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Research Article

Foreign Institutional Ownership and Earnings Management

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Abstract.
This study investigates the relationship between foreign institutional ownership (FIO) and earnings management (EM) using 552 firms of non-financial sector companies that publish annual financial reports for 2015–2021. We use ordinary least squares (OLS) for equation estimation. The results show that, overall, FIO has a negative impact on earnings management. Tests were also conducted on the FIO group: banks, insurance, pension fund mutual funds, and securities companies. The test results indicate that each group of institutional investors has a negative effect except for securities companies, which positively impact earnings management. The positive influence of securities firms shows that securities firms are more focused on trading strategies than managerial controls. The findings of this study are expected to contribute to the corporate governance literature and the quality of financial reporting. Institutional ownership as a corporate governance mechanism is expected to control earnings management which can reduce the quality of financial reporting.

Keywords: institutional ownership, earnings management, agency theory

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1. Introduction

Several studies suggested that companies in Indonesia exhibited low reporting quality [1]. This assertion is substantiated by data showing the involvement of certain companies in earnings manipulation scandals [2]. The occurrence of these financial reporting scandals serves as an indication of the persistently low quality of corporate governance. To enhance corporate governance, various mechanisms can be implemented, one of which involves the control exerted by institutional investors. Therefore, institutional investors assume a pivotal role in the implementation of corporate governance mechanisms [3]. They possess the capacity to exercise control and intervene with managers during the preparation of financial reporting [4].

Institutional ownership in Indonesia is relatively high, with an average of 79.16% from 2017 to 2021 (https://www.ojk.go.id). According to the data, there has been a consistent decline in the proportion of foreign and domestic institutional ownership over the past

five years. In 2017, the portion was at 84.2%, which decreased to 79.7%, 80%, 76.1%, and 75.8% in 2018, 2019, 2020, and 2021, respectively.

The phenomenon of declining institutional ownership has the potential to diminish companies' level of control in financial reporting, thereby intensifying the likelihood of earnings management. An extensive study has been conducted on the correlation between institutional ownership and earnings management. However, the examination of the connection between these variables remains limited and has yielded inconsistent findings [5]. The first opinion states that institutional ownership positively affects earnings quality. They play a role in the corporate governance mechanism, so they can potentially reduce management discretion [6], [7]. On the other hand, institutional ownership is more active in trading, so they are not actively involved in managerial control, which negatively affects earnings quality and increases earnings management [8].

This study was conducted to examine the impact of foreign institutional ownership (FIO) on earnings management using the Agency Theory approach, which emphasized the existence of a contract between agents and principals. Agents possess better information about the company compared to principals, resulting in information asymmetry, which promotes managers to engage in earnings management. Therefore, the role of FIO is expected to control managers in conducting earnings management [6].

2. Theory, Literature Review, and Hypothesis

2.1. Agency Theory

Agency theory describes contracts between one or more investors (principals) and managers (agents) to perform actions on their behalf (Jensen and Meckling, 1976; Eisenhardt, 1989; Scott, 2015). A conflict of interest can occur between the two in this contractual relationship, so a mechanism is needed to reduce this conflict. One of the efforts to reduce the conflict is with FIO.

2.2. Literature Review and Hypothesis

2.2.1. Foreign Institutional Ownership dan Earnings Management

Agency conflicts occur when there is information asymmetry that provides opportunities for managers to engage in earnings management, and one of the motivations is the

CEO's bonus plan [9],[10]. This promotes managers to act in their interests and disregard the principals, hence, effective controls are needed through FIO. FIO is associated with companies' fundamental information [11]. FIO can be involved in controlling managerial decisions so that it can affect the quality of reporting [6],[8]. Based on the discussion, a higher proportion of FIO has the potential to enhance managerial control, diminishing the occurrence of earnings management. Therefore, it is concluded that:

H1: foreign institutional ownership has a negative effect on earnings management.

3. Research Method

3.1. Sample

This study used 3,141 firm year data from 552 companies listed on the Indonesia Stock Exchange (IDX) and published annual financial reports for the 2015-2021 period.

3.2. Variables

The dependent variable is earnings management measured based on the value of discretionary accrual (DA). The equation used to determine the value of DA is:

$$DA_{it} = \frac{TA_{it}}{A_{it}} - \left(\alpha_1 \frac{1}{A_{it}} + \alpha_2 \left(\frac{\Delta REV_{it}}{A_{it}} - \frac{\Delta AR_{it}}{A_{it}}\right) + \alpha_3 \frac{PPE_{it}}{A_{it}}\right) \quad (1)$$

TA is the total accruals calculated based on the [12]:

$$\frac{TA_{it}}{A_{it}} = \alpha_1 \frac{1}{A_{it}} + \alpha_1 \frac{(\Delta REV_{it} - \Delta AR_{it})}{A_{it}} + \alpha_2 \frac{PPE_{it}}{A_{it}} + e_{it} \quad (2)$$

Description:

$TA_{i,t}$: Total company accrual i period t, is the difference between net income and operating cash flow [13]

A_{it} : Total assets of the company i period t

$\Delta REV_{i,t}$: Change in company income i period t

$\Delta AR_{i,t}$: Changes in company receivables i period t

$PPE_{i,t}$: Company property, plant and equipment i period t

e_{it}: Residual error

The independent variable is the proportion of FIO, measured by dividing FIO percentage by the total institutional ownership, which refers to the classification provided by the Financial Services Authority (FSA) based on Law Number 14 of 1967. Institutional ownership consists of Financial Institutions, such as Banks and Non-Banks. Furthermore,

Non-Bank Financial Institutions include Securities Companies, Mutual Fund Companies, Insurance Companies, Pension Funds, Special Financial Institutions, Financing Institutions, and Microfinance Institutions.

The control variables used are book-to-market (BM), leverage (LEV), GROWTH, SIZE, and profitability (PROF). BM is the ratio of the book value of equity to the market value of equity. LEV is the ratio of total debt to assets. Meanwhile, GROWTH is the rate measured by subtracting the asset value at period t-1 from period t and dividing the result by the total asset at period t-1. Size uses market capitalization value, while PROF uses return on equity, which is the ratio of net income to equity.

3.3. Study Model

Hypothesis testing is done with the following equation:

$$DAit = \alpha 0 + \alpha 1 FIOit + \alpha 2 BMit + \alpha 3 LEVit + \alpha 4 GROWTHit + \alpha 5 SIZEit + \alpha 6 PROFit + eit \quad (3)$$

Description:

DA_{it} : Discretionary accrual for the company i period t, the value is determined by Equation 1

FIO_{it}: Portion of foreign institutional ownership

BM_{it}: Rasio book to market

LEV_{it}: Leverage

$SIZE_{it}$: Company size based on market capitalization value

$PROF_{it}$: Profitability which is the value of return on equity

3.4. Method

The data used is in the form of unbalanced panel data and analyzed using Eviews software. We use ordinary least squares (OLS) for equation estimation.

4. Results and Discussion

The descriptive statistics for each variable can be seen in Table 1, consisting of the mean, median, maximum, minimum, and standard deviation values.

Table 1: Descriptive Statistic.

	Observations	Mean	Median	Maximum	Minimum	Std. Dev
DA	3.141	-2,746	-2,708	7,506	-11,716	1,883
FIO	3.141	12,434	4,700	99,000	0,000	17,631
BM	3.141	0,883	0,800	33,567	-102,203	4,943
LEV	3.141	4,279	0,137	32,000	-0,099	99,616
GROWTH	3.141	4,681	0,043	11,370	-1,000	204,544
SIZE	3.141	9,929	0,580	43,509	0,010	131,746
PROF	3.141	-1,184	0,047	43,009	-14,196	34,748

The first test conducted is a correlation analysis, and the results can be seen in Table 2. The correlation between the variables shows low results, indicating freedom from multicollinearity issues. FIO is negatively correlated with DA as a measure of earnings management. The LEV variable is positively correlated with DA, indicating that companies with high LEV potentially increase earnings management. The correlation between SIZE and DA shows a positive direction, indicating that larger companies potentially increase earnings management based on market capitalization. However, other control variables such as BM, GROWTH, and PROF do not show significant correlations with DA.

Table 2: Correlation.

	DA	FIO	BM	LEV	GROWTH	SIZE	PROF
DA	1,000						
FIO	-0,230	1,000					
	-13,269[a]						
BM	-0,021	-0,076	1,000				
	-1,193	-4,293[a]					
LEV	0,165	-0,017	0,016	1,000			
	9,390[a]	-0,938	0,890				
GROWTH	0,003	-0,008	0,006	-0,001	1,000		
	0,181	-0,470	0,336	-0,058			
SIZE	0,240	0,013	0,010	0,428	-0,002	1,000	
	13,828[a]	0,730	0,575	26,511[a]	-0,094		
PROF	0,019	0,006	0,006	0,001	0,001	0,003	1,000
	1,090	0,317	0,325	0,075	0,040	0,145	

Hypothesis testing was carried out on all sample companies, company groups, and FIO types. The group of companies is determined based on positive and negative DA values and the type of FIO based on the institution, namely banks, insurance, mutual funds, pension funds, and securities companies.

Table 3 shows the test for the entire company and is based on positive and negative DA groups. The results show that FIO has a negative effect on earnings management for testing all companies and in groups with positive DA.

TABLE 3: Foreign Institutional Ownership and Earnings Management.

	All		Positive Discretionary Accrual		Negative Discretionary Accrual	
	Coeff	Coeff	Coeff	Coeff	Coeff	Coeff
	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat
FIO	-0,024	-0,026	-0,022	-0,023	0,009	0,001
	-13,036[a]	-14,260[a]	-13,465[a]	-13,683[a]	1,474	0,096
BM		-0,017		-0,014		-0,050
		-2,621[a]		-2,375[a]		-1,205
LEV		0,001		-0,377		0,002
		3,683[a]		-4,106[a]		8,116[a]
GROWTH		-0,001		0,000		-0,047
		-0,008		0,165		-0,757
SIZE		0,003		0,046		0,094
		11,624[a]		4,554[a]		0,938
PROF		0,001		0,001		-0,052
		1,285		1,092		-0,411
Adj R^2	0,053	0,124	0,061	0,075	0,002	0,258
F-statistic	26,903[a]	37,945[a]	29,161[a]	20,785[a]	1,043[a]	5,594[a]

Besides the DA group, the test also evaluated the effects based on the type of institutional ownership. The results show that FIO in banks, insurance companies, mutual funds, and pension funds has a negative impact on earnings management. However, in the case of securities companies, a positive effect is observed. This implies that securities companies, focused on trading, may prioritize short-term earnings gains and potentially exert less control.

5. Finding and Conclusion

Table 4: Type of Foreign Institutional Ownership and Earnings Management.

	Coeff	Coeff
	t-stat	t-stat
F_Bank	-0,009	-0,010
	-3,920[a]	-4,111[a]
F_AS	-0,335	-0,294
	-5,336[a]	-4,888[a]
F_MF	-0,050	-0,057
	-9,381[a]	-10,851a
F_PF	-0,180	-0,181
	-9,713[a]	-10,082[a]
F_SC	0,008	0,007
	1,913[b]	1,809c
BM		-0,026
		-4,196[a]
LEV		0,001
		3,436[a]
	GROWTH	0,000
		0,051
SIZE		0,003
		13,487[a]
PROF		0,001
		1,428
Adj R^2	0,148	0,226
F-statistic	52,587[a]	58,304[a]

5.1. Findings

The portion of FIO ownership can determine managerial control over earnings management actions to encourage an increase in the quality of financial reporting. Quality financial reports have the potential to reduce information asymmetry.

These findings support the Agency Theory in which institutional ownership is a mechanism to reduce agency conflicts between agents and principals. The findings also support previous research stating that institutional ownership is related to company fundamentals, indicating that FIO can control management to carry out earnings management.

The findings show that foreign institutional ownership can reduce earnings management actions. It indicates that foreign institutional ownership can improve the quality of financial reports. This study uses accrual-based management. Accrual quality can describe the mapping of accounting profit into cash flow [14] so that accrual quality can be used to measure the error in earnings. However, in practice, this method is challenging to measure directly because it is related to several items in the financial statements.

5.2. Conclusion

This study examined the impact of FIO on earnings management. Tests were conducted encompassing all companies, groups, and various types of FIO. The results indicated that FIO had a detrimental effect on earnings management across all companies. Similarly, when testing the group of companies with positive DA, the results consistently exhibited a negative impact. In the case of the negative DA group, no significant effect was observed.

Testing was also carried out based on the types of institutional ownership, including banks, insurance companies, mutual funds, pension funds, and securities companies. The overall results showed that FIO had a negative effect on earnings management, except for securities companies with a positive effect.

6. Implications, Limitations, and Suggestions

The results are expected to contribute to the existing literature on corporate governance and financial reporting quality. Companies should also consider the decrease in institutional share ownership as it may potentially lead to a decline in financial reporting quality. This study has several limitations, firstly, it only uses the measure of FIO based on percentage and does not consider behavioral factors of institutional investors. Therefore, future studies should incorporate the trading behavior of institutional investors. Secondly, real earnings components should also be analyzed since the measurement of earnings management is based solely on accrual components.

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