

# ANALYSIS OF THE INFLUENCE OF COMPANY SIZE, PROFITABILITY, LIQUIDITY AND LEVERAGE ON EARNINGS MANAGEMENT (EMPIRICAL STUDY ON MANUFACTURING COMPANIES IN THE TRANSPORTATION AND LOGISTICS SECTOR LISTED ON THE INDONESIA STOCK EXCHANGE IN 2017-2021)

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## Abstract

This study aims to examine the effect of Firm Size, Profitability, Liquidity, and Leverage on Earnings Management in Transportation and Logistics sector companies listed on the Indonesia Stock Exchange for the 2017-2021 period. The data used in this study were obtained from financial statement data. The population used in this study are Transportation and Logistics sector companies listed on the Indonesia Stock Exchange (IDX) with a total of 30 populations with an observation period of 5 years (2017-2021). The data collection method used in this study is the purposive sampling method, with predetermined criteria to produce a sample of 6 companies. The data analysis technique used in this study is panel data regression analysis which consists of panel data regression estimation, classical assumption test, f-test and t-test, and coefficient of determination. The results showed that simultaneously Firm Size, Profitability, Liquidity, and Leverage affected Earnings Management. Partially, Firm Size and Profitability does not affect Earnings Management, while Liquidity and Leverage have a positive effect on Earnings Management.

**Keywords:** Profit management; Company Size; Profitability; Liquidity; Leverage

## INTRODUCTION

Financial statements are a source of information that can be used by users of financial statements who have an interest in a company. According to IAI, the Revised Financial Accounting Standards (Jakarta: Salemba Empat, 2009) says that financial statements aim to serve as a forum for information regarding the financial position, performance, and changes in a financial position which will be useful for users of financial statements and for making decisions. Users of financial statements usually use financial statements to access information about the company's performance in a comprehensive and in-depth manner.

The income statement is the part that is the target of manipulation activities carried out by management to obtain unilateral profits and on the other hand, it will have an impact on other parties such as investors and creditors (Yatulhusna, 2015). Management will choose certain accounting policies which later on company profits can be regulated to achieve a profit target (Lestari and Wulandari, 2019). Accounting policies are intended so that companies can increase or decrease profits by the wishes of management which aims to make the company's financial statements look good in the eyes of users of financial statements, especially interested parties. Such management actions are called earnings management (Lestari and Wulandari, 2019).

According to Yatulhusna (2015) several parties view earnings management actions from two different angles, the first one of which says that earnings management is an act of fraud. Earnings management is said to be fraudulent because of the manager's actions in playing with the numbers in the financial statements according to the desired goals. Meanwhile, on the other hand, earnings management is not fraud because it impacts the manager's freedom in determining the accounting methods used in preparing financial information, especially the income statement which is considered appropriate for the company.

Several companies were involved in the case of the application of earnings management, one of which occurred in PT Garuda Indonesia Tbk which practiced financial statement manipulation in 2018. The surge in PT Garuda Indonesia's profit was obtained from cooperation and income that had not been paid by PT Mahata Aero, but PT Garuda has recognized it as revenue in its 2018 financial statements. The service equipment installation was installed on flights for 50 Garuda Indonesia type A320 aircraft, 20 A330 aircraft, 73 Boeing 737-800 NG aircraft, and 10 Boeing 777 aircraft with a value of US\$131.94 million. This incident illustrates that PT Garuda Indonesia Tbk has practiced earnings management by increasing the company's profits.

Many factors trigger earnings management in a company, including company size, profitability, liquidity, and leverage. According to Hartono (2008), the size of the company is the size of the company can be measured by the total

assets / large assets of the company by using the calculation of the value of log total assets. Companies that have a smaller size tend to take earnings management actions, this is because small companies want to show the condition of companies that always perform well by taking earnings management actions so that investors invest their capital in the company (Amelia and Hernawati, 2016). Research conducted by Amelia and Hernawati, (2016) and Nalarreason et al., (2019) stated that firm size has a significant effect on earnings management, while research conducted by Agustia and Suryani, (2018) states that firm size has no significant effect. to earnings management.

The second factor that affects earnings management is profitability. Profitability is an action taken by the company in obtaining profits for a certain period (Kasmir, 2014). About earnings management, the higher the profitability of a company, the company's performance and ability to generate profits also increase (Agustia and Suryani, 2018). Conversely, if the profitability obtained by the company is low, it will trigger the company to take earnings management actions by increasing the income received, so that it will show shares and retain existing investors. Research conducted by Paramitha and Idayati, (2020) and Yatulhusna, (2015) showed that profitability has a significant effect on earnings management. Meanwhile, research conducted by Gunawan et al., (2015) states that profitability does not affect earnings management.

The third factor that influences earnings management actions is liquidity. If the value of the liquidity ratio obtained by the company is low, the company is experiencing problems in paying its debts, and this will have an impact on the loss of trust in suppliers and creditors. So in overcoming this does not happen, the company will take earnings management actions so that suppliers and creditors do not lose confidence in the company. Research conducted by Ani and Hardiyanti, (2022) states that liquidity has a significant effect on earnings management actions, while research conducted by Paramitha and Idayati, (2020) states that liquidity does not affect earnings management.

The last factor that affects earnings management is leverage. Leverage is a measure of how much the company's assets/capital are financed with debt. Companies that have a high leverage ratio mean that there is a larger proportion of debt compared to the proportion of assets owned so they will tend to manipulate in the form of earnings management by increasing profits. In the research conducted by Priharto et al., (2018), it is stated that leverage has a significant effect on earnings management. However, the results of this study are inversely proportional to that conducted by Gunawan et al., (2015) stating that leverage does not have a significant effect on earnings management.

This study is a replication of previous research conducted by Rere et al., (2020) regarding the effect of profitability, leverage, and firm size on earnings management. The difference between this study and the previous one is that this study used a sample of transportation and logistics sector companies listed on the Indonesian stock exchange in 2018-2021. In the research conducted by Rere et al., (2020) used a sample of mining sector companies listed on the Indonesia Stock Exchange (IDX) for the 2015-2018 period. The next difference lies in the independent variables, in this study the independent variables used are company size, profitability, liquidity, and leverage. While the research of Rere et al., (2020) the variables used are profitability, leverage, and firm size.

Based on the explanation of the above phenomenon, the researcher is interested in conducting research with the title "Analysis Of The Influence Of Company Size, Profitability, Liquidity And Leverage On Earnings Management (Empirical Study On Manufacturing Companies In The Transportation And Logistics Sector Listed On The Indonesia Stock Exchange In 2017-2021)".

## LITERATURE REVIEW

### Agency Theory

The theory used in this research is agency theory which was first proposed by Jensen and Mackling (1976). Agency theory explains that there is a separation between the ownership and management of a company that can cause conflict, the emergence of this conflict is usually called the agency problem (Arthawan and Wirasedana, 2018). Agency problems occur because the parties involved, namely the principal (who gives the contract or shareholder) and the agent (who receives the contract and the manager) have conflicting/different interests (Arthawan and Wirasedana, 2018). Agents and principals seek to maximize their respective utility and have different desires and motivations, therefore there is reason to believe that agents do not always act by the principal's wishes (Jensen and Meckling, 1976). On the other hand, the agent (company manager) has more information than the principal, this is because the agent manages the company directly, therefore this will cause an information asymmetry.

Information asymmetry is an imbalance of information between managers and parties outside the company (owners, potential investors, creditors, and other stakeholders) who have limited sources of information about the company, especially in terms of financial information (Andriyani, 2011). The information gap will encourage managers to behave opportunistically in disclosing information about the company. The existence of information asymmetry causes managers to become parties who get more information than other parties (Arthawan and Wirasedana, 2018). Due to differences in interests and information asymmetry, the presentation of financial statements can be manipulated in the interests of certain parties which can harm the company. The act of manipulating financial statements is known as earnings management.

### **Positive Accounting Theory**

Accounting theory is a theory that explains the basics of research in the field of accounting. In research, Nurmanto (2018) explains in positive accounting theory, that companies will take advantage of the opportunity to choose which alternative will be used in making a procedure. According to Watts and Zimmerman (1986) positive accounting theory can be divided into three factors that motivate earnings management, namely:

1. Bonus Plan Hypothesis
2. Debt Convent Hypothesis
3. Political Cost Hypothesis

### **Financial Reports**

Financial statements are the result of the accounting process and are used as a communication tool for stakeholders and to describe whether a company is good or not (Sundjaja and Inge, 2002). According to IAI, the Revised Financial Accounting Standards (Jakarta: Salemba Empat, 2009) says that financial statements aim to serve as a forum for information regarding the financial position, performance, and changes in a financial position which will be useful for users of financial statements and for making decisions.

### **Earnings Management**

According to Hanawiah (2021) earnings management is an action taken by managers in manipulating profits earned in the current period by lowering, increasing, and managing earnings. Abuse of policies often occurs in companies, now earnings management actions have become common thing for managers, managers will practice earnings management when the company's financial condition declines. This study, measured using the modified Jones model to calculate discretionary accruals (Sulistyanto, 2008).

### **Company Size**

Company size is a scale or value where companies can be classified based on total assets, log size, stock market value, and others (Azlina, 2010). Company size can be expressed in terms of total assets, sales, and market capitalization. The bigger the three indicators, the bigger the size of the company. These three indicators are used to determine the size of the company because they can represent how big the size of the company is, such as the larger the assets, the more capital invested, and the more sales, the more money turnover will occur and the amount of market capitalization will be the greater the company is known in the market community environment.

### **Profitability**

Profitability is the company's ability to generate profits related to sales, total assets, and own capital (Sartono, 2010). Profitability is one of the references used by investors to assess the company's performance in making decisions. The company's goal is to generate maximum profit and profit, in addition to other things. Earning a maximum profit according to the company's target will improve the welfare of owners, employees, and product quality as well as open new investment opportunities (Amelia and Hernawati, 2016).

### **Liquidity**

The liquidity ratio is a ratio that shows the company's ability to meet obligations (Hery, 2015). Liquidity is the ratio that relates the cash and current assets of the company to its current liabilities. Liquidity can be used to measure the level of the company's ability to pay off its short-term obligations that will mature.

### **Leverage**

According to Harjito and Martono (2011) leverage in business leads to the use of assets and sources of funds by the company, in the use of assets or funds the company must incur costs. Meanwhile, according to Fauziyah and Isroah (2017) leverage is the extent to which securities with debt are used in the company's capital structure. Leverage is the ratio between the total liabilities of the company's total assets. Based on the above understanding, it can be concluded that leverage is a measure of how much the company's assets/capital are financed by debt.

## **HYPOTHESIS**

### **Firm Size Affects Earnings Management**

Company size is a large or small picture of a company with proxies used to represent company sizes such as total assets, sales, and market capitalization (Reviani and Djoko, 2012). The size of the company determines the number of earnings management practices in a company. Companies with relatively large sizes will be seen by the public for their performance, so the company will present financial reports more carefully, informatively, and transparently (Nasution and Setiawan, 2007). Meanwhile, companies that have smaller sizes tend to take earnings management actions, because small companies want to show the condition of companies that always perform well by taking earnings management actions so that investors invest their capital in the company (Amelia and Hernawati, 2016).

In a study conducted by Arthawan and Wirasedana (2018), it is stated that company size has a negative and significant effect on earnings management. Companies with large sizes, the smaller earnings management actions. This is because large companies will increase the attention of investors so that they report reliable financial statements. Based on this explanation, the researcher formulates the first hypothesis as follows:

**H1: Company has a negative effect on earnings management**

#### **Profitability Affects Earnings Management**

Profitability is a ratio that shows the company's ability to generate profits based on certain assets (Aprina and Khairunnisa, 2015). One of the analysis ratios used in this study to describe profitability is the measurement of ROA (Return On Assets). The profitability of a company can be used as an indicator to measure its performance of a company. About earnings management, the higher the profitability of a company, the company's performance and ability to generate profits also increase (Agustia and Suryani, 2018). Conversely, if the profitability obtained by the company is low, it will trigger the company to take earnings management actions by increasing the income obtained, so that it will show shares and retain existing investors.

In research conducted by Agustia and Suryani, (2018), shows that profitability has a negative and significant effect on earnings management. That is, the higher the company's profitability, the company's ability to generate profits increases, and earnings management actions will decrease. Based on this explanation, the researchers formulated the second hypothesis as follows:

**H2: Profitability has a negative effect on earnings management**

#### **Liquidity Affects Earnings Management**

Liquidity is the ratio that relates the cash and current assets of the company to its current liabilities. Liquidity can be used to measure the level of the company's ability to pay off its short-term obligations that will mature. The higher the liquidity ratio, the higher the company's ability to pay off short-term debt. Liquidity is seen as a measure of the manager's performance in managing the company's finances. Low liquidity means that the company is having difficulty paying its short-term debt (Lucianam, 2007). A study conducted by Paramitha and Idayati (2020) stated that liquidity has a negative and significant effect on earnings management. That is, the resulting high liquidity ratio will reduce the earnings management actions taken by the company. Based on this explanation, the researchers formulated the third hypothesis as follows:

**H3: Liquidity has a negative effect on earnings management**

#### **Leverage Affects Earnings Management**

According to Fauziyah and Isroah (2017) leverage is the extent to which securities with debt are used in the company's capital structure. Leverage is the ratio between the total liabilities of the company's total assets. Based on the above understanding, it can be concluded that leverage is a measure of how much the company's assets/capital are financed by debt. Leverage can motivate management in implementing earnings management practices. Companies that have high leverage ratios mean that there is a larger proportion of debt compared to the proportion of assets owned so they will tend to manipulate in the form of earnings management (Hapsoro and Annisa, 2017). One of the analytical ratios used in this study to describe leverage is the measurement of the Debt to Equity Ratio (DER).

In research conducted by Priharta et al., (2018), it is stated that leverage has a positive and significant effect on earnings management, companies that have high leverage due to the number of liabilities compared to assets owned by the company, it is suspected that they will take earnings management actions because the company is threatened with default, which means that the company cannot meet its obligations to pay its obligations on time. Based on this explanation, the researchers formulated the fourth hypothesis as follows:

**H4: Leverage has a positive effect on earnings management**

#### **Firm Size, Profitability, Liquidity, and Leverage Together Affect Earnings Management**

Earnings management is an effort by company managers to intervene or influence the information in financial statements that aims to deceive stakeholders who want to know the performance and condition of the company (Sulistyanto, 2008). Many factors trigger earnings management including company size, profitability, liquidity, and leverage. Companies that have smaller sizes tend to take earnings management actions because small companies want to show the condition of companies that always perform well by taking earnings management actions so that investors invest their capital in the company (Amelia and Hernawati, 2016). Furthermore, the low profitability obtained by the company will trigger the company to take earnings management actions by increasing the income obtained, so that it will show shares and retain existing investors. Likewise liquidity, low liquidity means that the company is having difficulty paying its short-term debt besides that the company will also tend to disclose more information to external parties, this event will trigger earnings management actions (Lucianam, 2007). The last factor is leverage, companies that have high leverage ratios will tend to choose accounting procedures with changes in reported earnings from future periods to the current period, this will encourage managers to increase profits and assets because creditors will prefer companies that have

sufficient assets to cover their debts (Watts, 2003). This incident will trigger the management to take earnings management actions. Based on this explanation, the researchers formulated the fifth hypothesis as follows:

**H5: Company Size, Profitability, Liquidity, and Leverage Effect Together on Earnings Management**

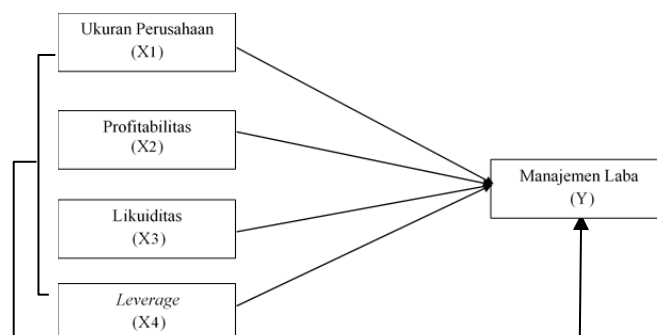


Figure 1. Conceptual Framework

## RESEARCH METHOD

### Population and Sample

The population in this study are manufacturing companies in the transportation and logistics sector listed on the Indonesia Stock Exchange, totaling 30 companies. Sampling in this study used a purposive sampling technique, namely taking samples from the population based on a criterion. Based on the criteria determined by the researcher, 6 companies were used as samples in this study with a period of observations per year for 5 (five) years of observation, so the number of observations was 30 samples.

### Data Collection Technique

The data used in this study is secondary data taken from the annual financial reports of manufacturing companies in the transportation and logistics sector listed on the Indonesia Stock Exchange in 2017-2021, which are accessed through the official website of the Indonesia Stock Exchange (IDX), namely [IDX.co.id](http://IDX.co.id). The data collection technique used in this research is the documentation method. Researchers collect data from various sources such as books, journals, theses, the internet, and various other sources that can support this research.

### Analysis Method

The technique used in this study uses panel data regression analysis. Panel data is a combination of time series data and cross-section data. Data processing in this study using Eviews software tools.

### Operational Variables

#### 1. Dependent Variable

Earnings management is an effort by company managers to intervene or influence the information in financial statements that aims to deceive stakeholders who want to know the performance and condition of the company (Sulistiyanto, 2008). This study measured earnings management using the modified Jones model to calculate discretionary accruals (Sulistiyanto, 2008). The following are the steps for calculating discretionary accruals:

1. Calculating total accruals  
 $TA_{it} = Nit - CFO_{it}$
2. Calculating the coefficient of accrual regression  
 $TA_{it}/A_{it-1} = \alpha_1(1/A_{it-1}) + \alpha_2(\Delta REV_{it} - \Delta REV_{it-1}/A_{it-1}) + \alpha_3(PPE_{it}/A_{it-1}) + \varepsilon$
3. Determine the value of non-discretionary accruals  
 $NDA_{it} = \alpha_1(1/A_{it-1}) + \alpha_2(\Delta REV_{it} - \Delta REV_{it-1}/A_{it-1}) - (\Delta REC_{it} - \Delta REC_{it-1}/A_{it-1}) + \alpha_3(PPE_{it}/A_{it-1}) + \varepsilon$
4. Calculating the value of discretionary accruals  
 $DA_{it} = (TA_{it}/A_{it-1}) - NDA_{it}$

Description:

$TA_{it}$  = Total accruals of the company in year t-i

$Nit$  = Net profit of the company in year t-i

$CFO_{it}$  = Cash flow operation (cash from operating activities) company in year t-i

$A_{it-1}$  = Total assets of the company in year t-i

REV<sub>it</sub> = Revenue of company in year t-i  
 REV<sub>it-1</sub> = Revenue of company in year t-i  
 PPE<sub>it</sub> = Fixed assets of the company in year t-i  
 REC<sub>it</sub> = Receivables of the company in year t-i  
 REC<sub>it-1</sub> = Receivables of the company in year t-i  
 DA<sub>it</sub> = Discretionary accrual of the company in year t-i  
 NDA<sub>it</sub> = Non-discretionary accruals of the company in year t-i  
 ε = Error term

## 2. Independent Variables

### Company Size (X1)

Company size is a scale or value where companies can be classified based on total assets, log size, stock market value, and others (Azlina, 2010). So in this study, the researcher will use the same measurement of company size log Total Assets used by the research conducted (Rudangga and Sudiarta, 2016).

$$\text{Company size} = \text{Log Total Assets}$$

### Profitability (X2)

Profitability is the company's ability to generate profits related to sales, total assets, and own capital (Sartono, 2010). In this study, researchers used the ROA (Return On Asset) measurement. The following is the ROA (Return On Asset) measurement formula (Tambunan and Siagian, 2021):

$$\text{ROA} = \text{Net Profit} / \text{Total Assets}$$

### Liquidity (X3)

The liquidity ratio is a ratio that shows the company's ability to meet obligations (Hery, 2015). Liquidity is the ratio that relates the cash and current assets of the company to its current liabilities. In this study, the measurement of liquidity used by researchers is the current ratio. According to Hery (2015) the current ratio is calculated by the following formula:

$$\text{Current ratio} = \text{Current Assets} / \text{Current Liabilities}$$

### Leverage (X4)

According to Harjito and Martono (2011) leverage in business leads to the use of assets and sources of funds by the company, in the use of assets or funds the company must incur costs. Meanwhile, according to Fauziyah and Isroah (2017) leverage is the extent to which securities with debt are used in the company's capital structure. Leverage is the ratio between the total liabilities of the company's total assets. Based on the above understanding, it can be concluded that leverage is a measure of how much the company's assets/capital are financed by debt. In this study, the leverage ratio was measured by the Debt to Equity Ratio (DER). The following is the formula for Debt to Equity Ratio (DER) (Kasmir, 2016):

$$\text{DER} = \text{Total Debt} / \text{Total Equity}$$

## RESULTS AND DISCUSSION

**Table 1. Descriptive Statistics Test**

	N	Minimum	Maksimum	Mean	Standar Deviasi
EM_Y	30	-8.213968	0.637856	-2.056421	1.605839
SIZE_X1	30	2.698566	3.381950	3.200948	0.226577
ROA_X2	30	-5.148060	-1.759243	-3.438738	0.948019
CR_X3	30	-1.520802	1.905595	-0.039286	1.002346
DER_X4	30	-2.512724	0.964631	0.041530	1.073907

Source: Processed with eviews 9 in 2022

The Earnings Management variable has a minimum value of -8.213968 which is owned by PT Batavia Prosperindo Trans Tbk in 2020, this can mean that PT Batavia Prosperindo Trans Tbk tends to do earnings management using income decreasing or lowering the profit value. While the maximum value of earnings management is 0.637856 which is owned by PT Mineral Sumberdaya Mandiri Tbk in 2017, this can mean that PT Mineral Sumberdaya Mandiri Tbk tends to carry out earnings management by increasing income or increasing profits in 2017.

The company size variable has a minimum value of 2.698566 which is owned by PT Temas Tbk, in 2018. While the maximum value is 3.381950 which is owned by PT Adi Sarana Armada Tbk, in 2021. The profitability variable has a minimum value of -5.148060 which is owned by PT Batavia Prosperindo Trans Tbk, in 2020. While the maximum value is -1.759243 which is owned by PT Temas Tbk, in 2021.

The liquidity variable has a minimum value of -1.520802 which is owned by PT Batavia Prosperindo Trans Tbk, in 2020. While the maximum value is 1.905595 which is owned by PT Pelayaran Nelly Dwi Putri Tbk, in 2020. The leverage variable has a minimum value of -2.512724 which is owned by PT Pelayaran Nelly Dwi Putri Tbk, in 2017. While the maximum value is 0.964631 which is owned by PT Adi Sarana Armada Tbk, in 2019.

The test of the panel data regression model aims to determine which of the common effects, fixed effects, and random effects models is the right one to use in managing time series and cross-section panel data. Several tests that can be done to determine the right panel data model are the chow test, Hausman test, and the Lagrange multiplier test. After doing several tests to determine the right panel data model, the results of this test can be concluded that the best model to be applied to the panel data regression model is the Common Effect Model (CEM).

Classical assumption test is conducted to determine whether the regression model meets the requirements of the classical assumption so that its feasibility can be known. The classical assumption test consists of a normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. Based on the results of the tests that have been carried out, it can be concluded that the data are normally distributed and are not affected by multicollinearity, heteroscedasticity, and autocorrelation.

### Hypothesis Testing

**Table 2. F and T Uji Test**

Variabel	Model Efektif Hipotesis ( <i>Common Effect Model</i> )			
	<i>Coefficient</i>	<i>Std.Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
C	-0.977749	3.541133	-0.276112	0.7847
SIZE_X1	0.282164	1.087838	0.259381	0.7975
ROA_X2	0.580190	0.354427	1.636983	0.1142
CR_X3	1.443246	0.528208	2.732344	0.0114
DER_X4	1.684484	0.432795	3.892109	0.0007
Adjusted R-squared	0.352242			
F-statistic	4.942459			
Prob(F-statistic)	0.004479			

Source: Processed with eviews 9 in 2022

#### F Uji Test

Based on the results of the F test in table 2, it can be formulated as follows:

1. The value of F-statistics or F-count is 4.942459
2. The value of the F-table is obtained from the table of the percentage distribution of F of 5% significance by first determining N1 and N2. The value of N1 = 5-1 (number of variables -1), and N2 = 30-5 (number of observations - number of variables). So that the value of N1 = 4 and N2 = 25 is obtained and the significance value of F is 2.759.
3. Based on the comparison of F-count  $4.942459 > F\text{-table } 2.759$ , so H0 is rejected, which means that the independent variable consisting of firm size, profitability, liquidity, and leverage simultaneously affects the dependent variable, namely earnings management.
4. Prob value (F-Statistic) is  $0.004479 < 0.05$ , then the independent variable consisting of firm size, profitability, liquidity, and leverage simultaneously affects the dependent variable, namely earnings management.

Thus, testing the hypothesis using the Common Effect Model (CEM) shows that all independent variables including company size, profitability, liquidity, and leverage together affect the earnings management of transportation and logistics companies listed on the Indonesia Stock Exchange (IDX) in the years 2017-2021. The ability of the independent variable to influence earnings management is indicated by the Adjusted R-Squared value of 0.352242 or 35.22% and the rest is influenced by other variables.

#### T Uji Test

Based on the results of the t-test in table 2, the t-table significance value of 2,059 can be concluded as follows:

##### 1. The Effect of Firm Size on Earnings Management

The firm size variable has a t-count value of  $0.259 < t\text{-table } 2.059$  and a probability of  $0.79 > 0.05$ , so H1 is not supported (rejected). So it can be said that the firm size variable does not affect earnings management. This proves that

company size does not necessarily reduce the possibility of earnings management, because managers in earnings management still have personal interests regardless of the size of the company (Riska Astari and Suputra, 2019).

The results of this study are in line with previous research conducted by Riska Astari and Suputra, (2019) which stated that company size did not affect earnings management. This is because investors and creditors do not consider the size of the company based on total assets as a consideration in determining investment decisions and credit analysis. According to Khazan Faozi (2003), company size is not the only consideration for investors in making investment decisions, because many other factors are more important to consider in making investment decisions, such as the level of profits and the company's business prospects in the future. So that the larger or smaller the company does not affect the level of earnings management.

### **2. The Effect of Profitability on Earnings Management**

The profitability variable has a t-count value of  $1.636 < t\text{-table } 2.059$  and a probability of  $0.11 > 0.05$ , so H2 is not supported (rejected). So it can be said that the profitability variable does not affect earnings management. This proves that companies that have large or small profitability will not affect the level of earnings management of a company. In addition, investors also tend to ignore company financial information such as Return on Assets (ROA), so that management is not motivated to take earnings management actions (Bestivano, 2013).

The results of this study are in line with research by Gunawan et.al., (2015) which states that profitability does not affect earnings management. Astuti's research (2017), states that companies that have high profitability show good company performance, and shareholders and company managers will also receive profits from the increased performance of a company. So this will make managers not motivated to take earnings management actions.

### **3. Effect of Liquidity on Earnings Management**

The liquidity variable has a t-count value of  $2.732 > t\text{-table } 2.059$  and a probability of  $0.01 < 0.05$ , then H3 is supported (accepted). So it can be said that the liquidity variable affects earnings management in a positive direction. The higher the liquidity ratio, the higher the company's ability to pay off short-term debt. Liquidity is seen as a measure of the manager's performance in managing the company's finances. Low liquidity means that the company is having difficulty paying its short-term debt. Low liquidity will trigger managers to take earnings management actions and vice versa.

The results of this study are in line with previous research conducted by Ani and Hardiyanti (2022) which stated that liquidity has a positive effect on earnings management. This study proves that the high and low value of a company's liquidity, of course, the company will practice earnings management. Companies that have low liquidity mean that the company is having difficulty paying their short-term debt, this will trigger the company to take earnings management actions, and vice versa if the company's liquidity is high it means that the company can pay off short-term debt with current assets owned and the company will avoid earnings management actions.

### **4. The Effect of Leverage on Earnings Management**

The leverage variable has a t-count value of  $3.892 > t\text{-table } 2.059$  and a probability of  $0.00 < 0.05$ , then H4 is supported (accepted). So it can be said that the leverage variable has a positive effect on earnings management. This proves that leverage can motivate management in implementing earnings management practices. Companies that have high leverage due to the number of liabilities compared to the assets owned by the company, will trigger earnings management actions because the company is threatened with default, which means the company cannot meet its obligations to pay liabilities on time.

The results of this study are in line with previous research conducted by Nalarreason et al., (2019) which states that leverage has a positive effect on earnings management. Companies that have high leverage ratios mean that there is a larger proportion of debt compared to the proportion of assets owned so they will tend to manipulate in the form of earnings management (Hapsoro and Annisa, 2017).

### **Coefficient of Determination (R<sup>2</sup>)**

**Table 3. Coefficient Of Determination Test**

Keterangan	Nilai
<i>Adjusted R-Squared</i>	0.352242

Source: Processed with eviews 9 in 2022

Based on table 3. shows the value of the coefficient of determination (R<sup>2</sup>) on the Adjusted R-Squared of 0.352242 or 35.22%. These results indicate that the variation in earnings management can be explained by the value of firm size, profitability, liquidity, and leverage of 35.22%. While the remaining 64.78% is explained by other variables that are not used in this study.

### **CONCLUSION**

The purpose of this study was to determine the effect of firm size, profitability, liquidity, and leverage on earnings management. This study takes a population of Transportation and Logistics Sector Companies listed on the Indonesia

Stock Exchange with a year of observation of 5 years (2017-2021) with a sample of 6 companies out of 30 total companies from the transportation and logistics sector listed on the Indonesia Stock Exchange (IDX). Based on the results of research conducted with a series of tests that have been carried out, it can be concluded as follows:

1. Firm size and profitability variables partially have no effect on earnings management in manufacturing companies in the transportation and logistics sector in 2017-2018.
2. Liquidity and leverage variables partially have a positive effect on earnings management in manufacturing companies in the transportation and logistics sector in 2017-2018.
3. Firm size, profitability, liquidity, and leverage variables simultaneously affect the earnings management of manufacturing companies in the transportation and logistics sector in 2017-2018.

### **Research Limitations**

Based on the results obtained, this study has limitations that can be taken into consideration for similar research, namely:

1. The sample used in this study is only small because the researcher only focuses on transportation and logistics sector companies listed on the Indonesia Stock Exchange (IDX).
2. Based on the results of the adjusted R Square test, the independent variables in this study were only able to explain 00.352242 or 35.22% to the dependent variable, namely earnings management, which means that 64.78% is explained by other variables that are not used in the study this.

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