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# The Effect of Top Management Team, Firm Size and Leverage on Earnings Management with Audit Quality as A Moderation Variable

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#### Abstract

This study aims to determine the influence of the Top Management Team, Firm Size and Leverage on earnings management with Audit Quality as a Moderating Variable. This type of research is quantitative research. This study uses secondary data obtained from the Indonesian Stock Exchange (IDX) website. The sample for this research is 24 companies that have conducted an IPO for the 2017-2021 period. This study uses a purposive sampling technique as a sample selection. The analytical method of this study uses multiple linear regression analysis with Eviews 12 as an analytical tool. The result is that the top management team variable has an effect on earnings management. Firm size and leverage variables have no effect on earnings management. Audit quality moderates leverage on earnings management.

Keywords Top Management Team, Firm Size, Leverage, Earnings Management, Audit Quality

# **INTRODUCTION**

According to Statement of Financial Accounting Concept (SFAC) No. 1 states that profit information is the main concern for interpreting management performance or accountability (Irfan & Deannes, 2019). Performance appraisal reflects the achievement of profits for the company, with the existence of this profit information can be used as a decision making regarding the continuity of a company's operations.

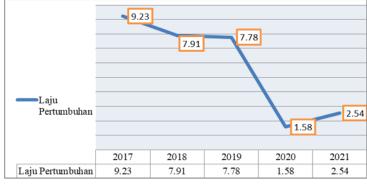


Figure 1 Profit Growth in Manufacturing Companies in the Food and Beverage Sector 2017-2021

(Source BPS 2021)

The picture beside is profit growth in manufacturing companies in the food and beverage sector where we can see that from 2017 to 2021 there has been a very significant decline in profits.

With relatively declining profit growth, the company will make efforts to survive so that it will affect company profits. Thus, actions taken by management will appear to make



the company's profits high so that the company's performance is considered good.

Phenomena related to earnings management occur in companies in the food and beverage sector that practice earnings management. This was stated by the Minister of Finance Sri Mulyani quoted on Kompas.com, PT. Tiga Pilar Sejahtera Food Tbk (AISA), that is, after an investigation into AISA's 2017 financial statements by PT EY Indonesia (EY) found an alleged inflation of Rp. 4 trillion and an alleged inflation of Rp. 662 billion in revenue and other inflation of Rp. 329 billion in EBITDA (earnings before interest, taxes, depreciation and amortization).

There are several factors that can influence the occurrence of earnings management like the phenomenon above, namely the top management team, firm sizeand leverage. In addition, audit quality can also strengthen or weaken the influence of the characteristics of the top team, firm size and leverage.

The purpose of this study is to find answers to the questions: (1) Does the top management team influence earnings management? (2) Does firm size affect earnings management? (3) Does leverage affect earnings management? (4) Does audit quality moderate the influence of the top management team on earnings management? (5) Does audit quality moderate the effect of firm size on earnings management? (6) Does audit quality moderate the influence of leverage on earnings management?

Researchers using signaling theory state that financial report information published in the form of a bulletin gives a signal to investors to make investment decisions and investors have the same information about the company's profit prospects in the future.

# **METHOD**

### The Scope of Research

This research was conducted at food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2017-2021 period. Audited financial reports and annual reports are obtained from the official website of each company or the official website of the Indonesia Stock Exchange www.idx.co.id. The research was conducted from September 2022 to March 2023.

# **Population and Sample**

The population in this study are companies manufacturing sub-divisions of the Food and Beverage industry which are registered on the IDX in 2017-2021. The sampling technique in this research is methodological purposive sampling with the aim of obtaining a sample that is in accordance with the research variables. The criteria for sample selection are as follows:

- 1. Manufacturing companies in the food and beverage industry are co-registered on the Indonesia stock exchange from 2017–2021.
- 2. Manufacturing companies in the food and beverage industry sector publish annual reports in Rupiah in a row in 2017–2021.
- 3. Manufacturing companies in the food and beverage industry sector have complete data on earnings management in a row in 2017–2021.

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The variables in this study are the influence of the top

management team, firm size and leverage on earnings management with audit quality as a moderating variable. The definition of variable operationalization can be seen in the following table.

| Table 1 Example of table description |                                       |             |  |  |  |  |
|--------------------------------------|---------------------------------------|-------------|--|--|--|--|
| Variable                             | Indicator                             | Measurement |  |  |  |  |
|                                      |                                       | Scale       |  |  |  |  |
| Earnings management (y)              | DACC = (TAC/ TAit-1) - NDACC          | Ratio       |  |  |  |  |
| (Scott, 2015),                       |                                       |             |  |  |  |  |
| (Sulistiyanto, 2017)                 |                                       |             |  |  |  |  |
| Top management team                  | Dummy (1=top management member        | Nominal     |  |  |  |  |
| $(\mathbf{x}_1)$                     | holding a master's degree or CPA      |             |  |  |  |  |
| Hambrick & Mason                     | 0=top management who do not have a    |             |  |  |  |  |
| (Abatecola & Cristofaro,             | master's degree or CPA)               |             |  |  |  |  |
| 2018)                                |                                       |             |  |  |  |  |
| Firm Size (x <sub>2</sub> )          | Size = Ln Asset                       | Ratio       |  |  |  |  |
| (Brigham, 2019)                      |                                       |             |  |  |  |  |
| Leverage (x <sub>3</sub> )           | Total Amoun of debt                   | Ratio       |  |  |  |  |
| (Kasmir, 2018)                       | Total Assets                          |             |  |  |  |  |
| Audit quality (z)                    | Dummy ( $1 = $ company audited by KAP | Nominal     |  |  |  |  |
| (Arens, et al, 2015)                 | Big-4,                                |             |  |  |  |  |
|                                      | 0=company audited by non-big-4 KAP    |             |  |  |  |  |

Research Model:

**DACCit** =  $\alpha$  +  $\beta$ **1TMPit** +  $\beta$ **2SIZEit** +  $\beta$ **3LEVit** +  $\epsilon$ 

 $DACC_{it} = \beta_0 + \beta_1 TMP_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_1 TMT_{it} M + \beta_2 SIZE_{it} M + \beta_3 LEV_{it} M + \varepsilon_{it}$ Where:  $\alpha$ : Constant;  $\beta 1$ ,  $\beta 2$ : Coefficients;  $\varepsilon$ : Error; i: Enterprise I; t: Year t

# **RESULTS AND DISCUSSION**

# **Descriptive Statistical Test**

Descriptive statistical tests in this research were conducted to demonstrate the data of maximum, minimum, mean, and standard deviation. The variables used were Top management team (X1), firm size (X2) and leverage (X3) as independent variables, earnings management (Y) as the dependent variable, and audit quality (Z) as mediating variabels. The following are the results of the descriptive statistical tests:

|                     | NN  | Ainimum | Means | std.<br>Deviation |      |
|---------------------|-----|---------|-------|-------------------|------|
| Earnings management | 120 | -4.28   | 0.74  | -0.14             | 0.68 |
| Audit Quality       | 120 | 0       | 1     | 0.36              | 0.48 |
| Top Management Team | 120 | 0       | 1     | 0.22              | 0.42 |

 Table 2 Descriptive Statistical Test Results



|                    | NN  | Ainimum | Means | std.<br>Deviation |      |
|--------------------|-----|---------|-------|-------------------|------|
| Firm Size          | 120 | 11.55   | 19.00 | 14.74             | 1.63 |
| leverage           | 120 | 0.34    | 9.21  | 3.02              | 1.79 |
| Valid N (listwise) | 120 |         |       |                   |      |

Based on the results of the variable descriptive statistical test, the top management team consisted of lowest value (minimum) = 0.00, highest (maximum) = 1.00, mean value = -0.22, and standard deviation 0.419. The firm size variable consists of lowest value (minimum) = 11,546, highest (maximum) = 19,005, mean value = 14,742, and standard deviation = 1,631. The Leverage variable consists of lowest value (minimum) = 0.345, highest (maximum) = 9.219, mean = 3.026, and standard deviation = 1.793. The earnings management variable (Y) in this study based on the descriptive results has the lowest (minimum) value = -4,283, the highest (maximum) = 0.741, mean = -0.14433, and standard deviation = 0.686. As for the audit quality variable (Z) in this study, based on the descriptive results, it has the lowest (minimum) value = 0.00, the highest (maximum) = 1.00, the mean value = 0.36, and the standard deviation = 0.482.

# **T-Test**

The t-test aims to determine the individual influence of each independent variable on the dependent variable. Here are the results of the t-test:

| Tabel 3 1-Test Result |        |                             |          |                         |                            |        |          |                         |
|-----------------------|--------|-----------------------------|----------|-------------------------|----------------------------|--------|----------|-------------------------|
| Variable              | Ν      | Model 1 (Before moderating) |          |                         | Model 2 (After moderating) |        |          |                         |
|                       | В      | Т                           | Sign     | Note                    | В                          | Т      | Sign     | Note                    |
| (Constant)            | -0.254 | -0.519                      | 0.605    |                         | -0.479                     | -0.779 | 0.438    |                         |
| TMP                   | 0.119  | 2.188                       | 0.031    | H <sub>1</sub> Accepted | 0.180                      | 2.802  | 0.0065   |                         |
| Size                  | 0.015  | 0.470                       | 0.639    | H <sub>2</sub> Rejected | 0.031                      | 0.533  | 0.595    |                         |
| LEV                   | 0.017  | 1.906                       | 0.060    | H <sub>3</sub> Rejected | 0.011                      | 1.161  | 0.249    |                         |
| TMP_M_                |        |                             |          |                         | -0.083                     | -0.079 | 0.937    | H <sub>4</sub> Rejected |
| SIZE_M_               |        |                             |          |                         | -0.007                     | -0.098 | 0.922    | H <sub>5</sub> Rejected |
| LEV_M_                |        |                             |          |                         | 0.042                      | 2.373  | 0.020    | H <sub>6</sub> Accepted |
| F                     | 3.619  |                             | 0.000015 |                         | 3.641                      |        | 0.000008 |                         |
| Adjusted              | 0.368  |                             |          |                         | 0.400                      |        |          |                         |
| <b>R-Square</b>       |        |                             |          |                         |                            |        |          |                         |
|                       |        |                             |          |                         |                            |        |          |                         |

 Tabel 3 T-Test Result

# **Regression Model Results**

The results of the normality test can be seen that the Sig value is 0.456. Value 0.456 > 0.05 then the residual data is normally distributed. The results of the multicollinearity test show that the value of Pob.chisquare 0.0003 < 0.05, there is no multicollinearity problem in the regression equation. The results of the autocorrelation test show that the visible value is the Durbin-Watson value of 2.240528. According to the Durbin Watson table, there is no autocorrelation if the value du < d < 4-du. So, it was found that 1.7364 < 2.240528 < 2.2636, it was concluded that this regression model had no autocorrelation problems. The results of

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the heteroscedasticity test show that the probability value of the prob chi-square count is < 0.05 or 0.0137 < 0.05, so H<sub>0</sub> is accepted, meaning that heteroscedasticity does not occur.

### The Effect of Top Management Team on Earnings Management

Based on the results of the statistical t-test of the variable Top Management Team with a t-value of 2.188 > 1.985 (t-table) and a significance value of 0.03 < 0.05 indicates that H0 is rejected, and Ha is accepted, it can be concluded that top management team does have a significant effect on earnings management.

These results support the first hypothesis, meaning that companies with a high top management team, in this case the educational category, where those with higher education, such as top management with a Masters or CPA degree, certainly understand more and master accounting procedures related to financial statements so that they can easily it is easy to practice accrual earnings management, while managers with lower education have more difficulty practicing accrual earnings management. Managers with lower education will meet profit targets using real earnings management. According to Hambrick and Mason in the Upper echelon theory theory states that the level of education reflects the abilities and skills of managers (Abatecola & Cristofaro, 2018). The general argument is that top managers with higher education have higher cognitive complexity and ability to absorb new ideas and implement more strategies. Managers with higher education are also able to select alternative variations in solving organizational problems and make better decisions because they have greater cognitive abilities in processing and analyzing information (Ali and Zhang, 2015). Managers with higher education pay more attention to the company's business in the long run. Lia et al.

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

Based on the results of the statistical t-test of the variable Top Management Team with a t-value of 0.470 < 1.985 (t-table) and a significance value of 0.639 > 0.05 indicates that H0 is accepted, and Ha is rejected, it can be concluded that firm size does not have a significant effect on earnings management.

This is because it relates to the company's total assets as an indicator of determining the size of the company. However, in this case the larger or smaller the company in terms of total assets does not affect earnings management because total assets are not the only factor that investors consider in making investment decisions, because there are other factors that are more important in making investment decisions. investment decisions such as future profit levels or prospects and so on. On the other hand, firm sizehas no effect on earnings management due to strict supervision from various parties such as the government, investors or auditors so that companies cannot carry out earnings management in order to maintain a good corporate image for the company's profits, one of which is to attract investors. The results of this study are supported by research conducted by Wulandari and Suganda (2021) who found that firm size has no effect on earnings management.



### The Effect of Leverage on Earnings Management

Based on the results of the statistical t-test of the variable leverage with a t-value of 1.906 < 1.985 (t-table) and a significance value of 0.060 > 0.05 indicates that H0 is accepted, and Ha is rejected, it can be concluded that leverage does not have a significant effect on earnings management.

The leverage ratio is used to measure how much a company relies on debt to finance its assets. In this study, leverage has no effect on earnings management because the level of leverage is not a factor for a company to manage earnings. The existence of an audit can help manage errors that occur in companies such as the discovery of high levels of leverage that can be caused by mismanagement of company finances or strategies used that are not appropriate on the part of management so that the audit process can be corrected. Therefore, when management will carry out earnings management practices it is already limited by the existence of strict supervision from the auditor so that these errors can be resolved, the impact of the company is improving performance and the company's image is good in the eyes of shareholders and the public. The results of this study are in line with Asyati & Farida's research (2020) and research conducted by Wulandari & Suganda (2021) which proves that there is no influence between leverage on earnings management.

# The Effect of Top Management Team on Earnings Management with Audit Quality as Moderating Variable

Based on the results of the statistical t-test of the variable top management team\_audit quality with a t-value of 0.079 < 1.985 (t-table) and a significance value of 0.937 > 0.05 indicates that H0 is accepted, and Ha is rejected, it can be concluded that audit quality dose not to have moderate the effect of top management team on earnings management. It means audit quality is a predictor moderating variable.

The results showed that the existence of audit quality, which in this study was proxied as a dummy variable from big-4 and non-big 4 KAPs, was not able to moderate the relationship between the top management team and earnings management. This means that audit quality does not make the relationship between the top management team and earnings management significantly stronger or weaker as previously thought. The results of this test prove that self interest in the agency theory proposed by Eisenhardt states that actions taken by management are personal interests. Because of this assumption, top management will prioritize its utility first, so that top management tends to act optimally. The results of this study also support research conducted by Zwageri (2020) which states that audit quality is a moderating factor that has not been proven to strengthen its influence. about earnings management.

# The Effect of Firm Size on Earnings Management with Audit Quality as Moderating Variable

Based on the results of the statistical t-test of the variable Firm Size\_audit quality with a t-value of 0.098 < 1.985 (t-table) and a significance value of 0.922 > 0.05 indicates that H0 is accepted, and Ha is rejected, it can be concluded that audit quality dose not to have

moderate the effect of firm size on earnings management. It means audit quality is a predictor moderating variable.

This is because not all large companies or small companies are audited by the Big-4 KAP. In addition, large companies will act carefully in managing the company to avoid auditor supervision so that the company will try to improve company performance. The results of this study are not in line with research conducted by Rahmawati et al (2017) which states that audit quality has a significant effect on earnings management.

# The Effect of Leverage on Earnings Management with Audit Quality as Moderating Variable

Based on the results of the statistical t-test of the variable leverage\_audit quality with a t-value of 2.373 > 1.985 (t-table) and a significance value of 0.020 < 0.05 indicates that H0 is rejected, and Ha is accepted, it can be concluded that audit quality dose to have moderate the effect of Leverage on earnings management. It means audit quality is a quasi-moderating variable.

Leverage is a tool to measure how far a company depends on creditors in financing the company's assets. If leverage is high, the company will become dependent on outsiders in financing its assets. A high company financial risk indicates that the company is experiencing financial distress due to high liabilities. Companies that have high leverage ratios, This means that the proportion of debt that is higher than the proportion of assets will tend to manipulate in the form of earnings management so that companies with high leverage tend to manage reported profits by increasing or decreasing profits from the future period to the current period (Agustia, 2017). Therefore, lack of supervision can lead to high leverage, and will increase oppurtunistic actions such as earnings management practices to maintain performance in the eyes of shareholders and the public. If the company cannot use its funds efficiently, it will cause a large debt for the company so that the company will have difficulty paying debts. The higher the level of debt owned by a company, then management will manipulate earnings to improve the company's image in the eyes of the public and so that investors still want to invest in the company. Research conducted by Hasti & Herawaty (2017) states that audit quality cannot moderate the effect of leverage on earnings management. In addition, research conducted by Himawan (2022) proves that the existence of audit quality can strengthen the relationship between leverage and earnings management.

# CONCLUSION

Partially, the results of the study show that the top management team has a positive effect on earnings management. Firm size and leverage variables have no effect on earnings management. Partially, audit quality moderates leverage on earnings management. Partially, the results show that audit quality does not moderate top management team and firm size on earnings management.



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