THE IMPACT OF FIRM ATTRIBUTES ON EARNINGS MANAGEMENT

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Abstract: The determinants of earnings management is a widely studied area which provides understanding of managerial behavior to investors and regulators. This study aims to provide empirical evidence regarding the effect of managerial ownership, leverage and firm size on earnings management. The sample in this study is manufacturing companies listed on the Indonesia Stock Exchange (IDX). The analysis technique used is multiple linear regression analysis method with SPSS version 20. The results of this study indicate that managerial ownership and leverage affect earnings management. But the size of the company has no effect on earnings management. This result implies the importance of restrictions in the company over managerial ownership and high leverage to avoid earnings management in the company.

Keywords: managerial ownership, leverage, firm size, earnings management

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Introduction

The Central Statistics Agency recorded Indonesia's economic growth in 2018, reaching 5.17 percent, which is higher than the 2017 increase of 5.07 percent, even the highest in 4 (four) last year. The Ministry of Industry said the manufacturing industry is still a major supporter of national economic growth. To provide good accountability, every company in the industry must be able to present quality financial reports. According to Alzeban (2018) a good financial report must meet several relevant, timely, and reliable conditions.

A good financial report is a financial statement that is free from earnings management. Earnings management is the deliberate action to increase or decrease the amount of income in financial statements by management, by changing, hiding, and delaying information in the financial statements to achieve certain goals (Agustia, 2015).

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Various research on earnings management has been carried out in Indonesia (Bukit & Iskandar, 2009; Mahrani & Soewarno, 2018; Muda et al., 2018). Earnings management can be associated with positive accounting theory because basically every decision taken will have a relationship with other aspects. Positive accounting theory seeks to explain a process that uses the ability, understanding, and knowledge of accounting and how accounting policies are most appropriate to deal with certain conditions in the future (Scott,2015).

There are three components of the hypothesis that there is of positive accounting theory hypothesis bonus plan The Hypothesis Bonus Plan, Debt Covenant Hypothesis and Political Cost Hypothesis (Watts and Zimmerman, 1990). Positive theory refers more to empirical research that maximizes profits (both investors, managers and the wider community) in choosing existing accounting methods. Some researchers have examined the influence of political costs, debt covenants, and bonus plans on earnings management, but there are still inconsistent results from these studies.

Variations in ownership structure within the company have different impacts within the company (Iskandar et al., 2012; Salehi & Sehat, 2019; Hajar & Nohong, 2020) From the point of view of positive accounting theory it states that managerial ownership can reduce earnings management. This is because managers will be more careful in making decisions because they also act as shareholders. Herrera-Echeverry et al (2020) shows that board orientation could affect risk and earning smoothing activities within the firms. A different matter is shown by Weston and Brigham (1994) which state that managerial ownership will lead to potential conflicts in agency relations when the management of the company owns less than 100% of the company's common stock. Conflicts can occur because of an agent's desire to get a high salary or get certain facilities that are the same as those of the principal for his personal convenience.

The next aspect is regarding debt contracts. Debt contracts are one of the motivations of managers to take earnings management actions. Companies that have a high level of debt ratio, the company's managers will be motivated to make an increase in corporate profits. The company tends to want to maximize itself but it still tries to fulfill the contract. The closer a company is to a violation of an accounting-based debt agreement, the more it is possible for managers to choose accounting procedures that shift earnings reported from future periods to the current period (Watts and Zimmerman, 1986). This is done so that there are creditors who wish to invest their funds in the company. Investment portfolio diversification may originate benefits if the investor doing diversification (Bhutto et al,2020).

Firm size can participate in influencing the financial reporting process within the company. Shareholders and stakeholders in large companies are considered more critical than small companies. Larger investors are found in large companies, so large companies are under greater pressure to be able to display reliable financial reports (Mahrani and Soewarno, 2018; Kliestik et al., 2020). This gives the argument that the larger the size of the company will reduce the tendency for earnings management practices within the company.
This research will analyze the effect of managerial ownership, leverage, and firm size on earnings management. The sample in this study is a manufacturing company listed on the Indonesia Stock Exchange (IDX) for 2013-2017. Based on multiple linear regression testing, it was found that managerial ownership and leverage affect earnings management (Hussain et al., 2019). But the size of the company has no effect on earnings management.
The remainder of this paper is structured as follows. Section 2 literature reviews and develops the research hypotheses. Section 3 describes the sample, variables, and research design. Section 4 specifies the empirical result. Section 5 summarizes the paper and presents concluding remarks.

Literature review

Managerial ownership in a company can lead to various kinds of actions in financial reporting in the company. According to Jensen and Meckling (1976) earnings management practices can be minimized by aligning differences in interests between owners and management by increasing the company's shareholding by management. When management has a stake in the company, then management will also position itself as a shareholder. This means that management will strive for better company performance. In line with this, Artawan & Wirasedana (2018) show that managerial ownership has a negative effect on earnings management.
On the other hand, Weston and Brigham (1994) state that managerial ownership will lead to potential conflicts in agency relationships when the management of the company owns less than 100% of the company's common stock (Altounjy et al., 2020). Conflicts can occur because of an agent's desire to get a high salary or get certain facilities that are the same as those of the principal for his personal convenience. When this happens the ownership of shares will be positively related to earnings management. We argue that higher managerial ownership could lead to higher earnings management.
H_1: Managerial ownership positively affects earnings management.
Leverage is the ratio between total liabilities and total assets. Companies that have leverage ratios high will result in a large amount of debt compared to assets owned by

the company, it will tend to manipulate in the form of earnings management (Kliestik, et al. 2020). Companies that have high leverage ratios will tend to take earnings management actions in order to avoid violating debt agreements. The Debt-covenant hypothesis states that if all other things remain the same, the closer a company is to violations of accounting-based debt agreements, will increase the likelihood for managers to move reported earnings from future periods to the current period (Watts and Zimmerman, 1986). This decision was chosen so that the company's profits seemed to increase and wanted to show that the company was able to pay its debts in the future (Scott, 2006). Thus, companies with high levels of leverage tend to manage their profits compared to companies with low levels of leverage. We argue that higher leverage will be associated with higher earnings management.

H_2: Leverage positively affects earnings management

Large companies receive greater attention from external parties such as investors, creditors, and the government. So that large companies tend to be more cautious. Conversely, smaller companies tend to do earnings management by reporting greater profits to show satisfactory financial performance (Alzeban, 2018). Barth (2018) say that there is a negative relationship between firm size and earnings management. This is consistent with the previous argument that large companies lack motivation in carrying out earnings management practices. Shareholders and stakeholders in large companies are considered more critical than small companies. Larger investors are found in large companies, so large companies are under greater pressure to be able to display reliable financial reports (Mahrani and Soewarno, 2018).

H_3: Firm size negatively affect earnings management.

Materials and methods

Samples in this study are all manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2013-2017. The observation year was chosen as we consider the availability of data published on the Indonesia Stock Exchange website. Table 1 shows the sample selection of this study. The final observations in this study were 490 observations from 98 companies in the manufacturing industry. This research uses secondary data types. Secondary data used in the form of company annual report documents obtained from the Indonesia Stock Exchange (IDX) through the website www.idx.co.id and the website of each company.

Table 1. Sample Selection

Criterias	**Total**
Manufacturing companies listed on the Indonesia Stock Exchange 2013-2017	155
Manufacturing companies that do not publish financial reports and *annual reports* in 2013-2017	(38)
Manufacturing companies that do not provide complete data	(19)
Number of research samples	98
Years used 2013-2017	5
Number of observations	490

The dependent variable in this study is earnings management. Earnings Management (EM) variables are measured using discretionary accruals to use the Modified Jones model (Jones, 1991). Proxies used to determine the number of discretionary accruals (DA) occur when the value of DA> 0. The steps in measuring earnings management with the Modified Jones Model are:

First, Determine the total value of accruals, which is the difference between net income and operating cash flows using the equation (1)

$$TA_{it} = NI_{it} - CFO_{it} \quad (1)$$

Second, Determine parameter values 1, 2, and 3 from model (2) with Jones Model (1991) To scale the data, all of the above variables are divided by the assets of the previous year, so the model (2) is as follows:

$$TA_{it}/ A_{it-1} = \alpha_1 (1 / Ait_{-1}) + \alpha_2 (\Delta REV_{it} / A_{it-1}) + \alpha_3 (PPE_{it}/ A_{it-1}) + \varepsilon_{it} \quad (2)$$

the parameter values 1, 2, and 3 are estimated by regression equation *ordinary least squares* (OLS)

Third, using the parameter values 1, 2, and 3, the value of *nondiscretionary accrual* can be calculated by the model (3)

$$NDA_{it} = \alpha_1 (1 / A_{it-1}) + \alpha_2 (\Delta REV_{it}/ A_{it-1} - \Delta REC_{it}/ A_{it-1}) + \alpha_3 (PPE_{it}/ A_{it-1}) +\varepsilon_{it} \quad (3)$$

Total accruals are also the sum of *discretionary accruals* and *nondiscretionary accruals*. To calculate the value of *discretionary accruals* which is an indicator of accrual earnings management is done by reducing total accruals with *nondiscretionary accruals*

$$DA_{it} = TA_{it} - NDA_{it} \quad (4)$$

TAC_{it} is the Total Accruals of Company i in period t; NI_{it} is the company's Net Income i in period t; CFO_{it} is the company's Operating Cash Flow i in period t; A_{it} is total assets of company i in period t; ΔRev_t is the change in corporate income i in period t; A_{it-1} is total assets of company i in period t-1; PPE_t is the company's fixed assets in the t period; α_1, α_2, α_3 are parameters obtained from the regression equation; NDA_{it} is non-*discretionary accrual of* company i in period t; ΔRec_t is Change in company receivables i in period t; DA_{it} is *Discretionary accrual of* company i in period t; εi_t is the *error term* company'si in period t.

Independent variables used in this study include managerial ownership (MNGOWN), leverage (LEV) and firm size (FSIZE). Managerial Ownership is ownership owned by management, in this case the board of commissioners and directors (Kim, Kim and Zhou, 2017). Managerial ownership variable (MNGOWN) is measured using the number of management shares divided by outstanding shares. The leverage variable (LEV) in this study is measured using the percentage of the company's total debt to the total assets of the company (Barth, 2018). Fan et al., (2019) states that firm size is a scale that can classify companies into large and small companies according to various ways such as total assets or total company assets, market value of shares, average level of sales, and total sales. In this study firm size is measured as the natural logarithm value of total assets (Barth, 2018).

Technique of multiple linear regression analysis is used to test the effect between the independent and dependent variables. This study reveals the analysis of multiple regression methods processed using SPSS applications. Equation model (5) is used to test the hypothesis in this study.

$$EM = \alpha + \beta_1 MNGOWN + \beta_2 LEV + \beta_3 FSIZE + \varepsilon \quad (5)$$

To find information on the partial effect of the independent variable on the dependent variable, a t test will be performed. T test was carried out with a significance level of 5%. When the value of t is greater than 5%, the independent variable does not affect earnings management while when the value of t is less than 5%, the independent variable partially affects earnings management.

Results

Table 2 shows information about the minimum, maximum, mean (mean) and standard deviation of the variables used in this study. Managerial ownership variable (MNGOWN) has an average value of .04982409 and a standard deviation of .157452975. The leverage variable (LEV) has a value ranging from 0.115 to 5.6402. This variable has an average value of 0.43681902. The firm size variable (FSIZE) has an average value of 28.57848898 and a standard deviation of 0.300311664. Earnings management variable (EM) has an average value of 0.7370388, and the value varies from 0.000003 to 6.492100.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviasi
MNGOWN	490	.000000	1.353700	.04982409	.157452975
LEV	490	.011500	5.640200	.43681902	.391344138
FSIZE	490	21.398700	33.871300	28.57848898	1.740388406
EM	490	.000003	6.492100	.07370388	.300311664
Valid N (listwise)	490				

In Table 3 are shown the results of multiple linear regression analysis. Based on table 3 the significance of the MNGOWN variable shows the number 0.044. This value is smaller than 5%. This result implies that hypothesis 1 is accepted, where managerial ownership is positively related to earnings management.

The results of this study indicate that managerial ownership affects earnings management. Managerial ownership will bring up potential conflicts in agency relations when the company's management owns less than 100% of the company's common stock (Weston and Brigham, 1994). This conflict occurs because of the desire of the agent to get a high salary or get certain facilities that are the same as the property of the principal for his personal comfort. Mellado & Saona (2019) also shows that as insider ownership increases, managers engage more actively in real earnings management. This causes a positive relationship between managerial ownership with earnings management. This result is in line with Khafid and Arief (2017) that managerial ownership has a positive effect on earnings management.

Based on table 3 the significance of the LEV variable shows the number 0.004. This value is smaller than 5%. This result implies that hypothesis 2 is accepted, where leverage is positively related to earnings management. When the company has high leverage, then management will increase the company's profits so that creditors continue to provide debt and the company seems able to repay its debts. The Debt-covenant hypothesis states that if all other things remain the same, the closer a company is to the possibility of violating an accounting-based debt agreement, it will increase the likelihood for managers to move reported earnings from future periods to the current period (Watts and Zimmerman, 1986). This will lead to earnings management practices by raising the level of the company's profit to be higher. The results of this study support the results of research conducted by Khafid and Arief (2017).

Table 3 shows the results of multiple linear regression analysis. Based on table 3 the significance of the FSIZE variable shows the number 0.799. This value is greater than 5%. This result implies that hypothesis 3 is rejected, where the size of the company is not related to earnings management. This shows that the motivation on the board of directors to practice data manipulation is not based on firm size. The existence of strict supervision from parties within the company and outside parties of the company results in no occurrence of earnings management in the company. So that managers of large and small companies do not dare to practice earnings management.

Table 3. Results of Multiple Regression Analysis

Model	**Unstandardized Cofficients**	**T**	**Sig**	**Conclusion**
(costant)	0.023	1.555	0.121	
MNGOWN	0.012	2.020	0.044	Significant
LEV	0.012	2.916	0.004	Significant
FSIZE	-0.0001	-0.254	0.799	Not significant
R	0.195			
R^2	0.038			
Adjusted R^2	0.027			

Conclusion

This study was conducted to find out the relationship between managerial ownership, leverage, and firm size on earnings management within the company. Based on multiple linear regression analysis, the results indicate that managerial ownership and leverage positively affect earnings management. Ownership held by the management encourages management to obtain higher incentives from the company for personal incentive. This will trigger earnings management in the company. Leverage is positively related to earnings management. This is driven by the company's desire to present to creditors that they pay its debts. This will make management to do earnings management, by increasing profits in the current year. However, we fail to proof that firm size is related to earnings management.

Our findings suggest that the business owner set the upper level of ownership that management can hold. This has to be done as insider ownership increases, managers engage more actively in real earnings management. Moreover, the results of this study imply the importance of restrictions in the company over the level of managerial ownership and leverage to avoid earnings management in the company. For further research it is recommended to increase the number of samples and add other variables that can affect earnings management to improve the generalization of research results.

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WPŁYW ATRYBUTÓW FIRMY NA ZARZĄDZANIE ZAROBKAMI

Streszczenie: Determinanty zarządzania dochodami to szeroko badany obszar, który zapewnia zrozumienie zachowań menedżerów inwestorom i organom regulacyjnym. Niniejsze badanie ma na celu dostarczenie dowodów empirycznych dotyczących wpływu własności menedżerskiej, dźwigni finansowej i wielkości firmy na zarządzanie dochodami. Próbka w tym badaniu to firmy produkcyjne notowane na indonezyjskiej giełdzie papierów wartościowych (IDX). Zastosowaną techniką analizy jest metoda analizy wielokrotnej regresji liniowej z SPSS w wersji 20. Wyniki tego badania wskazują, że własność menedżerska i dźwignia mają wpływ na zarządzanie dochodami. Ale wielkość firmy nie ma wpływu na zarządzanie wynikami. Wynik ten wskazuje na znaczenie ograniczeń w firmie w zakresie własności menedżerskiej i dużej dźwigni w celu uniknięcia zarządzania zyskami w firmie.

Słowa kluczowe: własność menedżerska, dźwignia finansowa, wielkość firmy, zarządzanie dochodami

公司属性对收益管理的影响

摘要:盈余管理的决定因素是一个广泛研究的领域，它为投资者和监管机构提供了对管理行为的理解。 本研究旨在提供有关管理层所有权，杠杆作用和公司规模对盈余管理的影响的经验证据。 本研究的样本是在印尼证券交易所(IDX)上市的制造公司。 所使用的分析技术是 SPSS 20 版的多元线性回归分析方法。这项研究的结果表明，管理者的所有权和杠杆影响盈余管理。 但是公司的规模对盈余管理没有影响。 这一结果表明，限制公司对管理层所有权和高杠杆率以避免公司盈余管理的重要性。

关键字:管理者所有权，杠杆率，公司规模，收益管理