p values < sig (0.719 > 0.05) with a regression coefficient of 0.048. Companies with large or small sizes have no impact if audited by big four or non-big four PAF because if the manager carries out income smoothing practices even though audited non-big four PAF will also be discovered and also damage its reputation so that managers are reluctant to carry out profit leveling practices. This means that the size of the company is unable to moderate the size of the PAF against the income smoothing practices. The results of this study are in line with research conducted by previous researchers by [15] which stated that company

size is able to moderate the relationship between company size and Income Smoothing Practices.

## 4 Conclusion

The study found that profitability does not affect income smoothing practices. Financial leverage also does not impact these practices, as investors understand that loans from creditors are not the primary source of a company's operations. The size of the Public Accounting Firm (PAF) does not affect income smoothing practices either, as both big four and non-big four auditors can detect fraudulent behavior. However, the size of a company can moderate the relationship between profitability and income smoothing, as larger companies tend to attract more attention from investors, and therefore, managers may attempt to make profits appear more stable.

The size of a company can also moderate the relationship between financial leverage and income smoothing, as larger companies with higher financial leverage may be more likely to engage in these practices to avoid default. Finally, the size of a company does not moderate the relationship between the size of the PAF and income smoothing practices, as both big four and non-big four auditors can detect fraudulent behavior regardless of the company's size.

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