

THE EFFECT OF FIRM SIZE, LEVERAGE AND FAMILY OWNERSHIP ON EARNINGS MANAGEMENT

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Abstract. This study aims to examine the effect of firm size, leverage, and family ownership on earnings management. The population includes food and beverage companies listed on the Indonesian Stock Exchange from 2020 to 2022, from which 72 samples of established criteria are selected through purposive sampling. The secondary data involved in this study are obtained from the companies' financial reports and annual reports, and are analyzed by multiple linear regression processed by SPSS to test the respective hypotheses. The results of the study exhibit that the bigger firm size and leverage improve the earnings management while family ownership in companies does not affect earnings management.

Keywords: Firm Size; Leverage; Family Ownership; Earnings Management

I. INTRODUCTION

Companies with good performance are often measured by how much profit they earn during a certain period (Kieso et al., 2018). Company profits are very important in making business decisions, because the amount of profit value is seen as one of the company's success factors in running its business. Management manages the company's profits and this action is called earnings management. Earnings management involves management's efforts to influence the company's profitability through the selection of accounting rules. Therefore, financial statements no longer provide an accurate picture of the true value of a company due to earnings management tactics and other efforts made by companies to engineer information. The information provided does not always represent the actual state of the organization (Melisa et al., 2024). Several cases of earnings management have occurred in Indonesia.

A very famous earnings management phenomenon is the Enron Corporation incident. According to cnbcindonesia.com, unethical practices carried out include presenting incorrect income data and modifying the balance sheet in order to obtain a positive financial performance assessment. As a result of earnings management practices, Enron Corporation was officially declared bankrupt after the company suffered losses of up to US\$ 11 billion or equivalent to Rp 159.5 trillion suffered by shareholders.

One of the phenomena related to earnings management in Indonesia that occurred in food and beverage sector companies was carried out by PT Tiga Pilar Sejahtera Food Tbk (AISA). According to cnbcindonesia.com, the earnings management practices that occurred were the result of the company's unfavorable financial condition so that it was unable to pay principal and interest on bonds. From these unfavorable financial conditions, AISA's management

practiced number management in several accounts such as fixed assets, accounts receivable, inventory, and income. This case indicates that the level of debt, whether it is debt from banks or debt to suppliers owned by the company, affects the practice of managing numbers in several accounts such as fixed assets, accounts receivable, inventory, and income earnings management. As a result of these earnings management practices, the Indonesia Stock Exchange suspended their shares.

The first variable that can affect earnings management in this study is company size. Where company size can be defined as a benchmark in distinguishing the size or size of a company. The bigger a company is, the company must be able to meet the expectations of investors or shareholders because company size greatly affects earnings management (Setiowati et al., 2023). This is utilized by large companies not to report profits that are too large by choosing accounting methods that reduce profits, so that companies can save political costs, namely taxes because large companies have high political costs compared to small companies (Astria et al., 2021). This is in line with agency theory where this theory assumes that each individual will be motivated by their personal interests which makes agency conflicts between principals and agents arise. Large company management has more information than the principal, so there is a possibility of indicating earnings management practices (Sari & Khafid, 2020). Previous research related to the company size variable has a different effect on earnings management, causing a research gap. Research conducted by Purnama (2017) and Lestari & Murtanto (2018) reveals that company size has a negative effect on earnings management. Meanwhile, research conducted by Sari & Khafid (2020) and Sri Mara Eni & Suaryana (2018) states that company size has no significant effect on earnings management. Different results in the research of Bailaen & Nugroho (2023) and Umah & Sunarto (2022) state that company size has a positive effect on earnings management. Other variables that affect earnings management is leverage. Leverage is calculated by dividing total liabilities by assets. The leverage ratio can be a benchmark in seeing manager behavior in earnings management as one of the factors that influence earnings management efforts to increase company profits. The use of debt that is too high will endanger the company because the company will fall into the extreme leverage category, namely a situation where the company is trapped in a high level of debt and it is difficult to release the debt burden (Soleman Vanrate et al., 2022). A high level of leverage will cause bankruptcy risk, so earnings management is one way to manipulate financial statements to make them look attractive to investors (Suhenny, 2019). This is in line with agency theory which explains that company management is a principal and agent with different interests, where the agent may deviate and ignore company goals. Therefore, when managers are under pressure due to high leverage, it can motivate managers to practice earnings management (Sari & Khafid, 2020).

Previous research examining the leverage relationship has been carried out quite a lot, but the results of previous studies show differences. Such as research conducted by Agustia & Suryani (2018) and Bailaen & Nugroho (2023) shows that leverage has a positive effect on earnings management. Different results in Savitri's research (2019) and (Lestari & Murtanto, 2018) show that leverage has a negative effect on earnings management, while research

conducted by (Purnama, 2017) and (Fadhilah & Kartika, 2022) found that leverage has no effect on earnings management.

Companies in Indonesia are dominated by family companies. Research results by PricewaterhouseCoopers (PwC) report that 95% of businesses in Indonesia are dominated by family-owned companies. Family companies often raise issues about the low quality of corporate disclosure. According to Stockmans et al. (2013) the issue of the low quality of corporate disclosure, in this case earnings management, is caused by the high level of concentration of share ownership and the lack of market monitoring which causes the high possibility of controlling shareholders to take over minority shareholders. This is in line with the agency theory that explains that ownership structure is an important factor because it can determine agency problems. On the one hand, industry owners want to ensure that management runs the business in accordance with the owner's wishes and that the owner's interests are protected. On the other hand, industry leaders tend to prioritize their personal interests, which affects company performance (Ivan & Raharja, 2021).

According to Ghaleb et al. (2020) examined how the effect of family ownership on earnings management, the results found that family ownership has no effect on earnings management. Companies with family control in developing countries have less incentive to engage in earnings management practices. This is because family companies have their own motivation to monitor their business which can avoid earnings management practices carried out by management. Different results occur in Adiguzel's research (2013) which states that the close relationship between family members and management causes managers to manage profits to meet the long-term goals or expectations of family members and sacrifice the wealth of minority shareholders.

This study uses the object of manufacturing companies engaged in the food and beverage sector listed on the IDX for 2020-2022. This is because the development of the manufacturing industry, especially the food and beverage sector in the capital market, is considered to show significant growth. According to DataIndonesia.id, the food and beverage sector index rose 4.62% and recorded the fourth largest performance among other processing industry sectors. It can be seen from the many activities of companies on the Indonesia Stock Exchange (IDX). However, in the food and beverage sector companies there are still several companies that practice earnings management. The sample selection is supported by several previous studies, namely research from Asmara (2024); Larasati & Subiyanto (2024); Zidan (2024). The selection of 2020-2022 is because in this period the Indonesian economy is experiencing pressure on economic stability caused by various fundamentals in the global economy. Therefore, the research plan is carried out in 2020-2022 to find out what kind of stability pressure will have an impact on the corporate finance sector.

Although there have been several studies that examine the effect of company size, leverage, and family ownership on earnings management, such as some of the studies discussed above. The inconsistent research results of each variable encourage researchers to conduct further research. In this study, the family ownership variable is added as an independent variable of novelty, which previously there were not many studies examining the effect of family

ownership on earnings management. The use of the agency theory perspective is expected to provide further explanation in cases that occur in Indonesia. Furthermore, the measurement of family ownership uses the percentage of the number of shares owned by the family, which was previously measured using dummy variables.

Based on the explanation above, the researcher conducted a study with the title "The Effect of Company Size, Leverage, and Family Ownership on Earnings Management (Case Study of Food and Beverage Sector Companies Listed on the Indonesia Stock Exchange for the Period 2020-2022)". It is hoped that this research will contribute theoretically and support empirical results related to earnings management research. with variable research company size, leverage, and family ownership. This research is also expected to be useful as a reference source for further research so that readers can improve their ability and understanding of earnings management practices. In addition, the practical contribution of this research is that investors and company management are related to knowledge and insights regarding what factors can help avoid earnings management in the company. The formulation of the problems that arise in this study is whether there is a positive influence between company size and earnings management, whether there is a positive influence on earnings management between leverage and earnings management, and whether there is a positive influence between family ownership and earnings management. Meanwhile, this study aims to examine the positive effect of company size on earnings management, examine the positive effect of leverage on earnings management, and examine the positive effect of family ownership on earnings management.

II. LITERATURE REVIEW

A. *Agency Theory*

The concept of earnings management using the agency theory approach was first proposed by (Jensen et al., 1976), which states that earnings management practices are influenced by conflicts of interest between management (agent) and shareholders (principal). Management is a party authorized by shareholders to work for the benefit of the company. If in the agreement between management and shareholders there is a target such as profit, this target will be pursued by management by manipulating numbers in order to affect profits. As an agent, the manager is responsible for maximizing profits for the company owner so that the manager gets a bonus according to the agreement. To increase their wealth, managers usually apply accounting techniques that are not in accordance with actual conditions (Kazemian & Sanusi, 2015). Such conditions can occur because managers' performance cannot be thoroughly monitored and the goals between managers and shareholders are not always aligned (Kazemian & Sanusi, 2015). Earnings management practices and agency theory have a relationship with each other. Information asymmetry between management and shareholders is an important situation for earnings management to occur.

B. *Earnings Management*

The profit generated by the company is a measure of the company's condition. Company profits also determine the level of performance of an entity, this results in management having

an incentive to manipulate reported profits. This earnings management practice can damage the quality of information provided in financial statements about earnings. This will have a negative impact on financial performance (Widagdo et al., 2021).

Earnings management is an action taken by management to influence company profits, which can be done legally or illegally. Legal practices in earnings management indicate that management tries to influence the numbers that can be done in accordance with the financial reporting rules contained in Accounting Standards which can be done by shifting the period of income and expenses. Meanwhile, illegal practices are known as financial fraud which is carried out by reporting fictitious income and cost transactions (Widyani, 2023).

Healy et al. (1998) defines earnings management as something that occurs when managers use judgment in a financial report. Arrange transactions to change financial statements with the aim of manipulation. The existence of earnings management practices in a company can be analyzed through a modification of the Jones (1995) model which is considered the best and is widely used in research because it can detect earnings management and provide more accurate results (Khoirunnisa & Lawita, 2023). The measurement of the discretionary accruals model in this study refers to research conducted by Astriah et al. (2021) is formulated as follows:

1. Calculation of the TACit value (Total accruals of company i in period t) using the cash flow approach:

$$TACit = NIit - CFOit$$

Description:

TACit = Total accruals in company i year t

Ait-1 = Total assets of company i in year t

NIit = Net income at company i year t

CFOit = Operating cash flow at company i year t

2. Then find the accrual value using a simple linear regression equation or ordinary least square (OLS):

$$TACit / Ait = \beta_1(1/Ait-1) + \beta_2(\Delta REVit / Ait-1) + \beta_3(PPEit / Ait-1) + \epsilon it$$

Description:

TACit = Total accruals in company i year t

Ait = Total assets of company i in year t

$\beta_1, \beta_2, \beta_3$ = Coefficient

$\Delta REVit$ = Change in total revenue of company i in year t

PPEit = Total assets tangible assets of company i in year t

ϵit = Item error

3. Find the value of nondiscretionary accruals (NDAC) using regression coefficients:

$$NDACit = \beta_1(1/Ait-1) + \beta_2(\Delta REVit / Ait-1) + (\Delta RECit / Ait-1) + \beta_3(PPEit / Ait-1) + \epsilon it$$

Description:

NDACit = Nondiscretionary accruals company i in year t

$\beta_1, \beta_2, \beta_3$ = Coefficient

Ait = Total assets of company i in year t

$\Delta REVit$ = Change in total revenue of company i in year t minus the revenue of company in year t-1.

$\Delta RECit$ = Company i's accounts receivable in year t minus revenue in year t-1

PPEit = Total tangible assets of company i in year t

4. Next determine discretionary accruals

$$DACit = (TACit/Ait-1) - NDACit$$

Description:

DACit = Discretionary accruals

TACit = Total accruals in company i in year t

NDACit = Nondiscretionary accruals company i in year t

C. Company Size

Company size is a measurement of the size of a company which is expressed or valued by assets, total sales, total profits, and other factors (Brigham & Houston, 2013).

Company size consists of dividing the company into large and small businesses. Grouping companies on the basis of operating scale (large or small) can be used by investors as one of the variables in determining investment decisions. Large companies generally have large total assets and are better known to the public so that they can attract investors to invest in these companies. In addition, creditors also have more confidence in providing financing to companies that are larger and known by the public. If the company is more widely known to the public, the easier information about the company will be obtained. The size of the company for investors is an indication that the company has a greater ability to return its investment. So the formula for the company size indicator is:

$$SIZE = \ln (\text{Total Assets})$$

Description:

SIZE = Company

Size Ln = Natural Logarithm of Leverage

Leverage is a ratio used to measure how much debt burden the company must bear and the company's ability to pay debt (Firmansyah & Anwar, 2019). The capital structure owned by the company can be described through this leverage ratio. The leverage ratio can measure how much the company is financed with debt. The use of this ratio has the aim that the benefits obtained can be greater than the cost of assets and sources of funds. Thus the use of leverage will increase profits for shareholders. Conversely, leverage can also increase earnings risk. If the company does not get the appropriate profit then the use of leverage will reduce shareholders' profits (Agustia & Suryani, 2018).

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A company is threatened with liquidation, so actions that management may be able to take by means of earnings management. By practicing earnings management, the company's performance will look good in the eyes of shareholders and outsiders, even though the company is not in a good condition. The measurement in this study uses the Debt to Assets Ratio (DAR) because this ratio is a ratio used to measure the amount of assets financed by debt. The following is the DAR formula that will be used to calculate leverage (Khoirunnisa & Lawita, 2023), namely:

$$\text{Debt to Assets Ratio} = \text{Total Debt} / \text{Total Assets}$$

D. Family Ownership

Family ownership is defined as one or more family members (blood or marriage) who have strong control over company management, own a number of shares, and act as officers or directors of the company (Alhebri et al., 2021). Family owners are directly involved in managing the company such as serving as directors or managers. This shows that agency conflicts do not occur between agents and principals but between majority and minority shareholders. Agency conflicts affect the operations, financial reporting, and valuation of family firms (Cheng, 2014).

Family relationships of shareholders can be identified by various approaches. This study uses the reference of Anderson et al. (2002) to identify founding family share ownership and the presence of family members in the board of directors or board of commissioners, by looking at the names of the board of directors and board of commissioners. If the names of the board of directors and the board of commissioners who tend to be the same in several years have shares in the company, then the company is categorized as a company with family share ownership (Pratiwi & Suandi, 2023) which can be measured by:

$$\text{FO} = \text{Number of shares held by family} / \text{Number of company shares outstanding}$$

E. Hypothesis Development

1. The Effect of Company Size on Earnings Management

Company size is one of the factors that have an impact on earnings management. Company size is a classification scale of the size of the company as measured by the total assets owned by the company. According to the results of Umah & Sunarto's research (2022), company size has a positive effect on earnings management, company size is one of the factors considered by investors in making investments, because large companies are considered to have reached maturity which reflects that the company is relatively stable. So that large companies have less risk than small companies and this is utilized by large companies not to report profits that are too large by choosing accounting methods that reduce profits, so that companies can save political costs, namely taxes. This is because large companies have high political costs compared to small companies (Astria et al., 2021).

This is in line with agency theory where this theory assumes that each individual will be motivated by their personal interests which makes agency conflicts between principal and agent arise. Large company management has more information than the principal, so there

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is a possibility of indicating management practices. The results of research from Bailaen & Nugroho (2023) state that company size has a positive effect on earnings management, companies with medium to large scale can be encouraged to practice earnings management due to their funding needs. From this explanation, the first hypothesis is formulated, namely:

H1: There is a positive influence between company size on earnings management.

2. The Effect of Leverage on Earnings Management

Leverage is the ratio of debt to equity which can show how much of the costs used for company operations are covered by debt (Sari & Khafid, 2020). leverage can be a benchmark in seeing manager behavior in earnings management as an effort to increase company profits. The use of debt that is too high will endanger the company because the company will fall into the extreme leverage category, namely a situation where the company is trapped in a high level of debt and it is difficult to release the debt burden (Soleman Vanrate et al., 2022). A high level of leverage will cause bankruptcy risk, so earnings management is one way to manipulate financial statements to make them look attractive to investors (Suheny, 2019). This is in line with agency theory, which describes that agents act to increase individual interests compared to increasing the interests of the company. So that a high level of leverage can reduce manager profits so that managers carry out earnings management to increase their profits (Elhawary & Hassouna, 2021).

According to Bailaen & Nugroho's research (2023), it shows that leverage has a positive effect on earnings management, which means that companies with high levels of debt can cause high earnings management to occur. The results of this study are in line with Oktaviana & Rivandi's research (2023) which states that leverage has a positive effect on earnings management. According to the theory and the previous explanation, the second hypothesis can be drawn, namely:

H2: There is a positive influence between leverage.

3. The Effect of Family Ownership on Earnings Management

Companies with family ownership are characterized by a concentrated ownership structure, this concentrated ownership can affect the quality of financial statements (Anderson et al., 2002). Family firms often raise issues about the low quality of corporate disclosure. According to Stockmans et al. (2013) the issue of the low quality of corporate disclosure, in this case earnings management, is caused by the high level of concentration of share ownership and the lack of market monitoring which causes a high possibility of controlling shareholders to take over minority shareholders. This is in line with agency theory which explains that ownership structure is an important factor because it can determine agency problems. On the one hand, industry owners want to ensure that management runs the business in accordance with the owner's wishes and the owner's interests are protected. On the other hand, industry leaders tend to prioritize their personal interests, which affects company performance (Ivan & Raharja, 2021).

According to Widagdo et al. (2021) shows that the relationship between family members and management causes managers to manage profits to meet the long-term goals and expectations of family members and sacrifice the wealth of minority shareholders. According to some of the previous explanations, the third hypothesis can be drawn, namely: H3: There is a positive influence between family ownership on earnings management.

III. RESEARCH METHODOLOGY

A. Population and Sampling Technique

The population in this study are all food and beverage manufacturing companies listed on the Indonesia Stock Exchange for 2020- 2022. The reason for using the population of food and beverage companies is because the implementation of earnings management in these companies is quite high. The population list can be accessed via www.idx.co.id.

The sample in this study was carried out using purposive judgment sampling method with certain criteria in accordance with the variables. Based on the results of selecting samples with purposive judgment sampling technique, a total of 24 companies met the criteria, so that the total observations were 72 companies. The sample selection results are as follows:

Table 1 Sample Selection

No.	Criteria	Number of Companies
1	Food and beverage sector companies listed on the Indonesia Stock Exchange during 2020-2022	26
2	Food and beverage sector companies whose financial reports are incomplete during the period 2020-2022	(1)
3	Food and beverage sector companies with incomplete annual reports during the period 2020-2022	(1)
4	Final Sample	24

B. Dependent Variable (Y)

The dependent variable of this study is earnings management. Earnings management measurement is done using discretionary accruals which are calculated by setting aside total accruals (TACC) and nondiscretionary accruals (NDACC). Discretionary accruals (DACC) are an abnormal level of accruals that come from management policies to carry out earnings management as they wish. Therefore, this study uses the discretionary accrual method with the Modified Jones model. The reason for choosing this model is because the Modified Jones model is considered the best model in detecting earnings management compared to other models and provides the most accurate results (Astria et al., 2021). The following are the stages of determining discretionary accruals:

1. Calculation of the TACit value (Total accruals of company i in period t) using the cash flow approach:

$$TACit = Nlit - CFOit$$

Description:

TACit = Total accruals in company i year t

Nlit = Profit net income in company i year t

CFOit = Operating cash flow at company i year t

2. Then find the accrual value using a simple linear regression equation or ordinary least square (OLS):

$$TACit / Ait = \beta_1(1/Ait-1) + \beta_2(\Delta REVit/Ait-1) + \beta_3(PPEit /Ait-1) + \epsilon it$$

Description:

TACit = Total accruals in company i year t

Ait = Total assets of company i in year t

$\beta_1, \beta_2, \beta_3$ = Coefficient

$\Delta REVit$ = Change in total revenue of company i in year t
PPEit = Total tangible assets of company i in year t

ϵit = Item error

3. Find the value of non-discretionary accruals (NDAC) using regression coefficients:

$$NDACit = \beta_1(1/Ait-1) + \beta_2(\Delta REVit /Ait-1) + (\Delta RECit /Ait-1) + \beta_3(PPEit /Ait-1) + \epsilon it$$

Description:

NDACit = Non discretionary accruals of company i in year t

$\beta_1, \beta_2, \beta_3$ = Coefficient

Ait = Total assets of company i in year t

$\Delta REVit$ = Change in total revenue of company i in year t minus the revenue of company i in year t-1

$\Delta RECit$ = Company i's accounts receivable in year t minus revenue in year t-1

PPEit = Total tangible assets of company i in year t

4. Next determine discretionary accruals

$$DACit = (TACit/Ait-1) - NDACit$$

Description:

DACit = Discretionary accruals

TACit = Total accruals at company i in year t

Ait-1 = Total assets of company i in year t

NDACit = Non discretionary accruals of company i in year t

C. Independent Variable (X)

1. Company Size

This study uses the company size variable as an independent variable. Company size is a description of the size of a company which is determined by certain predetermined limits (Zeptian & Rohman, 2013). These limits are in the form of total assets, sales and market capacity. In this study, in calculating the size of the company using the proxy log total assets. To calculate company size, you can use the following formula:

$$\text{SIZE} = \text{Ln (Total Assets)}$$

Description:

SIZE = Company

Size Ln = Natural Logarithm of Leverage

This study uses the leverage variable as an independent variable. Leverage is used to measure how much the company is financed with debt. The use of debt that is too high will endanger the company's condition because the category is included in the extreme leverage category, the company is said to be in the extreme leverage category when the company is trapped in a high level of debt and it is difficult to release the debt burden. The ratio used to measure leverage is the Debt to Asset Ratio (DAR) with the following formula:

$$\text{Debt to Assets Ratio} = \text{Total Debt} / \text{Total Assets}$$

2. Family Ownership

This study uses the family ownership variable as an independent variable. Family Ownership is defined as a family company where the percentage of shareholders is dominated by the family. Family relationships between shareholders can be identified with various approaches, according to research by Pukthuanthong et al., (2013) identifying that the founding family's share ownership or the presence of family members in the composition of the board of directors or commissioners, by looking at the names of the composition of the board of directors and commissioners. In this study, family ownership is measured using the formula:

$$\text{FO} = \text{Number of shares held by family} / \text{Number of company shares outstanding}$$

IV. RESULT AND DISCUSSION

A. Overview of Research Objects

The data used in this study are financial reports and annual reports of food and beverage sector companies listed on the Indonesia Stock Exchange in the period 2020 - 2022. The sampling process uses a purposive sampling method with criteria determined by the researcher. The number of samples that meet the criteria is 24 companies from the food and beverage sector listed on the Indonesia Stock Exchange.

B. Presentation of Data Testing Results Descriptive Statistical Test

According to Ghozali (2018), descriptive statistical analysis is used to analyze data by describing the data that has been collected without making general conclusions. The results of descriptive statistics in this study are shown in Table 2 below:

Table 2 Descriptive Statistics Results

Variables	N	Min.	Max.	Me an	Std. Deviation
Company Size (X1)	72	25.31	32.83	28.3858	1.88963
Leverage (X2)	72	0.10	0.96	0.4290	0.19863
Family Ownership (X3)	72	0.00	0.99	0.1393	0.26559
Earnings Management (Y)	72	-2.26	0.36	- 0.6465	0.40280
Valid N (listwise)	72				

Source: Data Processed by Researchers Using SPSS (2024)

C. Classical Assumption Test

The classic assumption test consists of normality test, multicollinearity test and heteroscedasticity test. The test results in this study are as follows:

1. Normality Test

The basis for decision making used in this test is if the significance value (p-value) is more than 0.05, it can be concluded that the residual value is normally distributed. Conversely, if the significance is less than 0.05, it can be concluded that the residual value is not normally distributed (Ghozali, 2018). The normality test results are presented in the following table:

Table 3 Normality Test Results

Significance (Asymp. Sig. (2-tailed))	Description
0,200	Normal

Source: Data Processed by Researchers Using SPSS (2024)

Based on the normality test results presented in Table 4.2, the significance (p- value) of 0.200 is greater than 0.05. This result concludes that the residual value is normally distributed.

2. Multicollinearity Test

The basis for decision making used in this test is if the tolerance value > 0.1 or the VIF value < 10 , it indicates that there is no multicollinearity between the independent variables. Conversely, if the tolerance value is less than 0.1 or the VIF value is greater than 10, it indicates multicollinearity between the independent variables (Ghozali, 2018). The multicollinearity test results are presented in the following table:

Table 4 Multicollinearity Test Results

Variables	Statistics Collinearity		Description
	Tolerance	VIF	
Company Size (X ₁)	0,654	1,528	No available multicollinearity
Leverage (X ₂)	0,670	1,492	No available multicollinearity
Family Ownership (X ₃)	0,971	1,030	No available multicollinearity

Source: Data Processed by Researchers Using SPSS (2024)

Based on the multicollinearity test results presented in Table 4, it shows that the tolerance value of all variables is greater than 0.1 so it can be concluded that there is no multicollinearity between the independent variables. In addition, the VIF value of all variables is smaller than 10 so it can be concluded that there is no multicollinearity between the independent variables.

3. Heteroscedasticity Test

The basis for decision making used in this test is when the significance value is less than 0.05, it can be concluded that heteroscedasticity occurs. Conversely, if the significance value is greater than 0.05, it can be concluded that heteroscedasticity does not occur (Ghozali, 2018). The results of the heteroscedasticity test are presented in the following table:

Table 6 Heteroscedasticity Test Results

Variables	Significance	Description
Company Size(X ₁)	0,300	There is no heteroscedasticity
Leverage (X ₂)	0,811	There is no heteroscedasticity
Family Ownership(X ₃)	0,952	There is no heteroscedasticity

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Source: Data Processed by Researchers Using SPSS (2024)

Based on the results of the heteroscedasticity test presented in Table 4.4, it shows that the significance of all variables is greater than 0.05. Thus it can be concluded that there are no symptoms of heteroscedasticity or data that have constant variance.

4. Autocorrelation Test

The autocorrelation test using Durbin- Watson (DW) aims to test whether a linear regression model has a correlation between errors in period t and errors in period $t-1$ (previous). If there is a correlation, then there is an autocorrelation problem. A good regression model should be free from autocorrelation (Ghozali, 2018). From the Durbin-Watson table for $n = 72$ (number of samples) and $k = 3$ (number of independent variables) it is known that the dL value is 1.532 and the $4-dL$ value is 2.468 ($4-1.532$), the dU value is 1.705 and $4-dU$ is 2.295 ($4-1.705$). The results of the autocorrelation test are presented in the following table:

Table 7 Autocorrelation Test Results

Durbin-Watson	dUValue	4-dU value
1,921	1,705	2,295

Source: Data Processed by Researchers Using SPSS (2024)

Based on the autocorrelation test results presented in Table 4.5, it can be seen that the Durbin-Watson test value of 1.921 is between 1.705 and 2.295. Therefore, it can be concluded that there is no autocorrelation between residues [$dU < DW < (4-dU)$].

D. Multiple Linear Regression Analysis

Multiple linear regression analysis is used to determine how the dependent variable, namely earnings management (Y), is related to two or more independent variables. This study uses multiple regression analysis because it consists of three independent variables, namely company size (X1), leverage (X2), and family ownership (X3). This test includes:

1. Adjusted R^2 (Coefficient of Determination)

The basis for decision making used in this test is that when the Adjusted R Square value is closer to the value 1, the ability of the independent variable to influence the dependent variable will be the stronger (Ghozali, 2018). The results of the coefficient of determination are presented in the following table:

Table 8 Coefficient Determination Table

R	R Square	Adjusted R Square
0,633	0,400	0,374

Source: Data Processed by Researcher Using SPSS (2024)

Based on the results of the coefficient of determination presented in Table 4.7, it shows that the Adjusted R Square is 0.374. Therefore, it can be concluded that the independent variables in this study, namely company size, leverage, and family ownership, can influence

the dependent variable, namely earnings management by 37.4%. Meanwhile, 62.6% of earnings management variables will be influenced by other variables not discussed in this study.

In addition to the coefficient of determination, there is also a correlation coefficient which shows the magnitude of the relationship between the firm size, leverage, and family ownership variables and the earnings management variable, namely the R value of 0.633. This correlation value indicates that the relationship between the independent variable and the dependent variable is in the strong category because it is in the range of 0.6-0.8.

2. F-Test

The basis for decision making used in this test is that if the significance value is smaller than 0.05, it can be concluded that the regression model used is correct. Conversely, if the significance value is greater than 0.05, it can be concluded that the regression model used is incorrect. If the result is significant, then H_0 is rejected and H_1 is accepted. Meanwhile, if the result is not significant, then H_0 is accepted and H_1 is rejected (Ghozali, 2018). The regression model test results are presented in the following table:

Table 9 F-Test Table

Model	Sum of Square	df	Mean Square	F	Sig.
Regression	4,613	3	1,538	15,138	0,000
Residual	6,907	68	0,102		
Total	11,520	71			

Source: Data Processed by Researchers Using SPSS (2024)

Based on the F test results presented in Table 9, the significance obtained is 0.000. Therefore, it can be concluded that the regression model used is appropriate, in other words, the variables of company size, leverage, and family ownership of disclosure can simultaneously affect earnings management. This means that H_0 is rejected and H_1 is accepted, so it can be concluded that the regression model used is good for estimation.

3. T-Test

The basis for decision making used in this test is if the significance value is smaller than 0.05, it can be concluded that the independent variable has a significant effect on the dependent variable. Conversely, if the significance value is greater than 0.05, it can be concluded that the independent variable has an insignificant effect on the dependent variable (Ghozali, 2018). Partial hypothesis test results are presented in the following table:

Table 10 Equation Table of Regression Results

Variables	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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Ramadhanty (The Effect of Firm Size, Leverage and Family Ownership on Earnings Management)

Dependent	Independent	β	Std. Error	Beta		
Y	(Constant)	-2,844	0,648		-4,386	0,000
	X ₁	0,065	0,025	0,304	2,619	0,011
	X ₂	0,814	0,233	0,4	3,489	0,001
	X ₃	0,063	0,144	0,041	0,435	0,665

Source: Data Processed by Researchers Using SPSS (2024)

The regression equation used to determine the form of the relationship between the independent variable and the dependent variable. The regression equation obtained as follows: $Y = -2.844 + 0.065X_1 + 0.814X_2 + 0.063X_3$

Description:

- Y = Earnings Management
- A = Intercept value (constant)
- β = Regression Coefficient
- X₁ = Company Size
- X₂ = Leverage
- X₃ = Family Ownership

Based on the regression model equation presented above, the following conclusions can be drawn:

- a. Regression coefficient (β_1) between firm size and earnings management is 0.065 indicates a positive relationship between the two variables. The significance value between company size and earnings management is $0.011 < 0.05$. Therefore, it can be concluded that company size has a positive and significant effect on earnings management. Then H_1 is accepted and H_0 is rejected.
- b. Regression coefficient (β_2) between leverage and earnings management of 0.814 indicates there is a positive relationship between the two variables. The significance value between leverage and earnings management is $0.001 < 0.05$. Therefore, it can be concluded that leverage has a positive and significant effect on earnings management. Then H_2 is accepted and H_0 is rejected.
- c. The Regression Coefficient (β_3) between family ownership and earnings management of 0.063 indicates a positive relationship between family ownership and earnings management. The significance value between family ownership and earnings management is $0.665 > 0.05$. Therefore, it can be concluded that family ownership has no effect on earnings management. Therefore, H_0 is accepted and H_3 is rejected.

E. Discussion of Research Results

1. The Effect of Company Size on Earnings Management

Ramadhanty (The Effect of Firm Size, Leverage and Family Ownership on Earnings Management)

The first hypothesis in this study is that company size has a positive effect on earnings management. After testing the results obtained that company size as measured by the natural logarithm of total assets has a significant positive effect on earnings management. Thus, it can be concluded that the first hypothesis of this study is accepted. The results of this study are consistent with the results of research stating that company size has a positive effect on earnings management, namely the research of Bailaen & Nugroho (2023); Umah & Sunarto (2022).

Company size is one of the factors that investors consider in making investments, because large companies can reflect that the company is relatively stable (Setiowati et al., 2023). The size of the company can affect the implementation of earnings management because large companies must have pressure from investors to always get increasing profits. This makes management in large companies have a greater impact on the public interest than small companies. Then the measurement of the logarithm of total assets used can detect earnings management practices because the total assets owned by the company are one of the factors considered by managers in carrying out earnings management practices (Putri, 2023).

The larger the size of the company, the more the company considers the risk in managing profits, so that it becomes a gap to carry out earnings management. Therefore, the results of this study are in line with agency theory which explains that management as an agent has more information in the financial statements when compared to the principal, namely shareholders, so that there is information asymmetry which causes a conflict of interest.

2. The Effect of Corporate Leverage on Earnings Management

The second hypothesis in this study is that leverage has a positive effect on earnings management. After testing, the results show that leverage as measured by the Debt to Asset Ratio has a significant positive effect on earnings management. Thus, it can be concluded that the second hypothesis of this study is accepted. The results of this study are consistent with the results of previous studies which state that leverage has a positive effect on earnings management, namely Oktaviana & Rivandi (2023); Setiowati et al. (2023).

Leverage shows the level of the company's ability to use assets or funds that have a constant burden in order to realize a company's goal of maximizing the value of the company owner's wealth. Leverage is one of the efforts in increasing company profits, it can be a benchmark to see manager behavior in terms of earnings management. Companies that have a high level of leverage due to the amount of debt compared to the assets owned by the company are suspected of carrying out earnings management because the company is threatened with default (Suheny, 2019). The company cannot fulfill its obligation to pay debt on time, so the greater the level of leverage, the greater the chance of experiencing losses. By doing earnings management, the company's performance will appear good in front of shareholders and the public even though the company is under threat of liquidation (Caithlin, 2019).

This research is in line with the concept of agency theory which explains that there is a contractual relationship between management and shareholders to do work on behalf of the owner by delegating power to management for decision making. Leverage is analyzed to see how well the company's funds are handled by management. If the handling of funds is not done properly, then financial leverage can trigger management to carry out earnings management (Yasa, 2020).

3. The Effect of Family Ownership on Earnings Management

The third hypothesis in this study is that family ownership has no significant effect on earnings management. After testing, it is found that family ownership has no significant effect on earnings management. Thus, it can be concluded that the third hypothesis of this study is rejected. The results of this study are consistent with the results of previous studies which state that family ownership has no significant effect on earnings management, namely the research of Ghaleb et al. (2020); Wanda (2022).

Family members as company owners consider their company as an asset that will be passed on to the next generation so that family members will maintain their image and reputation to look good in front of investors (Anderson et al., 2002). Family companies tend to have good performance to maximize profits because they want their companies to last a long time. In addition, when family share ownership is very dominant, family members carry out the supervisory function well in order to ensure the accuracy and quality of reported earnings so that earnings management practices do not need to be carried out.

This research is not in line with agency theory which states that companies that separate management and ownership will be prone to agency conflicts. However, on the contrary, the presence of family members in the company will reduce agency problems. Families as long-term investors and company owners have an incentive to monitor managers in protecting their wealth. Family ownership can monitor the opportunistic interests of managers by placing family members in manager positions, so that managers can behave according to the wishes of the family (Dewi, 2016). Therefore, family ownership has no influence on earnings management practices.

V. CONCLUSION

This study aims to determine the effect of company size, leverage, and family ownership on earnings management of food and beverage manufacturing sector companies listed on the Indonesia Stock Exchange for the period 2020-2022. Based on the results of statistical data analysis, researchers obtained several conclusions. First, the larger the company size, the greater the opportunity for managers to practice earnings management. Then the higher the level of leverage in a company, the higher the earnings management practices carried out. Furthermore, the more family members who own shares in the company cannot affect the occurrence of earnings management practices.

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