

# INCOME SMOOTHING WITH PROFITABILITY AS AN INTERVENING VARIABLE: FINANCIAL LEVERAGE AND COMPANY SIZE

Dodi Suryadi <sup>\*1)</sup>, Olandari Mulyadi <sup>2)</sup>, Try Ayu Parwati <sup>3)</sup>

Universitas Putra Indonesia YPTK, Padang

\* Corresponding Email: [dodisuryadi@upiptk.ac.id](mailto:dodisuryadi@upiptk.ac.id)

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## Abstract

The research method used in this study uses multiple linear regression analysis methods. The tests carried out in this study were the classical assumption test, descriptive test, path analysis and hypothesis testing. The test equipment used in this study was the IBM SPSS Statistics application version 25. The sample in this study were 51 manufacturing companies. The selection of this research sample was based on purposive sampling with the aim of obtaining a representative sample according to predetermined criteria. The results obtained are that there is no effect of financial leverage on profitability with a significant value of 0.629. There is no effect of company size on profitability with a significant value of 0.196. There is a financial leverage effect on income smoothing with a significant value of 0.000. There is no effect of company size on income smoothing with a significant value of 0.288. There is a profitability effect on income smoothing with a significant value of 0.00. There is an indirect effect of financial leverage through profitability on income smoothing. There is an indirect effect of company size through profitability on income smoothing.

**Keywords:** Profitability, Intervening Variable, Financial Leverage

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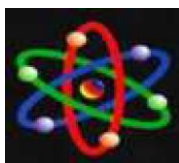
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## INTRODUCTION

The use of financial reports is divided into two parties, namely internal business users such as the management of the owner of the company and other internal parts. Meanwhile, external users such as investors, creditors, tax offices, labor unions, customers, capital markets, and the government (Pradana, 2013). Financial reports can be used as a reference in making decisions. With the existence of financial reports, we can see how the state of the company.

Profit value is one of the most potential information in financial statements and is very important, both for internal and external business. Most people think that the size of a company's profit is a measure of the company's success in managing its business. Profits that have a good image are preferred in the eyes of external parties because they can describe a low level of risk when compared to those that fluctuate. Income smoothing is caused more because management prefers to maintain a stable profit value compared to a fluctuating one (Khoirul Kabib et al., 2020). It can be interpreted that, on average, companies prefer stable profits, compared to obtaining fluctuating profits. Profits that are relatively flat from period to period will reduce market risk of the company's shares, which in turn will maintain the stock price at a stable level or even increase the company's stock price. If reported profits look stable, investors will feel interested and feel that the company has good performance so that it produces consistent profits (Thoharo & Andayani, 2018).

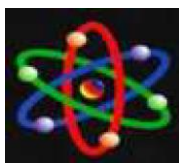
There are several factors that can influence income smoothing, one of which is financial leverage. Financial leverage can be interpreted as something that is useful within the company as the use of

financial resources that have a fixed burden with the aim of making greater profits (Devi, 2019). If the company has a relatively large debt, of course the risk will also increase, it will encourage the company to run a profit smoothing business that can be used to stabilize the company's financial condition. Based on statistical tests, the results can be obtained, namely leverage has a significant positive effect on income smoothing. If leverage increases, income smoothing will increase, as well as if leverage decreases, income smoothing will also decrease (Oktyawati & Agustia, 2014). However, this research is not in line with that conducted by (Tsuroyya & Astika, 2017) which says that financial leverage has no effect on income smoothing.

The next factor is company size, which is also capable of influencing income smoothing. Company size is the size of the company which can be classified in various ways, including revenue size, total assets and total equity. Companies that have a large size have a tendency to carry out income smoothing when compared to small companies because large companies are given more attention by the public and the government (Indrawan & Damayanthi, 2020). Companies that are larger in size and in strategic industries tend to flatten their profits because their activities involve the livelihoods of many people and because they receive great attention from analysts and investors. Based on research conducted by (Ditiya & Sunarto, 2019) that company size has a positive effect on income smoothing. The results of this study are also in line with those conducted by (Reza et al., 2022) which had positive and significant results.

The next factor that is able to give effect is profitability or profit analysis





which is a financial ratio analysis that measures a company's ability to earn profits or profits with a measure in percentages to assess the extent to which a company is able to generate profits or profits. Profitability is one of the attractive factors for shareholders to invest. The company seeks to increase profitability in each period (Wulan & Nabhan, 2021). Based on research conducted by (Christianingrum & Aisyah, 2014) has positive results, that profitability is able to influence income smoothing. In direct comparison with research conducted by (Nanda Ayunika & Yadnyana, 2018) which had positive and significant results.

## RESEARCH METHODS

This study uses intervening variables. The research method used in this study uses multiple linear regression analysis methods. The tests carried out in this study were the classical assumption test, descriptive test, path analysis and hypothesis testing. The test tool used in this study is the IBM SPSS Statistics application version 25.

### Population

Population is the area of generalization of objects or subjects that have certain qualities and characteristics determined by the researcher to be studied and then drawn conclusions. The population used in this study is the company. Manufacturing listed on the Indonesia Stock Exchange (IDX). The research observation period was carried out from 2017-2021.

### Sample

The sample in this study were 51 manufacturing companies. The selection of this research sample was based on purposive sampling with the aim of

obtaining a representative sample according to predetermined criteria.

## RESULTS AND DISCUSSION

| Descriptive Statistics |    |         |         |        |                |
|------------------------|----|---------|---------|--------|----------------|
|                        | N  | Minimum | Maximum | Mean   | Std. Deviation |
| Financial Leverage     | 25 | .11     | 3,68    | 1,4799 | .63531         |
| Company Size           | 25 | 1,57    | 1,73    | 1,6451 | .03360         |
| Income Smoothing       | 25 | .24     | 4,16    | 2,2926 | .81134         |
| Profitabilitas         | 25 | 1,07    | 2,76    | 1,6765 | .28399         |
| Valid N (listwise)     | 25 |         |         |        |                |

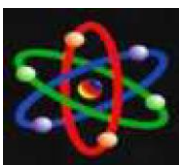
Table 1. Descriptive Statistical Test

From the table above it can be seen that the total number of samples (N) is 255 from 51 companies multiplied by 5, because the period in this study is 5 years. Financial Leverage has a minimum value of .11, a maximum value of 3.68, a mean value of 1.4799 with a standard deviation of .63531. The variable Company Size has a minimum value of 1.57, a maximum value of 1.73, a mean value of 1.6451 with a standard deviation of 0.03360. The Income Smoothing variable has a minimum value of .24, a maximum value of 4.16, a mean value of 2.2926 with a standard deviation of .81134. The Profitability variable has a minimum value of 1.07, a maximum value of 2.76, a mean value of 1.6765, with a standard deviation of .28399.

### Classic assumption test

This classic assumption test aims to provide certainty that the resulting regression equation has accuracy in estimation. It should be noted that there is





a possibility that the actual data does not meet all of these classic assumptions

**Normality test**

| One-Sample Kolmogorov-Smirnov Test |                         |
|------------------------------------|-------------------------|
|                                    | Unstandardized Residual |
| Asymp. Sig. (2-tailed)             | ,200 <sup>c,d</sup>     |

Table 2. Equation Normality Test I

Based on the results of the Kolgomorov-Smirnov equation I which shows that the data is normally distributed, namely Asymp. Sig > 0.05 which is equal to 0.200 Thus it can be concluded that the residual data is normally distributed and the regression model meets the normality assumption

| One-Sample Kolmogorov-Smirnov Test |                         |
|------------------------------------|-------------------------|
|                                    | Unstandardized Residual |
| Asymp. Sig. (2-tailed)             | ,200 <sup>c,d</sup>     |

Table 3. Equation II Normality Test

Based on the results of the Kolgomorov-Smirnov equation II which shows that the data is normally distributed, namely Asymp. Sig > 0.05 which is equal to 0.200 Thus it can be concluded that the residual data is normally distributed and the regression model meets the normality assumption

**Multicollinearity Test**

| Coefficients <sup>a</sup> |                    |                         |       |
|---------------------------|--------------------|-------------------------|-------|
| Model                     |                    | Collinearity Statistics |       |
|                           |                    | Tolerance               | VIF   |
| 1                         | (Constant)         |                         |       |
|                           | Financial Leverage | ,973                    | 1,028 |
|                           | Company Size       | ,973                    | 1,028 |

Table 4. Equation I Multicollinearity Test

Based on the equation I multicollinearity test table above, it is known that the tolerance value of all

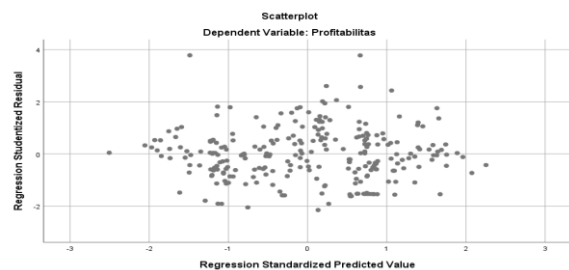
independent variables is > 0.01 and the Variance Inflation Factor (VIF) values of the three variables are < 10. Based on the criteria in decision making above, it can be concluded that multicollinearity does not occur.

| Coefficients <sup>a</sup> |                    |                         |       |
|---------------------------|--------------------|-------------------------|-------|
| Model                     |                    | Collinearity Statistics |       |
|                           |                    | Tolerance               | VIF   |
| 1                         | (Constant)         |                         |       |
|                           | Financial Leverage | ,972                    | 1,029 |
|                           | Company Size       | ,967                    | 1,035 |
|                           | Profitabilitas     | ,993                    | 1,007 |

Table 5. Equation II Multicollinearity Test

Based on the equation II multicollinearity test table above, it is known that the tolerance value of all independent variables is > 0.01 and the Variance Inflation Factor (VIF) values of the three variables are < 10. Based on the criteria in decision making above, it can be concluded that multicollinearity does not occur.

**Heteroscedasticity Test**

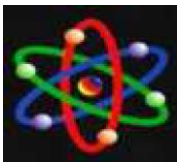


Source: Processed using SPSS 25

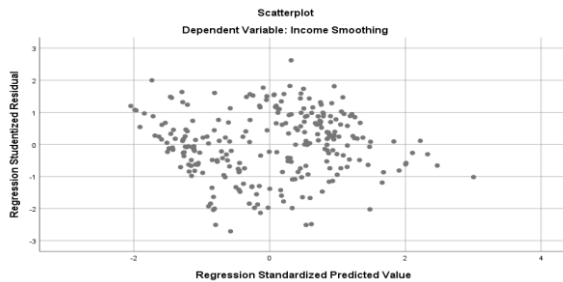
Figure 1. Equation I Heteroscedasticity Test

From the results of the heteroscedasticity test of equation I above, it can be concluded that there are no symptoms of heteroscedasticity because the points of the scatterplot graph both





below and above zero on the Y axis are not clustered and spread in an unclear pattern.



Source: Processed using SPSS 25

Figure 2. Equation II Heteroscedasticity Test

From the results of the heteroscedasticity test of equation II above, it can be concluded that there are no symptoms of heteroscedasticity because the points of the scatterplot graph both below and above zero on the Y axis are not clustered and spread in an unclear pattern.

**Autocorrelation Test**

**Autocorrelation Test Results Equation I**

| Model Summary <sup>b</sup> |               |
|----------------------------|---------------|
| Model                      | Durbin-Watson |
| 1                          | 2,192         |

Table 5. Autocorrelation Test Results Equation I

To determine whether or not there is an autocorrelation symptom with the condition that the value of  $DU < D < 4-DU$ . From the results of the equation I autocorrelation test above, it can be concluded that there is no autocorrelation symptom because the value obtained is  $1.80075 < 2.192 < 4-1.80075$ .

The regression equation shows that:

1. A constant value of 2.844: meaning that if financial leverage (X1),

company size (X2) is ignored (0), then the profitability (Z) value is 2.844

2. The regression coefficient of the financial leverage variable is -0.014: if financial leverage (X1) is increased by one (1) unit assuming company size (X2) is ignored (0), then profitability (Z) will increase by -0.014
3. The regression coefficient of the company size variable is -0.697: if the company size (X2) is increased by one (1) unit with the assumption that financial leverage (X1) is ignored (0), then profitability (Z) will increase by -0.697

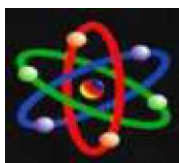
The regression equation is as follows:

$$Y = -2.019 + 0.715 X1 + 1.332 X2 + 0.633 (Z) + e$$

The regression equation shows that:

1. The constant value is -2.019: meaning that if financial leverage (X1), company size (X2) and profitability (Z) are ignored (0), then the income smoothing (Y) value is -2.019
2. The regression coefficient of the financial leverage variable is 0.715: if financial leverage (X1) is increased by one (1) unit assuming company size (X2) and profitability (Z) is ignored (0) then income smoothing (Y) will increase by 0.715
3. The regression coefficient of the company size variable is 1.332: if the company size (X2) is increased by one (1) unit with the assumption that financial leverage (X1) and profitability (Z) are ignored (0) then income smoothing (Y) will increase by 1.332





The regression coefficient of the profitability variable is 0.633: if profitability (Z) is increased by one (1) unit assuming financial leverage (X1) and company size (X2) are ignored (0) then income smoothing (Y) will increase by 0.633.

### Hypothesis testing

#### Partial Test (t)

The t test is intended to test the significant influence of the independent and dependent variables partially. Where this test compares the significant probability with an alpha of 0.05. From the results of this test, if the significant probability is less than alpha 0.05, Ho is rejected and Ha is accepted, meaning that there is an effect of X on Y. The probability is significantly greater than alpha 0.05, so Ho is accepted and Ha is rejected, meaning there is no connection. Degrees of freedom (df)  $n-k-1$ , namely  $51-2-1 = 48$  (n is the number of respondents and k is the number of independent variables), so the results obtained for t-table are 2.010. From the results of data processing can be presented in the following table:

| Coefficients <sup>a</sup> |                    |        |      |
|---------------------------|--------------------|--------|------|
| Model                     |                    | t      | Sig. |
| 1                         | (Constant)         | 3,185  | ,002 |
|                           | Financial Leverage | -,484  | ,629 |
|                           | Company Size       | -1,296 | ,196 |

a. Dependent Variable: Profitabilitas (Z)

Table 6. Partial Test of Equation I

The test results with SPSS obtained T-count for the variable financial leverage (X1)  $-0.484 < t\text{-table } 2.010$ . By using a significant limit of 0.05 the significance value of financial leverage (X1) is .629 then Ho is accepted and H1 is rejected. Thus, the

first hypothesis is rejected. The test results with SPSS obtained T-count for the variable company size (X2)  $-1.296 < t\text{-table } 2.010$ . By using a significant limit of 0.05, the significance value of company size (X2) is .196, then Ho is accepted and H2 is rejected. Thus, the second hypothesis is rejected.

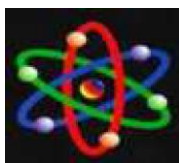
| Coefficients <sup>a</sup> |                    |        |      |
|---------------------------|--------------------|--------|------|
| Model                     |                    | T      | Sig. |
| 1                         | (Constant)         | -,957  | ,340 |
|                           | Financial Leverage | 10,842 | ,000 |
|                           | Company Size       | 1,065  | ,288 |
|                           | Profitabilitas     | 4,340  | ,000 |

a. Dependent Variable: Income Smoothing (Y)

Table 6. Partial Test of Equation II

1. The test results with SPSS obtained T-count for the financial leverage variable (X1)  $10.842 < t\text{-table } 2.010$ . By using a significant limit of 0.05, the significance value of financial leverage (X1) is .000, then Ho is rejected and H3 is accepted. Thus, the third hypothesis is accepted.
2. The test results with SPSS obtained T-count for company size variable (X2)  $1.065 < t\text{-table } 2.010$ . By using a significant limit of 0.05, the significance value of company size (X2) is .288, then Ho is accepted and H4 is rejected. Thus, the second hypothesis is rejected.
3. The test results with SPSS obtained T-count for the variable Profitabilitas (Z)  $4.340 < t\text{-table } 2.010$ . By using a significant limit of 0.05, the significance value of Profitabilitas (Z) is .000, then Ho is rejected and H5 is accepted. Thus, the fifth hypothesis is accepted.





## CONCLUSION

After conducting research on 51 manufacturing companies listed on the Indonesia Stock Exchange for five years (2017, 2018, 2019, 2020, 2021), the results of the description of Income Smoothing (Y) with profitability (Z) as an intervening variable: Financial Leverage (X1) ) and Company Size (X2), it can be concluded as follows:

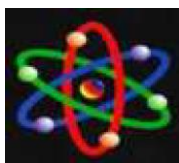
1. There is no effect of financial leverage on profitability with a significant value of 0.629
2. There is no effect of company size on profitability with a significant value of 0.196
3. There is a financial leverage effect on income smoothing with a significant value of 0.000
4. There is no effect of company size on income smoothing with a significant value of 0.288
5. There is a profitability effect on income smoothing with a significant value of 0.00
6. There is an indirect effect of financial leverage through profitability on income smoothing

There is an indirect effect of company size through profitability on income smoothing

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