

The Influence of Firm Size, Debt to Equity Ratio, and Net Profit Margin on Income Smoothing in Food and Beverage Sector Manufacturing Companies Listed on the Indonesia Stock Exchange

Maya Sari¹, Riska Adenamora²

Universitas Muhammadiyah Sumatera Utara

E-mail: mayasari@umsu.ac.id

ABSTRACT

This research aims to determine whether there is an influence between Firm Size, Debt to Equity Ratio, and Net Profit Margin on Income Smoothing either partially or simultaneously in Food and Beverage Sector Manufacturing Companies listed on the Indonesia Stock Exchange during the 2018-2022 period. The approach used in this research is an associative approach, with a population of 27 companies and a sample of 20 companies taken using the purposive sampling method. The type of data used is quantitative data. Meanwhile, the data source is in the form of secondary data. The data collection technique used in this research is a documentation study technique that uses financial report data on the Indonesia Stock Exchange. The data analysis technique used in this research is logistic regression analysis. Meanwhile, data processing in this research used SPSS (Statistical Package for The Social Science) software for Windows version 22.00. This research proves that Net Profit Margin partially influences Income Smoothing. Firm Size affects Income Smoothing, and the Debt to Equity Ratio does not. It simultaneously states that Firm Size, Debt to Equity Ratio, and Net Profit Margin influence Income Smoothing in Manufacturing companies listed on the Indonesia Stock Exchange.

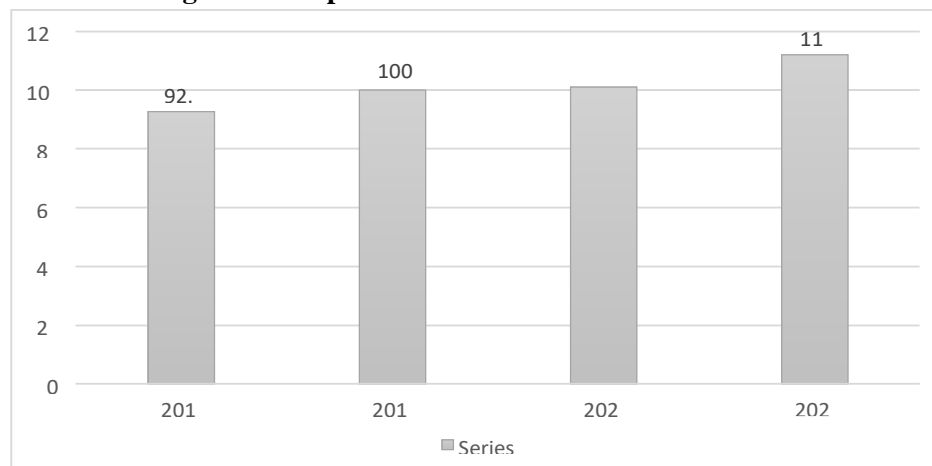
Keywords: Firm Size, Debt To Equity Ratio, Net Profit Margin, Income Smoothing

INTRODUCTION

In today's business world, more and more companies compete with other companies, especially companies going public. To compete with other companies, company management always tries to display the company's best performance in the hope of influencing the interest of potential investors to invest shares in their company. There are many media to display good company performance and performance, one of which is through financial reports, especially profits. Financial reports provide information on the financial position, changes, and the entity's performance. Income smoothing is done because financial report information is published to external parties. Based on research abroad and within the country, profit smoothing can occur in all manufacturing companies that go public. If the company's profits fluctuate, investors will think again about investing in the company, and this can encourage the practice of income smoothing. Income smoothing is one of the methods used by management to manipulate profits. Income smoothing is a practice carried out by management to achieve goals by reducing the fluctuations in profits so that they look good in the eyes of external parties (Chaerunnisa & Muslih, 2020). According to the Minister of Industry, Airlangga Hartanto, the contribution of the food and beverage industry to non-oil and gas gross domestic product they reached 38.05% in the third quarter of 2021. This achievement increased by 6.61% to IDR 16.97 quadrillion (Databoks, 2022). For clarity, see graph 1

below:

Figure 1. Graph of Economic Growth in Indonesia



Based on the graphic data above, it can be seen that the growth of the food and beverage sub-sector industry, which has experienced a significant increase, shows that the food and beverage sub-sector not only has good prospects but is also an indication that competition between food and beverage products is very tight. This makes managers in food and beverage companies continue to compete to maintain their profits so that profits look stable by carrying out income smoothing actions so that the company they run looks good.

Management tends to carry out earnings management actions that can improve financial reports. According to Sofyan (2017), stable profits with little fluctuation or variance from one period to another are considered a good achievement. This effort to stabilize profits is called income smoothing. Income smoothing is a deliberate reduction of fluctuations in reported profits so that they are at a level that is considered normal for the company (Hery, 2017). This income smoothing practice has been carried out for a long time and is still considered by some parties to be reasonable, as long as the income smoothing still uses the applicable accounting method. Management's actions to smooth income are generally based on various reasons, either to satisfy the interests of company owners, such as increasing the value of the company, so that the perception arises that the company in question has a low risk of uncertainty, increasing the company's share price, or to satisfy its interests, such as gaining compensation, maintaining his position (Juniarti, 2018). Users of financial reports need to be aware of this because information that has been added or subtracted can mislead decisions that will be made.

Income smoothing includes efforts to reduce the amount of reported profit if the actual profit is greater than the normal profit and efforts to increase reported profit if the actual profit is smaller than the normal profit because one of the managers' goals in carrying out income smoothing is to reduce profit fluctuations so that performance The company will look good among investors and investors will find it easier to predict the profits the company will earn in the coming period. Income smoothing occurs because it is influenced by factors (Pertiwi, 2019). Several previous researchers state that the factors influencing management to carry out

income smoothing in a company are very diverse. According to Immanuela (2018), these factors include Return on Assets (ROA), Net Profit Margin (NPM), Leverage, Debt to Equity Ratio (DER), and Institutional Ownership. Based on the results of research conducted by previous researchers, they gave different results even though they measured the same thing.

Investors are interested in companies that have relatively stable profits. However, investors' attention is often only focused on profits, so investors do not pay attention to the procedures used to produce profit information. This encourages companies in Indonesia to practice income smoothing. The following is sample data for food and beverage sector manufacturing companies listed on the Indonesia Stock Exchange for the period 2018 to 2022:

**Table 1. Data on Manufacturing Companies in the Food and Beverage Sector
for the period 2018-2022**

Company Code	Year	Firm Size	DER (%)	NPM(%)	Income Smoothing
DLTA	2018	28.05	0.19	1.50	0.67
	2019	27.99	0.18	0.39	2.60
	2020	27.83	0.20	0.24	4.23
	2021	27.90	0.30	0.27	3.66
	2022	27.97	0.31	0.46	2.18
ICBP	2018	31.17	0.51	0.09	10.71
	2019	31.17	0.45	0.11	99.32
	2020	32.27	1.06	0.16	6.29
	2021	32.41	1.34	1.58	0.63
	2022	32.43	1.29	1.57	0.64
INDF	2018	32.20	0.93	0.08	12,10
	2019	32.20	0.77	0.08	12.98
	2020	33.20	1.06	0.11	9.34
	2021	32.77	1.04	0.11	9.45
	2022	32.84	0.10	0.10	10.00
MYOR	2018	30.50	1.06	0.33	3.08
	2019	30.58	0.92	0.08	12.20
	2020	30.62	0.75	0.09	11.67
	2021	31.40	0.70	0.10	10.13
	2022	30.67	0.68	0.08	12,14
BREAD	2018	29.11	0.51	0.05	21.75
	2019	29.17	0.51	0.07	14,11
	2020	29.12	0.38	0.05	19.05
	2021	29.77	0.42	0.05	0.05
	2022	29.22	0.43	0.05	0.05
SKLT	2018	27.34	1.20	0.02	57.62
	2019	27.40	1.08	0.04	28.50
	2020	27.37	0.90	0.03	29.48
	2021	27.40	0.92	0.03	0.03
	2022	27.41	0.86	0.04	0.04

Based on the data in Table 1, the size of companies in the food and beverage manufacturing sector in 2018-2022 has increased yearly. The Net profit margin variable in the food and beverage manufacturing sector in 2018-2022 experienced fluctuations; in 2018-2019, it decreased, but in 2020-2022, it experienced an increase. Meanwhile, the Debt to Equity Ratio variable in the food and beverage manufacturing sector in 2018-2022

experienced a decline from 2018-2022. Income smoothing in the food and beverage manufacturing sector in 2018-2022 experienced an increase in 2018-2020, then in 2021-2022 it experienced a decrease.

Firm Size or company scale is determined by the total number of assets the company owns (Sartono, 2019). Larger Firm Sizes tend to receive more critical attention from the government, analysts, and investors. Large companies will avoid drastic profit fluctuations by carrying out profit smoothing measures because the company will avoid large tax burdens and minimize risks that might occur. This can trigger companies to take profit-smoothing actions to minimize risks that will occur later. Research conducted by Khrisna and Ulya (2021) shows that firm size significantly affects income smoothing. Meanwhile, research conducted by Yunengsih et al. (2018) found that firm size does not significantly affect income smoothing.

Net profit margin is proxied by comparing net profit divided by net sales. This ratio describes the net profit the company obtains for each sale made. This ratio describes the percentage of net profit obtained by the company for each sale due to the elements of non-operational income and costs (Heri, 2018). Net profit margin measures the profit generated by every rupiah of sales. NPM measures all efficiency, including administration, production, pricing, marketing, funding, and tax management. Management will display the best performance to increase the company's NPM and investor confidence. Improving company performance can be done by smoothing profits so that you always get the desired profit (Fahmi, 2018). Research conducted by Khrisna and Ulya (2021) and Yunengsih et al. (2018) shows that net profit margin significantly affects income smoothing. Meanwhile, research by Kurniawati (2019) showed that net profit margin did not significantly affect income smoothing.

DER compares debt and equity in company funding and shows its obligations (Kasmir, 2018). Debt to Equity Ratio (DER) shows how much debt is used to finance investments (Ditiya & Sunarto, 2019). The higher the DER will indicate the use of debt to finance investment in assets, the higher it will indicate that financial risk is increasing (Mardiana and Yulianasari, 2018). The use of large debts causes a decrease in profits resulting from an increase in the burden borne by the company. This condition encourages managers to carry out income smoothing (Mutasowifin and Kusumaningrostat, 2018). Previous research states that financial leverage significantly affects income smoothing (Ditiya & Sunarto, 2019; Mardiana & Yulianasari, 2019). Meanwhile, research by Kurniawati (2019) shows that the debt-to-equity ratio does not significantly affect income smoothing.

The object of this research is manufacturing companies because manufacturing companies are a group of industrial companies rapidly developing on a large scale in business activities with large transaction values compared to other companies. On the other hand, manufacturing companies are the most widely registered and actively trade their shares on the Indonesian Stock Exchange. Manufacturing companies tend to have relatively large total assets, total debt, and net profit. So researchers are interested in testing whether the level of debt, assets, and net profit of a company can be a factor that influences the company's income smoothing practices.

LITERATURE REVIEW

Signal Theory

Signaling theory explains that information about a company is a signal for investors in investing decisions. Signals can be financial or non-financial information stating that the company is better than others. Information about the company is a resource for investors in making decisions to invest because the information is a picture of the company's prospects in the future. Investors will assess a company based on the company's performance (Brigham, 2019).

According to Jogiyanto (2019), information published as an announcement will be a signal in making investment decisions. The market is expected to react when an information announcement is received if the announcement contains a positive value. One type of information released by a company that can be a signal for parties outside the company, especially for investors, is the annual financial report. The information disclosed in the annual report can be accounting or non-accounting. The company's annual report should contain relevant information and be able to disclose information that is considered important by report users, both inside and outside the company. All investors need this information for decision-making.

According to Husnan and Pudjiastuti (2018), managers need external parties to run a company. These parties include investors, creditors, suppliers, and customers. Investors will only invest capital if they assess the company can provide added value to the capital, which is greater than if they invest it elsewhere. For this reason, their attention will be directed to the company's ability to generate profits. On the other hand, creditors are more interested in the company's ability to repay the loans they provide. Suppliers and customers tend to pay more attention to the smooth flow of goods in and out. All this information can be found in the financial reports published by the company. The market response to a company thus depends greatly on the signals issued by the company. From this, it is clear that performance measurement is crucial in the relationship between the company and its stakeholders.

Trade of Theory

The trade-off theory explains a relationship between bankruptcy risk, taxes, and the use of debt, which is caused by the capital structure decisions made by the company. The theory refers to the balance between a company's gain and loss from its use of debt, where the tax condition of its value will increase minimally with minimal capital costs. There is asymmetric information that explains capital structure decisions taken by company management, namely the existence of information owned by a company's management, where the company can release information to the public. The trade-off theory assumes that the capital structure will be optimal if the company can make a profit with the company's liabilities being balanced. According to Nariman et al. (2022), the capital structure must balance benefits and sacrifices when using debt.

According to Kaaro in Tunnisa (2016), the trade-off concept is to balance the benefits and costs of using debt with equity. Trade-off theory and pecking order theory emphasize the benefits and costs of debt. In contrast, agency theory emphasizes the agency costs of equity and debt from the capital structure in question. Mamduh (2016) further said that the tradeoff theory implies that managers will consider the tradeoff between tax savings and costs in determining capital structure. Many things prevent companies from using as much debt as

possible. One is that the higher the debt, the greater the interest must be paid.

Income Smoothing

According to Belkaoui (2017), the best definition of income smoothing is presented by Beidleman as follows: Smoothing of reported income can be defined as a deliberate reduction or fluctuation in several levels of profit that are currently considered normal by the company. In this sense, smoothing reflects an attempt by company management to reduce abnormal variations in profits to the extent permitted by good accounting and management principles.

Income smoothing (Harahap, 2018) is "Income smoothing is a form/pattern of earnings management carried out to reduce profit fluctuations so that reported profits are relatively stable from one period to the next and are considered normal for the company. Usually stable profits where there is not much fluctuation or variance from one period to another is considered a good achievement." Arens et al. (2018) state income smoothing as follows: "Income smoothing is a form of profit regulation where income & Expenses are staggered between periods to reduce fluctuations in profits." The main goal of the company is to make a profit. Profit is the difference between income and expenses so that profit can measure input (in the form of expenses measured by costs) and output (in the form of income earned). Profit growth in a company shows that management has successfully utilized and managed the company's resources effectively and efficiently (Novien Rialdy, 2017). Income smoothing is an attempt by company management to reduce abnormal profit variations permitted by good accounting and management principles (Belkaoui, 2017). The practice of income smoothing is measured using the Eckel index (1981), which is formulated as follows:

$$\text{Income Smoothing} = \frac{CV\Delta I}{CV\Delta S}$$

Information :

CV: The coefficient of variation is the standard deviation divided by the expected value

ΔI : Change in income for one period

ΔS : Changes in net profit in one period

According to Wijoyo (2019), income smoothing is a dummy variable with the following measurement criteria:

1. If the Eckel index ≤ 1 , then the company is classified as a company that is indicated to be practicing income smoothing or ($CV\Delta S \geq CV\Delta I$) and is given status 1.
2. If the Eckel index ≥ 1 , then the company is classified as an indicated company that does not practice income smoothing or ($CV\Delta S \leq CV\Delta I$) and is given a status of 0.

Firm Size

Firm Size is one of the variables commonly used to explain variations in disclosure in company annual reports (Munawir, 2018). Firm Size is one of the variables commonly used to explain variations in disclosure in company annual reports (Sudana, 2021).

Firm Size is a measure that shows the size of a company, which is characterized by several measures, including total sales, total assets, log size, number of employees, company

market value, and company book value (Sawir, 2021). Companies always want to obtain net profit after tax because it increases their capital. In other words, net profit can be obtained if the amount of sales exceeds the operating costs. Planning and controlling the management carry out very important things to obtain a net profit by the desired amount. Companies with high sales growth require greater capital support, and vice versa for companies with low sales growth rates. The need for capital is also getting smaller. However, if funds from internal sources are insufficient, then there is no other choice for the company to use funds originating from outside the company, either in debt or by issuing new shares (Maya & Jufrizen, 2019)

Firm Size can influence the company's ability to obtain additional capital that will be used to finance the company's operational activities. High profits will influence the company's size, but it is assumed to have many assets. Thus, the company's large size will make it easier for the company to obtain funds from the capital market and have wider access to funding sources from outside, making it easier to obtain loans. Apart from that, investors tend to pay special attention to large companies. Because it is considered easier to obtain internal and external funding sources (Hery, 2018). Kasmir (2018) said that Firm Size is a scale where Firm Size can be grouped in terms of total assets, total sales, and share value.

Debt to Equity Ratio

In a business activity, determining the right capital structure is challenging for company executives because, with this decision, the company will obtain funds with minimal capital costs and maximum results. Especially in creating company value, the company's capital structure is a mixture of debt and equity proportions to fund its investment (Fahmi, 2018). According to Maya et al. (2019), the Debt Ratio determines how much debt a company has compared to its assets. According to Sawir (2021), "Debt to equity ratio is a ratio that describes the comparison of debt and equity in company funding and shows the ability of own capital to fulfill its obligations. The greater this ratio means the company's ability to pay interest is better, and the opportunity to get a loan is also higher."

Meanwhile, according to (Kasmir, 2018), "Deb to equity ratio is a ratio used to assess equity. In other words, this ratio can measure how much of one's own capital is used as collateral for debt." Liquidity shows the company's ability to fulfill financial obligations that must be fulfilled immediately or the company's ability to fulfill its financial obligations at the time of collection. The current Ratio is the comparison between current assets and current liabilities. The greater the current assets, the higher the current ratio (Januri, 2021)

Debt to Equity Ratio has goals and benefits not only for business owners or management but also for parties outside the company, especially those with relationships or interests with the company. Looking at DER, the benchmark for debt accumulation or financing is the proportion of total debt. With short or long-term liabilities, the personal amount they have (Sirait et al., 2021). Debt to equity ratio is used to measure the value of debt and equity, which is done by comparing total debt with equity, according to Joel K. Siegel and Jae K. Shim in Irham Fahmi (2018).

$$\text{Debt to equity ratio} = \frac{\text{Total Liabilities}}{\text{Total Shareholder's Equity}} \times 100\%$$

Net Profit Margin

Net profit margin (Net Profit Margin) measures a company's profitability from sales after considering all costs and income taxes. Profit margin also indicates a company's price-earnings strategy and how well it controls costs. Several experts have different understandings regarding the delivery of the meaning of Net Profit Margin (NPM) (Fahmi, 2019)

This ratio is calculated by dividing net profit by net sales. Net profit is calculated by subtracting the previous income tax profit from the income tax expense. What is meant by profit before income tax is operational profit plus other income and profits, then deducted by other expenses and losses (Heri, 2018).

According to Sawir (2021), Net Profit Margin compares net profit and sales. The greater the WPAJ Net Profit Margin, the more productive the company's performance will be so that investors' confidence in investing their capital in the company will also increase.

$$NPM = \frac{\text{Profit After Tax}}{\text{Saleclean}} \times 100\%$$

METHODS

The research conducted consisted of three independent variables, namely Firm Size (X1), Debt to Equity Ratio (X2), Net Profit Margin (X3), and income smoothing (Y) as the dependent variable. The approach in this research is to use a comparative approach that investigates causal influences (relationships), which aims to determine the influence of the independent variable on the dependent variable (Sugiyono, 2018). Based on the data used, this research is quantitative/statistical because it focuses on calculating data in numbers to test the hypotheses made.

In this research, the sampling technique used is based on the population, using non-probability sampling with a purposive sampling method, where this sampling technique has predetermined considerations. The sample selection criteria include the following: 1) Manufacturing companies in the food and beverage sector must publish audited annual reports. 2) Have complete data regarding the variables needed in the research. The sample was taken based on the population of food and beverage sector manufacturing companies listed on the Indonesia Stock Exchange (BEI) for the 2018-2022 period, totaling 20 food and beverage sector manufacturing companies. The data collection method used is a documentation study. In this research, the required secondary data collection can be obtained from the official website of the Indonesian Stock Exchange (www.idx.co.id). The data is in the form of company financial reports, which are the research population and sample.

The data analysis technique for this research uses statistical analysis, namely SPSS, which aims to carry out path analysis with latent variables. Then, descriptive statistical analysis was carried out. Descriptive analysis is a descriptive technique that provides information about the data held and is not intended to test hypotheses. This analysis is only used to present and analyze data accompanied by calculations to clarify the situation or characteristics of the data in question.

RESULTS AND DISCUSSION

Classic assumption test

Normality

Individual reflexive measures are considered high if they correlate > 0.70 with the measured construct. However, according to (Ghozali, 2013), For research in the initial stages of developing a measurement scale, a loading value of 0.5-0.6 is considered sufficient.

**Table 2. Normality Test Before Outliers
One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		100
Normal Parameters	Mean	.0000000
	Std. Deviation	18.51200110
MostExtreme Differences	Absolute	.245
	Positive	.245
	Negative	-.183
Kolmogorov-Smirnov Z		2.454
Asymp. Sig. (2-tailed)		.000

Source: SmartPLS 3 Data Processing Results (2023)

The results from Asymp can be seen by testing normality using the Kolmogorov-Smirnov test above. Sig. (2-tailed) is only 0.000, where the value is < 0.05 , which means that the confounding or residual variable has a non-normal distribution in the regression model. After removing outlier data using the z-score method, the resulting Kolmogorov-Smirnov normality test looks like the table below:

**Table 3. Normality Test After Outliers
One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		60
Normal Parameters	Mean	.0000000
	Std. Deviation	6.65590035
MostExtreme Differences	Absolute	.141
	Positive	.141
	Negative	-.090
Kolmogorov-Smirnov Z		1.094
Asymp. Sig. (2-tailed)		.182

Based on the test results in Table 3, a significance value of 0.182 was obtained with a significance level of 0.05, so it can be concluded that all data has a normal distribution or has a normal data distribution.

Multicollinearity Test

The multicollinearity test aims to determine whether there is a relationship or correlation between the independent variables. To find out the results of the multicollinearity

test in this study, look at the tolerance and VIF (Variance Inflation Factor) values in the table below:

Table 4. Multicollinearity Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-20,485	14,379		-1,425	,160		
Firm Size	1,009	,489	,257	2,062	,044	,985	1,015
DER	,547	1,567	,044	,349	,728	,972	1,029
NPM	-4,407	2,122	-.260	-2,077	,042	,976	1,024

a. Dependent Variable: Income Smoothing

Based on the multicollinearity test table above, it can be seen that there is no multicollinearity between the independent variables because none of the results of calculating the tolerance value of each independent variable show a result of less than 0.10. The results of calculating the variance inflation factor (VIF) value also show the results of each independent variable. All is at most 10. There is no multicollinearity between the independent variables in this regression model.

Heteroscedasticity Test

The heteroscedasticity test aims to test whether, in the regression model, there is an inequality of variance and residuals from one observation to another. Residuals are other variables besides company value. You can use the Spearman rank and scatterplot graph tests to test whether heteroscedasticity occurs. The following displays the results of the Spearman rank test and the scatterplot graph test.

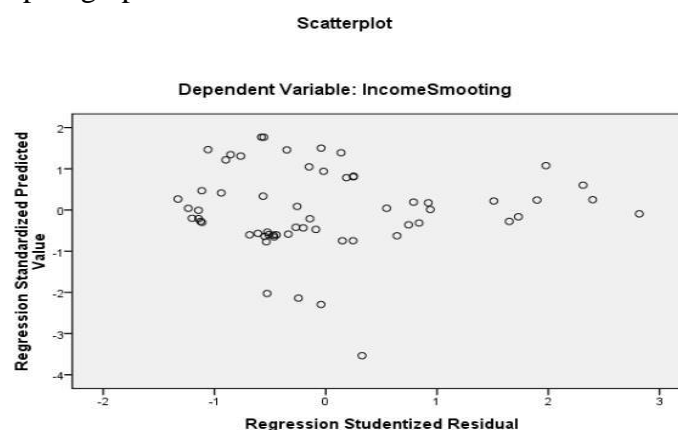


Figure 2. Heteroskedasticity test

Based on the test results seen in Figure 2, the heteroscedasticity test results above show that the regression model does not contain any symptoms of heteroscedasticity. It can be seen from the points spread randomly above and below the number 0 on the Y-axis and do not form a particular pattern, so it can be concluded that this regression model does not have symptoms of heteroscedasticity.

Autocorrelation Test

The autocorrelation test is used to test whether there is a correlation between confounding errors in period t and confounding errors in period 1 in the path analysis model. To detect autocorrelation, use the Durbin-Watson value, which is presented in Table 5 as follows:

Table 5. Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.379a	.144	.098	6.83186	1,597

a. Predictors: (Constant), NPM, Firm Size, DER

b. Dependent Variable: IncomeSmoothing

The test results in Table 5 show three independent variables (k): the Durbin Watson value is 1.597 with $\alpha = 5\%$, and du is 1.7351. So $DU < DW < 4 - DU$ ($1.7351 < 1.597 < 2,403$) means that it can be concluded that there are no problems or symptoms of autocorrelation.

Multiple Linear Analysis

According to (Ghozali, 2016), Regression analysis is used to measure how strong the relationship is between two or more variables and to show the direction of the relationship between the dependent and independent variables. This analysis is needed to determine the regression coefficients and their significance so that they can be used to answer existing hypotheses. The results of multiple linear regression analysis can be seen in Table 6 below:

Table 6. Multiple Linear Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-20,485	14,379		-1,425	,160
	Firm Size	1,009	,489	,257	2,062	,044
	DER	,547	1,567	,044	,349	,728
	NPM	-4,407	2,122	-.260	-2,077	,042

a. Dependent Variable: Income Smoothing

Based on the table of results of the multiple linear regression analysis above, the following equation is obtained:

$$Y = -20.485 + 1.009X_1 + 0.547X_2 - 4.407X_3 + 14.379$$

Judging from the equation above, it can be explained as follows:

- 1) Based on the multiple linear regression equation above, it is known that the constant value is $= -20,485$, meaning that if the independent variables Firm Size, DER, and NPM are considered constant, then it can be predicted that income smoothing will be $-20,485$ units.
- 2) The Firm Size variable (X_1) in the multiple linear regression model has a coefficient value of 1,009, meaning that if the value of the Firm Size variable increases by 1 unit and the others are constant, then it can be predicted that the value of the income smoothing variable will increase by 1,009 units.

- 3) The DER equivalent level variable (X2) in the multiple linear regression model has a coefficient value of 0.547, meaning that if the value of the DER variable increases by 1 unit the others are constant. The value of the income smoothing variable will increase by 0.547 units.
- 4) The equivalent level variable NPM (X3) in the multiple linear regression model is above the coefficient value of 4,407, meaning that the NPM variable increases.

Hypothesis test

Partial test (t)

The t-statistical test shows how far the influence of individual independent variables explains variations in the dependent variable (Ghozali, 2012). This research uses the t-statistical test to partially determine the influence of bank health assessment variables, which are proxied in profitability, Firm Size, solvency, and activity on stock returns. The criteria used in testing statistics can be seen in the significance value: If the sig value is <0.05 , then the independent variable affects the dependent variable. If the sig value is >0.05 , the independent variable does not affect the dependent variable. The statistical test results can be seen in Table 7 below.

Table 7. T-test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-20,485	14,379		-1,425	,160
	Firm Size	1,009	,489	,257	2,062	,044
	DER	,547	1,567	,044	,349	,728
	NPM	-4,407	2,122	-.260	-2,077	,042

a. Dependent Variable: IncomeSmoothing

Based on the spss output results in the table above, it shows the following results:

- 1) Firm Size has a significance value of $0.044 < 0.05$, so it can be concluded that Firm Size affects income smoothing
- 2) DER has a significance value of $0.728 > 0.05$, so it can be concluded that DER does not affect income smoothing
- 3) NPM has a significance value of $0.042 < 0.05$, so it can be concluded that NPM affects income smoothing

Simultaneous Test (F-Test)

According to Ghozali (2016), the F statistical test is used to show whether all the independent variables included in the model have a joint influence on the dependent variable. The criteria are:

Suppose the significance value is ≤ 0.05 or the calculated F value is $> F$ table. In that case, H_0 is rejected, meaning that each variable significantly affects the dependent variable and vice versa. If the significance value > 0.05 or calculated F value $< F$ table, then H_1 is accepted, meaning that each independent variable has no significant effect on the dependent

variable. The results of the F statistical test can be seen in Table 8 as follows:

Table 8. Simultaneous Test (F)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	438.124	3	146,041	3,129	.033a
	Residual	2613.760	56	46,674		
	Total	3051.883	59			

a. Predictors: (Constant), NPM, Firm Size, DER

b. Dependent Variable: Income Smoothing

Based on the table above, it shows that the significance value is smaller than 0.05 ($0.033 < 0.05$) and the calculated F value is 3.129; the F table value is 2.49, so it can be seen that the calculated F value is greater than the F table value (calculated F 3.129 > F table 2.49), so it can be concluded that each independent variable jointly influences the dependent variable or Firm Size, DER and NPM simultaneously influence income smoothing.

Determination Test

The coefficient of determination (R^2) measures the extent of the model's ability to describe variations in the independent variables. A small R^2 value means the ability of the independent variables to explain variations in the dependent variable is very limited. An R^2 value close to one means that the independent variables provide almost all the information needed to predict variations in the dependent variable. In this research, multiple linear regression is used; each independent variable partially and jointly influences the dependent variable, expressed as R^2 , to express the degree of determination test or how much influence the variable's profitability, Firm Size, solvency, and activity have on. The coefficient of determination (R^2) value can be seen in Table 9 below.

Table 9. Determination Coefficient Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.379a	.144	.098	6.83186

a. Predictors: (Constant), NPM, Firm Size, DER

b. Dependent Variable: IncomeSmoothing

Source: SPSS 23 data processing results, 2023

Based on Table 9, the coefficient of determination (R) test results above show a value (R) of 0.379. This shows that the dependent variable income smoothing can be explained by the independent variables Firm Size, DER, and NPM, amounting to 63.9%, while other variables outside this research influence 79.1%.

DISCUSSION

The Effect of NPM on Income Smoothing

NPM has a significance value of $.042 < 0.05$, so it can be concluded that NPM has an effect on income smoothing research. This research is in line with research conducted by Kurniawan et al. (2018) and Khrisna (2021) and Kurniawati (2019) produced research that

Net Profit Margin has a positive and significant influence on income smoothing.

Net profit margin is proxied by comparing net profit divided by net sales. This ratio describes the net profit the company obtains for each sale made. This ratio describes the percentage of net profit obtained by the company for each sale due to the elements of non-operational income and costs (Hery, 2018). This net income margin is often used as the goal of income smoothing by management to reduce profit fluctuations and show outside parties that the company's management performance has been effective (Rahmawati and Muid, 2019). According to Dewi (2019) states that if there is a large variability in profits, managers will tend to smooth in the hope that high profitability will raise bonus/profit standards in the future and reduce managers' concerns about achieving stable profit targets in the future.

The Influence of Firm Size on Income Smoothing

Firm Size has a significance value of $0.044 < 0.05$, so it can be concluded that Firm Size affects income smoothing. This research aligns with Widati and Arindita (2022) and Khrisna (2021), who show that firm size positively and significantly influences income smoothing. This happens because companies that are getting bigger will be in the public spotlight, so they tend not to carry out income smoothing; besides that, transactions in large companies are also becoming more complex, so income smoothing is increasingly difficult.

Firm Size is a scale that classifies the size of a company in various ways, including total assets, log size, stock market value, and others (Machfoed 1994 in Kurniawan 2018). Firm size is usually measured using the company's total assets. Companies that have large total assets can be called large companies and will receive more attention from various parties, such as analysts, investors, and the government. Large companies are more likely to practice income smoothing than small companies because they are considered to have broader prospects for business development by having large total assets, and it is easier to obtain funding from creditors to increase the company's capital.

The Effect of DER on Income Smoothing

DER has a significance value of $0.728 > 0.05$, so it can be concluded that DER does not affect income smoothing. These results are different from research conducted by Kurniawan et al. (2018), Khrisna (2021), and Kurniawati (2019), who produced research that Net Profit Margin has a positive and significant influence on income smoothing.

With that, the higher debt-to-equity ratio shows that the composition of total debt has less and less influence on total capital, so it does not impact the company's burden on external parties (creditors).

The Influence of Firm Size, Debt to Equity Ratio, and Net Profit Margin on Income Smoothing

Based on the table above it shows that the significance value is smaller than 0.05 ($0.033 < 0.05$), and the calculated F value is 3.129; the F table value is 2.49, so it can be seen that the calculated F value is greater than the F table value (calculated F $3.129 > F$ table 2.49), so it can be concluded that each independent variable jointly influences the dependent variable or Firm Size, DER and NPM simultaneously influence income smoothing. This research is in

line with research conducted by Kurniawan et al. (2018), Widati (2022), and Krisna (2021) produced research that shows that Firm Size, Debt to Equity Ratio, and Net Profit Margin have a positive and significant influence on income smoothing.

Of the several earnings management patterns, according to Dewi (2018), the pattern that is often used by management to maximize its interests or the interests of the company is the income smoothing technique. In other words, income smoothing reflects an attempt by company management to reduce abnormal variations in profits to the extent permitted by good accounting and management principles. One of the company's profit management strategies is income smoothing. Income smoothing is a common phenomenon as a management effort to reduce profit fluctuations (Khrisna, 2021).

CONCLUSION

Based on data obtained in research regarding the influence of Firm Size, debt to equity ratio, and net profit margin on income smoothing in food and beverage sector manufacturing companies listed on the Indonesian Stock Exchange in 2018-2022, it is concluded as follows: 1) Firm Size has an impact, significance value of $0.044 < 0.05$, so it can be concluded that Firm Size influences income smoothing 2) DER has a significance value of $0.728 > 0.05$, so it can be concluded that DER has no effect on income smoothing 3) NPM has a significance value of $.042 < 0.05$, so it can be concluded that NPM affects income smoothing.

The suggestions for this research are Based on the adjusted size (R) of 0.379. This shows that the dependent variable income smoothing can be explained by the independent variables Firm Size, DER, and NPM, amounting to 63.9%, while other variables outside this research influence 79.1%. So, the coefficient of determination test results mean that other independent variables still influence income smoothing; for this reason, further research is needed. It is hoped that this research can provide an understanding of the factors that are the basis for companies to carry out income smoothing actions, then become a consideration for investors in maintaining or increasing the number of shares to be invested in the Company. In carrying out income smoothing actions, it is better for companies first to consider internal and external risks; if they make the wrong decision, it will harm one of the parties, which is undesirable.

REFERENCES

- Belkaoui, A.R., (2017). *Accounting Theory* (5th ed). Jakarta. Salemba Empat.
- Brigham, E. F. dan Houston, J. F. (2019). *Dasar-Dasar Manajemen Keuangan* (Buku 2). Edisi 14. Salemba Empat. Jakarta.
- Ditiya, Y. D., & Sunarto, S. (2019). Ukuran perusahaan, profitabilitas, financial leverage, boox-tax differences dan kepemilikan publik terhadap perataan laba (Studi empiris pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2014-2017). *Dinamika Akuntansi Keuangan Dan Perbankan*, 8(1), 51–63.
- Ghozali, Imam. (2018). *Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23* (Edisi Kedelapan). Cetakan ke Delapan. Semarang: Badan Penerbit Universitas Diponegoro.
- Hery. (2018). *Analisis Laporan Keuangan*. Bandung: Grasindo.
- Harahap, Sofyan S. (2018). *“Teori Akuntansi”*. Edisi Revisi 2011. Jakarta : PT. Raja Grafindo

Persada.

Irham, Fahmi (2018). Analisis Laporan Keuangan. Cetakan keenam Bandung : Alfabeta.

Immanuela., Wibisono., dan Purnamasari. (2018). Pengaruh Ukuran Perusahaan, Return on Asset (ROA), Net Profit Margin (NPM), Leverage, Debt to Equity Ratio (DER), dan Kepemilikan Institusional terhadap Praktik Income Smoothing pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia pada Tahun 2011-2015. *Jurnal Riset Manajemen dan Akuntansi* Vol. 06 No. 02. ISSN Online: 2338-6576

Januri. 2021. Effect of Current Ratio and Debt to Equity Ratio on Return on Assets at PT Pertamina (Persero) Marketing Operational Region I. Volume: 2 Issue: 1, January 2021: Page 1-10 <http://jurnal.bundamedia grup.co.id/index.php/ijrs> ISSN ONLINE: 2745- 8350

Jufrizen, J., & Sari, M. (2019). Pengaruh Current Ratio, Debt to Equity Ratio dan Firm Size terhadap Return on Equity. *Jurnal Riset Akuntansi : Aksioma*, 18(1), 156–191. <https://doi.org/10.29303/aksioma.v18i1.58>

Jufrizen, J., Putri, A. M., Sari, M., Radiman, R., & Muslih, M. (2019). Pengaruh Debt Ratio, Long Term Debt to Equity Ratio dan Kepemilikan Institusional Terhadap Return on Asset pada Perusahaan Sub Sektor Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia. *Jurnal Manajemen Motivasi*, 15(1), 7–18. <https://doi.org/10.29406/jmm.v15i1.1376>

Kasmir. (2019). Analisis Laporan Keuangan. Jakarta. PT. RajaGrafindo Persada.

Kasmir (2018). “Analisis Laporan Keuangan”. Cetakan kelima Jakarta : RajaGrafindo Persada.

Mutasowifin, A., & Kusumaningrostat, A. (2018). Analisis Pengaruh FaktorFaktor Terhadap Income smoothing dengan Gender Sebagai Variabel Moderator pada Emiten Perbankan. *Jurnal Manajemen dan Organisasi*. Vol.2.

Mardiana, P., & Yulianasari, N. (2019). Pengaruh nilai saham, financial leverage, dan pajak penghasilan terhadap perataan laba (Studi kasus perusahaan batubara dan migas yang terdaftar di Bursa Efek Indonesia tahun 2012- 2016). *JAZ: Jurnal Akuntansi Unihaz*, 1(2), 31–38.

Novien Rialdy. 2017. Pengaruh Arus Kas Operasi Terhadap Pertumbuhan Laba Perusahaan Pada Pt Pegadaian (Persero) Kanwil I Medan. *Jurnal Akuntansi Dan Bisnis*. Vol. 3 No. 1. Issn :2443-3071 (P) Issn :2503-0337 (Online)

Reza, R., Jufrizen, J., & Rambe, M. F. (2023). Pengaruh Return on Asset, Current Ratio, dan Debt to Asset Ratio terhadap Firm Value dengan Firm Size sebagai Variabel Moderating. *Owner: Riset & Jurnal Akuntansi*, 7(1), 576–598. <https://doi.org/10.33395/owner.v7i1.1228>

Sari, M., Hariyanti, N., & Gunawan, A. (2020). Analisis Determinan Nilai Perusahaan Pada Perusahaan Transportasi di Bursa Efek Indonesia. *Jurnal Humaniora : Jurnal Ilmu Sosial, Ekonomi Dan Hukum*, 4(1), 172–182. <https://doi.org/10.30601/humaniora.v4i1.676>

Sari, M., & Jufrizen, J. (2019). Pengaruh price to earning ratio, debt to equity ratio, return on asset dan price to book value terhadap harga pasar saham. *Jurnal KRISNA: Kumpulan Riset Akuntansi*, 10(2).

- Sari, M., & Monica, D. A. (2016). Pengaruh Non Performing Loan (NPL), Loan To Deposit Ratio (LDR), Dan Biaya Operasional Terhadap Pendapatan Operasional (BOPO) Terhadap Capital Adequacy Ratio (CAR) Pada Perusahaan Perbankan Yang Terdaftar Di Bursa Efek Indonesia 2010-2015. *Jurnal Riset Akuntansi Dan Bisnis*, 16(01), 71–93.
- Sirait., S. Eka Nurmala Sari., Muis Fauzi Rambe. 2021. Pengaruh Current Ratio, Debt To Equity Ratio Dan Return On Assets Terhadap Price To Book Value Dengan Divident Payout Ratio Sebagai Variabel Intervening Pada Perusahaan Manufaktur Sub Sektor Farmasi. *Jurnal AKMAMI (Akutansi, Manajemen, Ekonomi)*, Vol. 2, No.2
- Sartono, Agus. (2019). *Manajemen Keuangan Teori dan Aplikasi*. Edisi Keempat, Yogyakarta. BPFE
- Sawir, Agnes. (2021). *Analisis Knerja Keuangan Dan Perencanaan Keuangan Perusahaan*. Jakarta: PT Gramedia Pustaka Indonesia
- Wijoyo, Dewi S. (2019). "Variabel-Variabel Yang Mempengaruhi Perataan Laba Pada Perusahaan Manufaktur Yang Publik". *Jurnal Bisnis dan Akuntansi*. STIE Trisakti. Vol. 16 No. 1. ISSN: 1410-9875