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# Corporate governance implementation on earnings management practices: Firm size as moderation

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**Abstract**

This study aims to analyze the effect of corporate governance, firm performance, and firm characteristics on earning management (EM). The data used in this study are secondary data, that is financial statements of non-financial companies listed on Indonesian Stock Exchange (IDX) in period 2010-2021 with a total sampel of 116 companies. Using multiple linear regression analysis pooled least square method, moderated regression analysis, and sub-group regressions prove that institutional ownership and board size as proxies for corporate governance affect earnings management practices (EM). Financial performance, which is proxied by return on assets (ROA) and sales growth (SGR) has a significant effect on EM. Through the moderation test, firm size (SIZE) as pure moderation. SIZE only perfoms as a moderator not as an independent variable that effects the relationship between board size (BZISE) and EM. In this study, profitability is the most dominant factor in determining EM. This study can provide useful information for shareholders and regulators in evaluating corporate governance attributes, financial performance and company characteristics that are effective in reducing EM practices. This study also contributes to the existing literature regarding EM practices, especially in non-financial companies listed on the IDX

Keywords: Earnings Management, Corporate Governance, Financial Performance, Firm Size, Indonesia Stock Exchange

**Abstrak**

Penelitian ini bertujuan untuk menganalisis pengaruh tata kelola perusahaan, kinerja perusahaan, dan karakteristik perusahaan terhadap *earning management (EM)*. Data yang digunakan berupa data sekunder yaitu laporan keuangan perusahaan non keuangan yang terdaftar di Bursa Efek Indonesia (BEI) periode 2010-2021 dengan jumlah sampel sebanyak 116 perusahaan. Dengan menggunakan analisis multiple linear regression analysis pooled least square method, moderated regression analysis, and sub-group regressions membuktikan bahwa kepemilikan institusional dan ukuran dewan direksi sebagai proksi tata kelola perusahaan berpengaruh terhadap praktik EM. Kinerja keuangan yang diproksikan dengan *return on assets (ROA)* dan *sales growth (SGR)* berpengaruh signifikan terhadap EM. Melalui uji moderasi, ukuran perusahaan sebagai moderasi murni. Ukuran perusahaan hanya berperan sebagai moderator bukan sebagai variabel independen yang mempengaruhi hubungan ukuran dewan direksi dan EM. Dalam penelitian ini profitabilitas merupakan faktor yang paling dominan dalam menentukan EM. Penelitian ini dapat memberikan informasi yang berguna bagi pemegang saham dan regulator dalam mengevaluasi atribut tata kelola perusahaan, kinerja keuangan dan karakteristik perusahaan yang efektif dalam mengurangi praktik EM. Penelitian ini juga memberikan kontribusi terhadap literatur yang ada mengenai praktik EM, khususnya pada perusahaan non-keuangan yang terdaftar di BEI.

Kata kunci: Earnings Management, Corporate Governance, Financial Performance, Firm Size, Indonesia Stock Exchange

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## Introduction

Earnings management is an intervention carried out by managers in the process of determining company profits to fulfill their interests (Huynh, 2020; Mahrani & Soewarno, 2018). Managers manipulate profit information to maximize self-interest. There are several main motives for companies to manage earnings (Healy & Wahlen, 1999). The first is the motive related to the capital market, the company aims to influence the short-term stock price performance before making a big announcement or corporate action (Chou et al., 2006; Cohen & Zarowin, 2010; Dechow et al., 1996; Teoh et al., 1998), or to meet the expectations of financial statements users (Burgstahler & Eames, 2006; Doyle et al., 2013). Second, is the motive related to the contract (Palumbo & Rosati, 2022), managers use accounting judgments to increase profit-based bonuses (Healy, 1985; Holthausen et al., 1995).

Several incidents of earnings management practices have occurred in large companies which have shocked the business world both domestically and abroad. El Diri et al. (2020) explains how earnings management occurred at the Coca Cola company which made an overstatement of assets of $ 9 million and how Pepsi Co. which has made a fictitious vendor of $ 8.7 million between 1998 to 2009. In 2002 in Indonesia, a case of earnings management was found at PT. Kimia Farma Tbk. who made an error in the valuation of finished goods inventory and sales recording for the financial statements for the December 2001 period which resulted in an overstated net profit of IDR 32.7 billion (which was initially reported as a net profit of IDR 132 billion) (Syahrul, 2003). In addition, earnings management practices have also occurred at PT Hanson International Tbk. There are several points that conflict with capital market laws, including the recognition of revenue using the full accrual method for sales of plots ready to build (KASIBA) worth Rp 732 billion grosses in the financial statements for that period. This revenue recognition led to an overstated December 2016 financial statement with a value of Rp 613 billion. A phenomenal case is that PT Garuda Indonesia Tbk reported income earlier so that the current year's profit became positive and soared, followed by the refusal of one of the commissioners to sign the annual report and ended in a revised annual report.

The rise in earnings management practices is due to differences in interests between agents and principals. A conflict of interest will arise if the agent fails to act in accordance with the wishes of the principal (Wiyadi et al., 2015). In a corporate context, this conflict can lead agents to prepare financial reports in a way that benefits their interests only. Therefore, to get some benefits, agents can manipulate financial reports that are not in accordance with reality (Firnanti et al., 2019). Various conflicts of interest and agency costs that arise, it is necessary to have a complete and clear concept of how each party can work together and side by side within the framework of protecting stakeholders and long-term business continuity. The concept that pays attention and regulates the interests of these parties is corporate governance. The implementation of corporate governance is an effort to eliminate earnings management practices in managing the business world (Sulistyanto, 2008; Tanjung et al., 2015).

Implementation of corporate governance can be done through a monitoring mechanism to align various interests. The first mechanism can be through the monitoring role by the board of commissioners. Jaya Kirana et al. (2020); Nasution & Setiawan (2007); Susanto et al. (2017) found a significant relationship between the role of the board of commissioners and earnings management practices. The second mechanism is by increasing share ownership by institutional

investors. Institutional investors are parties who can monitor agents with large holdings (Chung & Zhang, 2011). Jao & Pagalung (2011); Susanto & Agness (2019) found that institutional ownership has a negative relationship with earnings management.

Specifically, this study analyzes the role of corporate governance and firm characteristics on earnings management practices in non-financial companies in Indonesia for the 2010-2018 period. Thus, this research can contribute both practically and theoretically to the role of firm size in maintaining the effectiveness of monitoring by the board of commissioners and institutional investors on management's earnings management actions.

Board size of commissioners is the number of members of the board of commissioners in the company. Fama & Jensen (1983) stated that the board of commissioners is the highest internal control mechanism responsible for overseeing the actions of top management. However, the more the number of commissioners, the more complex it will be to carry out the role as a commissioner (Nasution & Setiawan, 2007). This complexity will hinder communication and work coordination of each member of the board of commissioners. In addition, commissioners will find it difficult to supervise and control management actions, as well as in making decisions that are useful for the company. If the number of commissioners is small, this will be more effective in reducing earnings management actions. This is because a small amount can inhibit the emergence of agency problems because supervision can be more focused so that management can avoid earnings management actions. Study results from Jaya Kirana et al. (2020); Nasution & Setiawan (2007); Susanto et al. (2017) proves that the board size of commissioners has a significant positive effect on earnings management. However, unlike Prastiti & Meiranto (2013) who found no effect of board size on earnings management.

$H_1$: Board size of commissioners has a positive impact on earnings management

Institutional ownership is measured by the percentage of the number of shares owned by the institution from the total listed shares (Chung & Zhang, 2011; Perwitasari, 2014; Teti & Montefusco, 2022). Institutional investors have the opportunity, resources, and capabilities to supervise, discipline, and influence company managers in terms of opportunistic management actions (Chung & Zhang, 2011). Institutional investors that have large shareholdings will have strong incentives to gather information, monitor and encourage better management performance. It would limit the manager's behavior so that it can reduce the manager's opportunistic actions and earnings management actions. Previous studies from Jao & Pagalung (2011); Susanto & Agness (2019) found that institutional ownership has a negative relationship with earnings management. However, in contrast to Firnanti et al. (2019); Harahap (2021); Purnama (2017) who found no significant effect of institutional ownership on earnings management. However, unlike Prastiti & Meiranto (2013) who found no effect of board size on earnings management.

H2: Institutional ownership has a negative impact on earnings management

Return on assets shows how much net profit can be created from the total assets owned (Soesetio et al., 2022b). The greater the profits created by the company, the greater the possibility of taxes that must be paid by the company to the state. Thus, companies with high profits tend to carry out earnings management in order to reduce the amount of tax that must be paid to the state (Puspitosari, 2015). This action is usually carried out with income minimization which aims for the purposes of tax considerations, that is minimize the company's tax obligations (D. Purnama,

2017). Studi dari (Firnanti et al., 2019; Harahap, 2021; Puspitosari, 2015) found that return of assets (ROA) has a positive effect on earnings management. On the other hand, Abbadi et al. (2016) proves that there is a negative effect of ROA on earnings management.

H3: Return on asset has a positive impact on earnings management

Companies that have high leverage ratios show a higher proportion of debt than equity, so creditors will control the company more strictly, thereby reducing management's flexibility to manage earnings. Thus, the higher the leverage ratio, the lower the possibility of management to manage earnings (Harahap, 2021), because the management will be more careful in preparing its financial statements (Puspitosari, 2015). In addition, the debt used to finance the company's operational activities will incur interest expenses. The greater the company's interest expense, the less the tax burden that must be paid by the company. Thus, earnings management can be minimized. Previous studies from Harahap (2021) prove the negative effect of debt to equity ratio (DER) on earnings management. Whereas Ghofir & Yusuf (2020) found no significant relationship between DER and earnings management.

H4: Debt to equity ratio has a negative impact on earnings management

Sales growth is measured as the difference between the current period's sales and the previous period's sales. Companies that have high sales growth tend not to be motivated to engage in earnings management practices because they benefit from a strong market share where a strong market share causes the company to achieve greater scale in its operations and increase profitability (Abbadi et al., 2016). A company will gain market share as long as it maximizes growth and maximizing growth is the way to maximize their profits (Wernerfelt, 1986). Companies that have higher growth rates tend not to engage in earnings management practices (Abdul Rahman & Haneem Mohamed Ali, 2006). On the other side, Matsumoto (2002) found that companies that have high growth rates are more likely to use earnings management.

H5: Sales growth has a negative impact on earnings management

When an investor buys a stock, it will certainly be seen whether the shares are feasible or not seen from their corporate governance, especially the board of commissioners whose role is to supervise and control the performance of managers. Companies with fewer commissioners will usually minimize earnings management practices, but the number of commissioners does not guarantee earnings management practices. The influence of the board of commissioners on earnings management also depends on the firm size. Compared to small companies, large scale companies tend to have more effective internal control systems, which help in providing reliable financial information (Firnanti et al., 2019). Large companies will have more and better resources (Zuhroh, 2019). With the availability of superior resources, it will make the company look more reliable for long-term investment so that many investors are interested in the company. Large companies are considered to have a good reputation which stems from the impression of their ability to survive in intense business competition and the motivation to always maintain a good and credible reputation from an investor's point of view. Thus, the larger the company accompanied by an increase in the number of commissioners, the greater the motivation of the board of commissioners to encourage management to manage earnings for the purpose of maintain consistency in company decision making (Purnama & Nurdiniah, 2019). Likewise with small companies, even though their operational and non-operational costs are small, their income cannot compete strictly with large

companies. Therefore, the action of earnings management is also sought and encouraged by the board of commissioners to management in line with the increase in the number of commissioners to maximize earnings management. In addition, small firms are more likely to be motivated to engage in earnings management practices to cover higher marginal costs compared to large firms that enjoy the benefits of economic scale (Abbadi et al., 2016).

H6: Firm size moderates the relationship between board size of commissioners and earnings management.

## Method

This study aims to reveal the effect of corporate governance, financial performance, and firm characteristic on earnings management. The population is 526 non-financial companies listed on the Indonesia Stock Exchange (IDX) in 2010-2021. The use of the purposive sampling method obtained a sample of 116 companies with sample criteria, that are: (1) all non-financial companies listed on the IDX in 2010-2021; (2) companies that consistently present annual financial reports according to the study period and are reported in IDR currency; (3) the company presents data that supports corporate governance variables.

The secondary data used in this study was financial reports during the research period which were obtained from PT KSEI, The Indonesia Capital Market Institute, and the Indonesia Stock Exchange.

Earnings management was used as a dependent variable. Meanwhile, corporate governance (i.e. institutional ownership and board size of commissioners), financial performance (i.e. return on asset, debt to equity ratio, and sales growth), firm size was used as a moderator variable. Measurements of each variable are detailed presented in the appendix 1.

Normality test was applied before hypothesis testing and all models have passed the normality test and others clasical asumssion. Multiple regression, moderated regression analysis (MRA), and sub-group regression analysis is used as an analytical tool to answer the hypotheses proposed. This study uses firm size as a moderator variable that moderates the relationship between board size of commissioners and earnings management. Larger companies have internal control systems that tend to be stronger and more competent commissioners than smaller companies which can reduce management's ability to manipulate earnings. From the 116 data collected, divided into two groups of big-size firms and small-size firms with a cut-off based on the mean asset value of IDR 3,079,843,808,185 assets or ln asset value of 28.7559. The regression model used:

$EM_i = \alpha i + BSIZE_i + ROA_i + DER_i + SGR_i + \varepsilon_i$

$EM_i = \alpha i + IO_i + ROA_i + DER_i + SGR_i + \varepsilon_i$

$EM_i = \alpha i + BSIZE_i + IO_i + ROA_i + DER_i + SGR_i + \varepsilon_i$

$Emi_{,t} = \alpha i + BSIZE_{i,t} + ROA_{i,t} + DER_{i,t} + SGR_{i,t} + \varepsilon_{i,t}$

$Emi_{,t} = \alpha i + BSIZE_{i,t} + ROA_{i,t} + DER_{i,t} + SGR_{i,t} + SIZE_{i,t} + \varepsilon_{i,t}$

$Emi_{,t} = \alpha i + BSIZE_{i,t} + ROA_{i,t} + DER_{i,t} + SGR_{i,t} + SIZE_{i,t} + BSIZE_{i,t} * SIZE_{i,t} + \varepsilon_{i,t}$

$EM\ Big\ Firm_{i,t} = \alpha i + BSIZE\ Big\ Firm_{i,t} + \varepsilon_i$

$EM\ Small\ Firm_{i,t} = \alpha i + BSIZE\ Small\ Firm_{i,t} + \varepsilon_i$

## Result

Based on the output of table 1, it can be concluded as follows, The average value of the earnings management (EM) variable is -0.15, which means that the EM of non-financial companies in this period tends to be small, however, the minimum value of the EM variable is -1.04 owned by PT Alakasa Industrindo Tbk in 2018. The negative EM value illustrates that PT Alakasa Industrindo Tbk carried out the highest income minimization in 2018. The maximum EM value is 1.26 which was owned by PT Gajah Tunggal Tbk in 2010. The positive EM value illustrates that PT Gajah Tunggal Tbk performed the highest income maximization in 2010. The minimum value of the variable institutional

**Table 1. Descriptive Statistics**

| Variable | Obs | Mean | Std. dev. | Min | Max |
|---|---|---|---|---|---|
| EM | 1,341 | -0.1459 | 0.1847 | -1.0413 | 1.2644 |
| BSIZE | 1,341 | 4.6020 | 1.9431 | 2 | 12 |
| IO | 1,341 | 0.6760 | 0.1918 | 0.0313 | 1.0000 |
| ROA | 1,341 | 0.0600 | 0.1149 | -0.7213 | 0.7484 |
| DER | 1,341 | 1.6296 | 12.0371 | -30.6385 | 370.5741 |
| SGR | 1,341 | 0.1313 | 0.4087 | -2.9607 | 5.9473 |
| SIZE | 1,341 | 28.7559 | 1.8091 | 23.0603 | 33.4737 |

Source: data processed (2023).

ownership (IO) is 0.03 and the maximum value is 1.00 with an average value of 0.68 which means that non-financial companies listed on the IDX are on average the average is owned by institutional parties by 68%. The minimum value for the variable board size of commissioners (BSIZE) is 2 and the maximum value is 12 with an average value of 4.62, which means that on average the company appoints 4-5 commissioners to carry out monitoring. The minimum value of the variable return on assets (ROA) is -0.72 and the maximum value is 0.75 with an average value of 0.06. This shows that the final profit of non-financial companies in this period tends to be small compared to the assets owned. The minimum value of the variable debt to equity ratio (DER) is -30.64 and the maximum value is 370.57 with an average value of 1.63. The minimum value of the sales growth variable (SGR) is -2.96 and the maximum value is 5.95 with an average value of 0.13. The minimum value of the firm size variable (SIZE) is 23.06 and the maximum value is 33.47 with an average value of 28.76.

## Hypotheses Testing Results

Based on table 2, it proves that each variable consistently has a significant effect in the same direction on earnings management practices. The corporate governance variable proxied by institutional ownership has a probability ≤ 0.01 and is negative, which means that institutional ownership has a negative and significant effect on earnings management practices. In contrast to the size of the board of commissioners which has a probability ≤ 0.01 and is positive, which means that the size of the board of commissioners has a positive and significant effect on earnings management practices.

The proxy financial performance by return on assets has a probability ≤ 0.01 and is positive, which indicates a significant positive effect of return on assets on earnings management. Debt to equity ratio has a negative relationship and probability ≤ 0.01, which means the debt-to-equity ratio has a negative and significant effect on earnings management. Sales growth has a probability ≤ 0.05 and is negative, proving that sales growth has a negative and significant effect on earnings management.

Next, we use firm size which is calculated using natural logarithm of total assets as a moderator variable that moderates the relationship between board of commissioners (BSIZE) and earnings management (EM). The results in table 4 show that firm size positively and significantly moderates the relationship between BSIZE and EM.

RSSr = 25.05127; RSS1 = 10.96844; RSS2 = 13.9061; RSSur = 24.87454

F = ((RSSr – RSSur) / k) / (RSSur / (n1 + n2 – 2k))

**Tabel 2. Regression Output**

| VARIABLES | EM | EM | EM |
|---|---|---|---|
| BSIZE | 0.015*** | | 0.008** |
| | (0.003) | | (0.003) |
| IO | | -0.079*** | -0.068** |
| | | (0.026) | (0.027) |
| ROA | 0.285*** | 0.331*** | 0.318*** |
| | (0.051) | (0.053) | (0.053) |
| DER | -0.002 | -0.003 | -0.002 |
| | (0.002) | (0.002) | (0.002) |
| SGR | -0.021 | -0.047** | -0.027 |
| | (0.015) | (0.013) | (0.013) |
| Constant | -0.215*** | -0.126*** | -0.173*** |
| | (0.014) | (0.018) | (0.023) |
| R-squared | 0.065 | 0.067 | 0.067 |

Source: data processed (2023).

**Tabel 3. Moderated Regression Output**

| VARIABLES | Moderated Regression Analysis | | | Sub-Group Regression | |
|---|---|---|---|---|---|
| | | | | Big Firms | Small Firms |
| | EM | EM | EM | EM | EM |
| BSIZE | 0.014*** | 0.014** | -0.171* | 0.024** | 0.025** |
| | (0.005) | (0.006) | (0.089) | (0.006) | (0.006) |
| ROA | 0.375*** | 0.421*** | 0.419*** | | |
| | (0.069) | (0.078) | (0.076) | | |
| DER | 0.001 | 0.001 | 0.001 | | |
| | (0.001) | (0.001) | (0.001) | | |
| SGR | -0.004 | 0.004 | 0.005 | | |
| | (0.011) | (0.011) | (0.012) | | |
| SIZE | | 0.027 | -0.008 | | |
| | | (0.012) | (0.015) | | |
| BSIZE*SIZE | | | 0.008* | | |
| | | | (0.003) | | |
| Constant | -0.243*** | -0.716** | 0.008 | -0.230*** | -0.220*** |
| | (0.022) | (0.340) | (0.430) | (0.034) | (0.028) |
| R-squared | 0.079 | 0.080 | 0.095 | 0.059 | 0.047 |

Source: data processed (2023).

F = ((25.05127 - 24.87454) / 1) / (24.87454 / (475 + 503 - 2))
F = 6.9343385; Ftabel = 3.851004168

RSSr = Restricted residual sum of squares total observations; RSS1 = Restricted residual sum of squares for large companies; RSS2 = Restricted residual sum of squares for small companies; RSSur = RSS1 + RSS2. The chow test for sub-group regression shows that the calculated F is 6.93 > F table 3.85, which means firm size is the moderator variable. Table 3 also shows that in the category of large and small companies, BSIZE has a significant effect (≤ 5%) on EM.

## Discussion

### Effect of Board Size of Commisioners on Earnings Management

The corporate governance variable proxied by board size of commissioners has a positive and significant effect on earnings management practices. The more personnel who become the board of commissioners can result in the worse performance of the company (Eisenberg et al., 1998; Jao & Pagalung, 2011; Nasution & Setiawan, 2007). This can be explained by the existence of an agency problem, that is, with an increasing number of commissioners, it will result in complications in carrying out the role as a board of commissioners (Nasution & Setiawan, 2007). This complexity causes communication and work coordination of each member of the board of commissioners to be hampered. In addition, the board of commissioners will experience many difficulties when carrying out in-depth control and supervision of management actions and making decisions that are useful for the company. This resulted in delays in the supervisory process to management, which should be the responsibility of the board of commissioners. The ineffective supervision of the board of commissioners can also be based on the condition of companies in Indonesia, most of which are family firms (Claessens, S., Djankov, S., Fan, J. P. H., & Lang, 2002; Muntahanah et al., 2021; Widagdo et al., 2021). This is because the appointment of the board of commissioners is only based on family relationships, awards, and other close relationships. So, it is not based on the ability of the board of commissioners themselves. In addition, the commissioners also expect the distribution of bonuses for financial performance apart from the dividends distributed. So that the existence of a personal profit motive in the form of bonuses is thought to be able to deepen and enlarge the occurrence of earnings management actions.

If the number of commissioners is small, this will be more effective in reducing earnings management actions. This is because a small amount can inhibit the emergence of agency problems because supervision can be more focused so that management can avoid earnings management actions. These results are supported by previous studies by Nasution & Setiawan (2007) which states that the size of the board of commissioners has a significant positive effect on earnings management.

### Effect of Institusional Ownership on Earnings Management

Institutional ownership has a negative and significant effect on earnings management practices. Institutional investors have the opportunity, resources, and capabilities to supervise, discipline, and influence company managers in terms of opportunistic management actions (Chung & Zhang, 2011). If institutional investors have a lower number of ownerships, then institutional investors have less incentive and power to monitor the opportunistic actions of managers, and vice versa. This makes opportunistic actions and earnings management by managers more optimally controlled and limited.

This result strengthens the findings of Susanto & Agness (2019) that high institutional ownership can minimize earnings management practices. Study

results from Jao & Pagalung (2011) also found that institutional ownership has a negative relationship with earnings management. However, in contrast to Firnanti et al. (2019) who found no significant effect of institutional ownership on earnings management.

**Effect of Return on Asset on Earnings Management**

ROA has a significant effect on earnings management in a positive direction. This shows that the higher the ROA, the higher the possibility of a company doing earnings management. Companies with high profits will be more attractive to shareholders and potential investors. Therefore, companies tend to carry out earnings management using income maximization to show that the profits generated by the company have increased (Hidayah & Subowo, 2019). In addition, companies with too high profits tend to carry out earnings management in order to reduce the amount of tax that must be paid to the state (Puspitosari, 2015). This action is usually carried out with income minimization which aims for the purposes of tax considerations, that is minimize the company's tax obligations (D. Purnama, 2017). The earnings management method to be used depends on management's motives (Ghazali et al., 2015). These results also support Firnanti et al. (2019); Harahap (2021); Puspitosari (2015), who found that ROA has a positive effect on earnings management.

**Effect of Debt-to-Equity Ratio on Earnings Management**

There is no significant effect of debt-to-equity ratio (DER) on earnings management. The level of leverage at the company has no influence on earnings management actions. That is, the level of debt is not a reason for companies to practice earnings management. Companies with high levels of leverage have a risk of default, the company is unable to fulfill its obligations. Earnings management cannot be done as a way to avoid the risk of default (Wiyadi et al., 2015). Companies cannot avoid having to make settlements and repay several debts that must be met. This result strengthens the findings of Wiyadi *et al.* (2015) that the debt to equity ratio has no effect on earnings management practices.

**Effect of Sales Growth on Earnings Management**

Sales growth has a negative and significant effect on earnings management practices. Sales growth is measured as the difference between the current period's sales and the previous period's sales. Companies that have high sales growth tend not to be motivated to engage in earnings management practices because they benefit from a strong market share where a strong market share causes the company to achieve greater scale in its operations and increase profitability. A company will gain market share as long as it maximizes growth and maximizing growth is the way to maximize profits (Wernerfelt, 1986). Companies that have higher growth rates tend not to engage in earnings management practices (Abdul Rahman & Haneem Mohamed Ali, 2006).

**Moderation Effect of Firm Size on Board Size of Commissioners to Earnings Management**

Firm size as an independent variable does not have a significant effect on earnings management practices. These results explain that the size of the company has no direct effect on earnings management practices. As found by Ghofir & Yusuf (2020); Wahyono et al. (2019) which found that there is no significant effect of firm size on earnings management. However, what is surprising from the findings of this study is that it proves the role of company size as a moderator in the relationship between the number of commissioners and earnings management. Large companies tend to have large final profits because they are supported by greater resources and more network connections. In addition, large

and already large companies are considered to have a good reputation which stems from the impression of their ability to survive in intense business competition and the motivation to always maintain a good and credible reputation from an investor's point of view. Thus, the larger the company accompanied by an increase in the number of commissioners, the greater the motivation of the board of commissioners to encourage management to manage earnings by minimizing profits for the purpose of reducing taxes and earning smoothing (D. Purnama, 2017; Puspitosari, 2015). Likewise with small companies, even though their operational and non-operational costs are small, their income cannot compete strictly with large companies. Therefore, the action of earnings management is also sought and encouraged by the board of commissioners to manage in line with the increase in the number of commissioners to maximize earnings management. Small companies are also trying to attract the sympathy of investors and creditors to participate in funding their business by displaying impressive dynamics and trends.

The increase in the number of commissioners along with the encouragement of earnings management is more common in small companies than large companies. This is very reasonable considering that when the company was still small, it had a stronger and passionate motivation to always be a more credible, profitable, prosperous, and bigger company. In line with the impresario hypothesis theory, the company will make every effort to give a good impression to attract investors (Rathnayake et al., 2022), including the board of commissioners who always strive to improve various aspects, especially the amount of assets to acquire publicity and promote enthusiasm (Shiller, 1987). Thus, investors and creditors have an extraordinary impression of the company's performance.

## Conclusion

Overall, corporate governance (i.e. board size of commissioners and institutional ownership), financial performance (i.e. return on assets and sales growth) significantly affect earnings management practices. Meanwhile, the debt-to-equity ratio has no significant effect on earnings management. It is surprising that the role of firm size is only as a moderator that moderates the relationship between board size of commissioners and earnings management. This means that an increase in company assets coupled with an increase in the number of commissioners will affect the size of earnings management. Furthermore, this study proves that return on assets is the most appropriate and valuable information as a basis for consideration by managers in manage earnings.

This study also has implications for shareholders to strengthen the implementation of good corporate governance in such as greater institutional shareholding and a relatively small number of quality commissioners so that earnings information becomes more qualified. Meanwhile, regulators focus more on the level of profitability reported by companies and combined with the implementation of corporate governance as an indication of early detection of earnings management practices that are detrimental to government revenue from the tax sector.

This research is limited to non-financial companies. Future research can use all samples of companies listed on the IDX to obtain more comprehensive and general results as a basis for assessing and analyzing earnings management so that it is hoped that this will become a reference for investors to make decisions that are more rational and not be manipulated by beautiful financial reports.

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**Appendix 1. Variable operationalization**

| Variables | Symbol | Type | Measurement |
|---|---|---|---|
| **Dependent Variable** | | | |
| Earnings Management | EM | Measure accrual discretion or to find out the intervention of information in financial statements | $TAC_{it} = NI_{it} - CFO_{it}$<br>$TAC_{it} / TA_{it-1} = \alpha_1 (1 / TA_{it-1}) + \beta 1_i ((\Delta REV_{it} / \Delta TA_{it-1}) + \beta 2_i (PPE_{it} / TA_{it-1}) + \varepsilon$<br>$NDTAC_{it} = \alpha_1 (1 / TA_{it-1}) + \beta 1_i ((\Delta REV_{it} / \Delta REC_{it}) / TA_{it-1}) + \beta 2_i (PPE_{it} / TA_{it-1}) + \varepsilon$<br>$DTAC_{it} = (TAC_{it} / TAC_{it-1}) - NDTAC_{it}$<br>Where:<br>TACCit = Total Accrual i in year t<br>TAit-1 = Total Assets i in year t-1<br>ΔREVit = Change in net income of firm i between year t and year t-1<br>ΔRECit = Change in the receivables of company i between year t and year t-1<br>PPEit = The acquisition value of fixed assets at company i in year t<br>ε = Error term<br>The total accrual equation was estimated using the Ordinary Least Square (OLS) method. Estimates of α, β1, β2 were obtained from the OLS regression and used to calculate the Non-Discretionary Accrual. |
| **Independent Variables** | | | |
| Board size of commissioners | BSIZE | Measures the proportion of the board of commissioners in a company | The number of board of commissioners |
| Institutional Ownership | IO | Measures the percentage of shareholding by an institution | $\frac{\text{Institutional shares}}{\text{Listed shares}} \times 100\%$ |
| Return on Asset | ROA | Measures how much profit can be generated from total assets held | $\frac{\text{Earning after tax}}{\text{Total asset}}$ |
| Debt to Equity Ratio | DER | Measures how much debt is secured by a company's equity | $\frac{\text{Total debt}}{\text{Total equity}}$ |
| Sales Growth | SGR | Measure changes in sales value periodically | $\frac{\text{Net sales}_t - \text{Net sales}_{t-1}}{\text{Net sales}_{t-1}}$ |

| Variables | Symbol | Type | Measurement |
|---|---|---|---|
| Firm Size | SIZE | Measures the size of the company through the total assets owned | Natural logarithm of total asset |

Source: data processed (2023)