# The Effect of Profitability and Leverage on Earnings Management with Company Size as Moderation

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## **ABSTRACT**

This study aims to determine the effect of profitability and leverage on earning management with company size as moderation. The population in this study was 23 State-Owned Enterprises (BUMN) for the time period 2018 to 2022. The sample selection used a purposive sampling technique and selected 23 companies with 115 units of analysis. The analysis techniques used descriptive statistical analysis, inferential analysis, and moderated regression analysis. The results showed that profitability has an effect on earnings management, while leverage has no effect on earnings management. Simultaneously profitability and leverage influence earnings management. In moderation, company size cannot moderate profitability on earnings management and company size can moderate leverage on earnings management. The conclusion of this study is that it can only be explained in general for all sectors, not specifically. However, investors can consider the profitability variable as one of the indicators of companies practicing earnings management. For companies, they can consider optimizing governance and supervision because the variables of profitability, leverage, and company size, either partially or moderately, can influence company management to practice earnings management.

Keywords: Profitability; Leverage; Firm Size; Earnings Management

### I. INTRODUCTION

Business competition in Indonesia is currently still very dynamic and competitive. Various factors such as technological developments, government policies, and changes in market trends also influence the dynamics this competition. Competition in Indonesia reflects that the economy continues to grow and is a challenge for business actors to continue to innovate in increasing company performance. The progress of a company's performance can be assessed through its ability maximize profits, because profit is one of the main indicators used to measure the performance and responsibility of profit management (Hardiyanti et al., 2022b). In general, all parts of the financial statements consisting of the financial position statement, profit and loss, retained earnings statement, cash flow statement, notes to the financial entire report statements are the presented. However, there is a tendency for users of financial statements to only pay attention to the profit contained in the profit and loss statement (Bestivano, 2018). Earnings management is defined as an effort by company managers to intervene or influence information in financial statements with the aim of deceiving stakeholders who want to know financial performance (Sulistyanto, 2012). Profit information is often the target of manipulation of opportunistic management actions to maximize their satisfaction. The opportunistic action is carried out by choosing a certain accounting policy, so that company's profit can be regulated, increased or decreased according to the company's wishes (Anindya & Yuyetta, 2020). In April 2019, PT Garuda Indonesia (Persero) Tbk (GIAA) was known in its 2018 financial report to have recorded longterm receivables recognized as income and included in other income. This made the GIAA commissioner refuse to sign the financial report because it was not in accordance with PSAK. stated **GIAA** a net profit USD890.85 thousand or equivalent to billion IDR11.33 assuming exchange rate of IDR14,000. A very significant spike with the previous bookkeeping which stated a loss of USD216.5 million. In fact, GIAA has recognized receivables from PT Mahata Aero Tekologi as income. These funds are still receivables with a contract valid for the next 15 years, but have been recorded in the first year and recognized as income. As a result, the GIAA company which was previously at a loss then made a profit. GIAA is one of the state-owned companies engaged in the transportation sector. Many people trust to use the services of the GIAA company and the size of this company can be categorized as large. This is a strong reason for the management of the GIAA company to manipulate or manage profits on the company's profits. With a large company image, the expectations of investors or company owners are also getting higher. This is a pressure when

GIAA has to maintain its image in the community. Because, if the company has a large enough loss, it can reduce company's performance investor interest. From the case of the Garuda Indonesia company which took managerial actions, namely profit management to increase profitability and high leverage or debt ratios. Can support the research results Setiowati et al (2023) When the profitability obtained by a small company in a certain period will encourage management to practice profit management by making the profit in the current period higher than the actual profit. Conversely, when the company's profitability is high in a certain period, management practices profit management by making the profit in the current period lower than the actual profit. **Earnings** management was the dependent variable in this study, the independent variables included profitability and leverage. Meanwhile, the moderating variable was company size.

### II. RESEARCH METHOD

The research used quantitative research. The population in this study were State-Owned Enterprises (BUMN) listed on the Indonesia Stock Exchange (IDX) for the 2018-2022 period. The sample of this study was BUMN companies listed on the IDX in 2018-2022. This study used purposive sampling, here are some of the criteria: 1. BUMN companies listed on the IDX in 2018-2022

2. BUMN companies that have complete information regarding profit

management, profitability, leverage, and company size

3. BUMN companies that consistently publish complete and accessible financial reports during 2018-2022. The dependent variable in this study is earnings management. To obtain a description of accrual earnings management using the revenue discretionary model approach (Stubben, 2010) as follows:

#### Revenue Model

 $\Delta ARit = \alpha + \beta 1\Delta R1_3it + \beta 2\Delta R4it + e$ Conditional Revenue Model  $\Delta ARit = \alpha + \beta 1\Delta Rit + \beta 2\Delta Rit \times SIZEit$ +  $\beta 3\Delta Rit \times AGEit + \beta \Delta Rit \times AGE_SQit + \beta 5\Delta Rit \times GRMit + \beta 6\Delta Rit \times GRM SQit + e$ 

The independent variables in this study are profitability and leverage.

### 1. Profitability

Profitability is the level of net profit that a company has successfully obtained in running its operations. Profitability (PROFIT) is proxied by return on assets (ROA). Profitability can be formulated as follows:

ROA (Return on Asset) = 
$$\frac{Earning After Taxes}{Total Aset}$$

### 2. Leverage

Leverage is calculated using the Debt Ratio by comparing the amount of debt with the amount of assets. So the measurement of leverage can be formulated as follows:

$$DAR (Debt to Assets Ratio) = \frac{Total Hutang}{Total Aset}$$

Moderation Variable

Measurement of the moderation variable is measured by:

Size = Ln(asset)

# The Effect of Profitability on Earning Management (H1)

The relationship between earnings management and agency theory is that there is a conflict of interest between company management (agent) and investors (principal), because the agent acts not in accordance with the interests of the principal. The company management maintains high profits in order to show better financial and company performance which result in bigger bonuses to the management for the performance that has been done. This study uses the State-Owned Enterprises (BUMN) sector which is considered by the public to have good and transparent financial governance because it is managed directly by the Indonesian government, this also supports the practice of earnings management carried out by management to maintain this image. The results of this study are supported by Setiowati et al (2023) that when the profitability obtained by a small company in a certain period will encourage management practice earnings management by making the profit in the current period higher than the actual profit. Conversely, when the company's profitability is high in a certain period, management practices earnings management by making the profit in the current period lower than the actual profit. The results of this study are also supported by previous research

conducted by (Febria, 2020) which states that profitability has an influence on earnings management, as well as in research (Tala & Karamoy, 2017) and (Hardiyanti et al., 2022a).

# The Effect of Leverage on Earnings Management (H2)

In this study, leverage partially has no effect on earnings management (H2). The results obtained in the study that has been conducted on the leverage variable using the debt to asset ratio formula obtained a probability value of 0.935, which indicates that the value obtained is greater than the significance value of 0.05. This means that the profitability variable has no effect on earnings management in State-Owned Enterprises (BUMN) Indonesia listed on the Stock Exchange in 2018-2022.

Leverage is a debt used by a company to pay for the company's assets in its plan to carry out its operational Leverage activities. is also comparison between total debt and total assets which shows some parts of the assets used to guarantee debt. In this study, it can be interpreted that if a company has high leverage, then the earnings management actions taken by the company will remain or be constant. The impact of high leverage on agency theory also creates conflict between the agent and the principal. With a high debt ratio and small profit fluctuations, the company may not be able to meet its debt obligations, causing bankruptcy and loss of shareholder investment value.

Judging from the descriptive statistics, it can be concluded that the average

company has safe leverage, meaning that the company is able to pay the debt used to finance the company's assets, so the company's managers are not motivated to practice earnings management. This is because the company does not need actions that will help the company in certain situations because the company is in good condition or is able to pay the debt used (Anindya & Yuyetta, 2020). In the research of Kristiana & Rita (2021) it is explained that companies with increasing debt will encourage management to try to improve their financial performance. Companies with good financial performance can cover costs due to debt and can convince creditors to provide loans. Companies with high debt usually tend to carry out strict supervision so that it is not easy for companies to take profit management actions, this makes leverage have no effect on profit management.

The results of this study support the findings of Astuti's research (2017) which states that leverage has no effect on profit management because the company is in good financial condition and is able to pay the company's debt. Also supported by Febria (2020) that the level of debt owned by the company does not make the company carry out profit management. However, the risk that arises because companies with high debt levels have the threat of being unable to pay their obligations and are at risk of bankruptcy. Research by Kristiana & Rita (2021) and Anindya & Yuyetta 2020) also supports the results of this

study that leverage has no effect on earnings management.

## The Effect of Profitability and Leverage Simultaneously on Earnings Management (H3)

In this study, based on the partial significance test (t-test), it is known that the probability value (F-statistic) of the profitability and leverage variables simultaneously is 0.0000 or less than 0.05. Which means that the hypothesis (H3) is accepted, namely that the profitability and leverage variables simultaneously affect earnings management.

The results of this study can be interpreted that the existence of profitability and leverage variables is an indicator for company management to carry out earnings management practices. Because, there is pressure to pursue the profit target that has been set, the company management (agent) tries to achieve this even though the practice does not reflect the company's actual performance, and wants to maintain the investment value of shareholders by reducing the debt ratio.

## Company Size Moderates the Effect of Profitability on Earnings Management (H4)

In this study, based on the interaction test of the results obtained in the study that has been conducted on the moderation variable of company size using the formula Ln = (Asset) obtained a probability value of 0.8304 which indicates that the value obtained is greater than the significance value of 0.05. This means that the moderation

variable of company size cannot moderate the effect of profitability on earnings management in State-Owned Enterprises (BUMN) listed on the Indonesia Stock Exchange in 2018-2022.

Company size is indicated by company assets, the greater the company's assets owned, the larger the company (Kristiana & Rita, 2021). Based on the partial test (t-test) in this study, profitability has an effect on earnings management, then based on the Interaction test, the results found that company size is unable to moderate the effect of profitability on earnings management. It can be interpreted in this study that profitability increases earnings management regardless of whether the company is large or small. The ineffectiveness of company size as a moderator can also be due to the fact that large companies that generate high profitability usually have strict supervision from the government, analysts and investors. relationship between this and agency theory is that large companies generally have stronger governance mechanisms such as boards of directors, audit committees, stronger codes of ethics and have higher agency costs to monitor the company. This mechanism can also help reduce agency conflicts in a company.

# Company Size Moderates the Effect of Leverage on Earnings Management (H5)

In this study, based on the interaction test of the results obtained in the study that has been conducted on the moderation variable of company size using the formula Ln = (Asset) obtained a probability value of 0.0007 which indicates that the value obtained is smaller than the significance value of 0.05. This means that the moderation variable of company size can moderate the effect of leverage on earnings management in State-Owned Enterprises (BUMN) listed on the Indonesia Stock Exchange in 2018-2022.

Earnings management is the practice of manipulating financial statements to achieve certain goals. Leverage or debt ratio is the debt used by the company in its operational activities and company size is a value that indicates the size of the company, which in this study is seen from the company's total assets. In this study, it was found that the moderation variable of company size has an effect on leverage on earnings management. It can be concluded that companies with high leverage and large company size have greater pressure to meet profit targets set by investors or shareholders (principals), so earnings management practices are used to achieve profit targets even though actual profits are not achieved. Earnings management practices are also carried out to reduce agency costs due to high leverage, because high leverage has impacts such as reducing financial flexibility, increasing the risk of bankruptcy, reducing company value. Because large companies have a reputation and high investor stock value, management (agent) does not want to lose it. Because, this can trigger a conflict between shareholders (principals) and

company management (agents) due to the principal's reduced trust in the agent. This is closely related to agency theory, the impact of which triggers a conflict between the agent and the principal because of the separation of duties and interests between the two parties.

### III. CONCLUSION

management The earnings impacted by the profitability. This can lead to a larger incentive for the management for the work done even though it does not reflect the actual profit since the management of the company keeps the profit value high to demonstrate that the business's financial performance is improving. earnings management The unaffected by the leverage variable. This can occur because average company data has safe leverage, which means that the business can repay the debt used to finance its assets. As a result, managers of the business are not incentivized to manage earnings, and if the business has high leverage, management of earnings can be implemented.

The determinants of profitability and leverage impact the earnings management. This is due to the pressure to meet the profit target set by the management (agent) of the company, even though doing so does not accurately reflect the actual performance of the business. Additionally, by lowering the debt ratio, the company hopes to preserve investment value of shareholders.

The impact of profitability on profits management is not mitigated by the company size variable. This is possible in this study because profitability—regardless of the size of the business—increases profits management. The lack of firm size as a moderator may also be due to the fact that governments and analysts typically closely monitor large corporations and highly profitable businesses.

This study has limitations, namely the study population consists of State-Enterprises Owned (BUMN) covering various business sectors. Thus, the results of the study can only explain in general for all sectors, not specifically. Suggestions in this writing for investors can consider the profitability variable as one of the indicators of companies practicing management. earnings For can companies, they consider optimizing governance and supervision because the variables of profitability, leverage, and company size, either partially or moderately, can influence company management to practice earnings management.

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