



# The Influence of Firm Size, Ownership Structure, Leverage, and Audit Quality on Earnings Management

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**Abstract.** This study aims to identify and analyze the factors that influence earnings management in manufacturing companies listed on the IDX. The method of determining the sample used is purposive sampling in accordance with predetermined criteria. The number of samples obtained are 36 manufacturing companies with a period of 2015–2019. This research is a quantitative study with an analytical technique used, namely multiple linear regression. Annual financial report data from 36 manufacturing companies are used in this study. The results show that firm size and institutional ownership affect earnings management, but managerial ownership, leverage, and industry specialization auditors have no effect on earnings management. On the other hand firm size, managerial ownership, institutional ownership, leverage, industry specialization auditors together affect earnings management. The results of this study are expected to be useful for regulators, investors, and other stakeholders so that they can make policies in preventing opportunistic earnings management practices that can harm various related parties.

**Keywords:** Industrial specialization auditor · Leverage · Earnings management · Ownership structure · Company size

## 1 Introduction

Financial reports can assist external parties in making decisions regarding the state and performance of the company. One of the important information contained in financial statements is information about company profits [1]. Investors can find out that the funds invested in the company are efficiently used and indicate that they can provide increased prosperity through profit information [2]. Based on the facts, most of the parties who have an interest in the financial statements are more concerned with the amount of profit earned by the company than the way it is achieved [3]. Therefore, the management will take earnings management actions to achieve the expected interests because earnings are easily manipulated by the management so that they become opportunistic targets.

Earnings management is part of the manager's decision to choose accounting policies that can benefit the manager so that it can affect the reporting of high or low earnings [2]. Earnings management is in accordance with agency theory which is influenced by

differences in interests between 2 parties, namely management and owners who are trying to achieve their respective interests [4], and is also supported by the existence of information asymmetry, namely a condition where managers have more information about the condition of the company than shareholders, thus triggering managers to use their position in the company to manage earnings [5]. The accounting standards set by IAI provide freedom for management to choose the right accounting policy in reporting the condition of the company to external parties so that earnings management becomes an easy action for management because of the use of the accrual basis used [4].

Earnings management that is applied now seems to have turned into a financial scandal that has changed the view of earnings management to an opportunistic view [4]. Examples of earnings management cases have occurred in Toshiba which has inflated profits of more than \$ 1.2 billion in the past seven years so that it has an impact on the fall in the value of shares owned by about 20% [4]. Earnings management carried out to such an extreme that it is said to be illegal has proven to have resulted in the destruction of the economic, ethical, and moral order. So earnings management is a behavior that must be monitored by the authorities so that business people do not misuse the information they have to achieve their interests.

Earnings management that is applied to the extreme can be reduced by the presence of share ownership by institutional parties. Institutional ownership owned by external parties is considered to be able to monitor internal parties more optimally [6]. Institutional ownership can provide good supervision of the management so that the occurrence of earnings management can be minimized.

Managerial ownership also has a role in reducing applied earnings management. Theoretically, if management also owns a large number of company shares, it will certainly behave like other stakeholders in the company [6]. Because management also has an ownership portion, they will try to maximize their role in presenting financial statements fairly so that the company's condition reflects the actual situation [6].

Earnings management, apart from being reduced by institutional ownership and managerial ownership, can also be triggered by leverage. When the company's leverage ratio is high enough, it can be said to be insolvable, meaning that most of the company's funding sources come from debt [7]. Policies that can show an increase in income will certainly be chosen by management to overcome these problems, for example, increasing their bargaining position during debt negotiations and trying to fulfill debt agreements in order to get a good assessment from creditors.

Firm size can also trigger earnings management. Company size will affect the company's funding structure. Large companies tend to require more funds than small companies, where the source comes from issuing new shares or increasing debt [7]. The desire to obtain additional funds causes management to be motivated to implement earnings management.

Another factor that can influence the occurrence of earnings management is the industry specialization auditor, where audit quality is not only seen from the auditor's reputation represented by the brand name, but can also be seen from the industry specialization. Specialized auditors have a better ability to audit than non-industrial-specialized

auditors [8]. Thus, high audit quality can restore the confidence of users of financial statements through relevant and credible financial reporting.

The purpose of this study is to empirically examine the effect of firm size, managerial ownership, institutional ownership, leverage, and industry specialization auditor on earnings management. Manufacturing companies listed on the Indonesia Stock Exchange were chosen as research objects because they are a very influential sector in the Indonesian economy and require substantial financial support to finance their production activities so that there is a greater tendency to practice earnings management.

## 2 Method

This type of research is quantitative research. The documentation technique is used by collecting secondary data in the form of financial statements of manufacturing companies listed on the Indonesia Stock Exchange. The population in this study were all manufacturing companies listed on the Indonesia Stock Exchange during the 2015–2019 period. The procedure used for sampling is the purposive sampling method and obtained 36 manufacturing companies with a total of 180 data in a period of 5 years from 2015 to 2019. The independent variables in this study are company size, managerial ownership, institutional ownership, leverage, and auditor specialization in industry. The dependent variable in this study is earnings management and is measured by proxy discretionary accruals using the Modified Jones model [9]. The criteria for sampling are described in Table 1.

**Table 1.** Sampling criteria and results

Criteria	Amount
The manufacturing company is listed on the Indonesia Stock Exchange and is consistent in reporting its financial performance for the 2015–2019 period;	141
Does not provide complete research needs through the publication of its reports throughout 2015–2019;	(15)
Do not use rupiah as a transaction;	(27)
Not having managerial and institutional ownership at the same time	(63)
Total Company	36
Total data taken (36×5 periods)	180

### 3 Results and Discussion

Classical assumption test was used in this study before hypothesis testing was conducted to ensure the regression model was valid. This regression model has fulfilled 4 stages of the classical assumption test. The analytical model used in this study is multiple linear analysis. The following analysis results are presented in Table 2.

The results of multiple linear regression equations can be presented as follows:

$$Y = -0,229 + 0,008X1 + 0,056X2 + 0,064X3 - 0,032X4 - 0,007X5 + \varepsilon \quad (1)$$

The value of the coefficient of determination is 6.6%, meaning that the value of 6.6% indicates the magnitude of the influence of the proposed independent variables that affect the occurrence of earnings management, while as much as 93.4% is influenced by variables that are not proposed in the study. Where the dominant variables in influencing earnings management and not proposed are social disclosure, company diversification, bonus compensation [10], deferred tax assets and dependent tax expense [11], audit committee effectiveness, audit quality, and the effectiveness of the board of directors [12].

The results of the F Table 3 test are the significance value of 0.005 less than alpha 0.05 or the calculated F value of 3.537 which is greater than the F table of 2.27 so that it shows that company size, managerial ownership, institutional ownership, leverage, and industrial specialization auditors have a simultaneous effect to earnings management (See Table 4).

**Table 2.** Multiple linear regression analysis results

Variable	Unstandardized Coefficient
	B
C	-0,229
X1 (Size)	0,008
X2 (Managerial Ownership)	0,056
X3 (Institutional Ownership)	
X4 (Leverage)	0,064 -0,032

**Table 3.** The results of the F test

Model	F	Prob (F-statistic) Sig
DA	3,537	0,005(a)

**Table 4.** Result of t test analysis

Variable	T	Sig.	Information
X1	3,011	0,003	Significant
X2	1,182	0,239	Not significant
X3	2,112	0,036	Significant
X4	-1,485	0,139	Not significant
X5	-0,691	0,490	Not significant

- According to the results obtained for the x1 variable, the t count is 3.011, which is greater than the t table of 1.97369 and the significance value is not greater than 0.050 so that the company size variable can partially have an effect on earnings management. This means that the size of the company is directly proportional to the applied earnings management.
- According to the results obtained for the x2 variable, the t-count is 1.182, not greater than 1.97369 and the significance value is 0.239, exceeding 0.05 so this variable cannot partially affect the earnings management practiced. This means that the practice of financial manipulation by the company cannot be anticipated by the number of shareholdings by internal parties.
- According to the results obtained for the x3 variable, the t count is 2.112 exceeding the t table of 1.97369 and the significance value of 0.036 does not exceed 0.05 so this variable can partially affect the earnings management practiced. This means that the high percentage of external ownership further encourages actions to change the actual amount of profit by management.
- According to the results obtained for the x4 variable, the t-count is -1.485, not greater than the t-table, which is 1.97369 and the significance value of 0.139 exceeds 0.05, so that this variable partially cannot affect the earnings management practiced. This means that the greater the leverage ratio is not able to reduce earnings management fraud in reporting earnings.
- According to the results obtained for the x5 variable, the t-count is -0.691, not greater than the t-table, which is 1.97369 and the significance value of 0.490 exceeds 0.05, so that this variable partially cannot affect the earnings management practiced. This means that more and more industry-specialized auditors who audit the financial statements of similar companies have not been able to reduce earnings management practices.

The effect of company size as measured by the natural logarithm of company sales has a positive effect on earnings management. This shows that the larger the size of the company, it will increase earnings management behavior. Large companies certainly need large enough funding to finance all company activities so that to make it easier to get additional capital from creditors, companies tend to practice income smoothing [13]. The size of the company is also one of the factors of consideration for investors so that they decide to invest their capital because it is related to the investment risk

made so that medium and large sized companies will implement earnings management in order to be able to meet the expectations of their investors [4]. Watts and Zimmerman stated that large companies have always been the center of public attention and have higher political costs so they will apply earnings management practices with a pattern of declining profits to avoid regulation [14].

Managerial ownership has no effect on earnings management, so the hypothesis is rejected. The hypothesis is rejected due to the distance between the minimum and maximum percentage of managerial ownership between companies and the low average value of managerial ownership of only 8.1%, reflecting the uneven number of shares owned by management. This condition becomes less meaningful for the management who owns the company's shares because the supervision and motivation in earnings management is certainly not as good and effective as if the number of shareholdings owned is relatively high. This makes the management who owns the company's shares tend to take policies to regulate profits in accordance with the wishes of investors (shareholders), for example, increasing the company's reported profit, many potential investors will be interested in buying company shares so that the company's share price increases [15].

The effect of institutional ownership on earnings management explains if it has a positive effect. This indicates that if the number of share ownership by institutional parties is increasing, it can certainly trigger earnings management by the company's internal parties. Institutional investors do not act as sophisticated investors who have more capabilities and opportunities to monitor managers, but instead act as transient investors who are more focused on current earnings [16]. When institutional ownership increases, shareholders are encouraged to protect their investments and the opportunities for earnings management are higher [17]. In line with the view that institutional parties focus more on current earnings received by the company [18]. The management is increasingly motivated to achieve the profit target expected by investors by continuing to implement earnings management due to institutional ownership [6].

The effect of leverage on earnings management shows if there is no effect. This is because as many as 36 samples of manufacturing companies in financing their assets do not depend on debt seen from the average percentage of leverage of 43.4% of the total sample. Because the manufacturing companies that are sampled do not depend on debt in financing company assets, so that if there is a change in the level of debt it will not be related to management decisions on the amount of reported profits [6]. The number of leverage ratios owned by the average manufacturing company is within safe limits so that earnings management is not carried out by the management because based on the leverage ratio the company is able to pay the debt used to finance the company's assets.

The influence of the Industry Specialization Auditor on Earnings Management shows no effect. This is because the earnings management practice applied by the company is still within reasonable limits (GAAP) and does not violate the applicable accounting standards so the impact is that there is no difference between industry specialization auditors and non-specialist auditors. Weak law enforcement in Indonesia also has an impact on the motivation of auditors in disclosing earnings management. Ettredge explained that a good legal environment is the key so that the industry specialization skills of auditors can be developed properly. Although industry-specialized auditors have better skills and knowledge about the auditor's client industry, this is not efficient in reducing earnings

management practices because there are still many manufacturing companies in this study that are not audited by industry-specialized KAPs [19]. Where only 12 companies from the total sample have their financial statements audited by an industry-specialized KAP.

## 4 Conclusion and Suggestion

The conclusions that can be drawn from this study are firm size and institutional ownership partially have a positive effect on earnings management, managerial ownership, leverage, and industry specialization auditors partially have no effect on earnings management, and firm size, managerial ownership, institutional ownership, leverage, and industry specialization auditors simultaneously affect earnings management. The advice that can be given based on this research is for investors when they are going to invest in a company, not only focusing on the profits generated by the company but also considering other aspects of the company such as corporate governance (GMS, board of commissioners, directors), as well as supporting organs which include committees under the board of commissioners, directors, company secretaries, internal audit), and sources of company funding. Because of the ability of the independent variables proposed in this study to have a weak relationship in explaining the variation of the dependent variable, it is hoped that further researchers will add other independent variables such as social disclosure, company diversification, bonus compensation, deferred tax assets, deferred tax expense, profitability, committee audit, net profit margin, ROA.

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