

## Effect of Institutional Ownership and Managerial Ownership on Corporate Financial Performance: Mediating Earning Management.

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### Abstract

This study was intended to obtain empirical evidence of the effect of Institutional Ownership and Managerial Ownership on Corporate Financial Performance through Earning Management. Using the Path Analysis method for banks listed on the Stock Exchange, there is evidence that Institutional Ownership and Managerial Ownership influence Corporate Financial Performance through the mediation of earnings management. Both of these variables negatively affect earnings management, and earnings management has a negative influence on the company's financial performance. That is every increase in managerial ownership and institutional ownership increases, causing a decrease in earnings management, while a decrease in earnings management can increase the company's financial performance. This study succeeded in proving in the banking sector that earnings management can be suppressed by a self-control mechanism to reduce the effect of agency theory, among others by (1) ownership of company shares by the manager (managerial ownership); (2) share ownership by institutions (institutional ownership). This study also proves that the firm size and audit committee control variables have no significant effect on the company's financial performance.

**Keywords:** institutional ownership, managerial ownership, earning management, corporate financial performance

### Introduction

The development of information flows supported by sustainable innovation in this digital era, enables the fulfillment of accurate and fast financial information needs. Stakeholders need this information for quick and risk-free decision making. Information that contains inaccuracies and is incompatible with the circumstances will actually mislead decision makers. On the other hand, the information provider manager has full authority over the information that will be presented, resulting in information asymmetry for the external party of the company, while the manager also measured its performance based on the company's financial performance information. The speed and accuracy of information supported by technological sophistication will lose its relevance if the content of information presented misleads decision makers. One of the causes of misleading financial information is the presence of earnings management by managers, where managers take action to maximize or minimize profits, including income smoothing in accordance with the wishes of the manager (Watts & Zimmerman, 1983).

Earnings management is the manager's attempt to manipulate accounting information through the selection of accounting methods without conflict with generally accepted accounting principles. Shareholders' efforts to prevent and control the possibility of conflicts of interest as an effect of agency theory can lead to agency costs (Jensen & Meckling, 1976). Agency cost is the burden incurred by the principal to overcome or prevent the problem of the practice of manipulation (earnings management) carried out by the manager. According to Jensen and Meckling (1976), the problem of earnings management can be avoided or at least suppressed by a self-control mechanism to harmonize differences in interests between owners and management, among others by (1) ownership of company shares by management; (2) share ownership by the institution.

Through a managerial ownership mechanism with a significant amount of ownership can monitor management which has the effect of reducing managers' motivation to make earnings management (Fama, 1980). Managerial ownership can reduce agency conflict because the manager's actions are in accordance with the wishes of shareholders and give managers the opportunity to be involved in share ownership to make managers act more carefully because they will share the consequences of the decisions taken. Contracts cannot block this activity if shareholders cannot observe managerial behavior directly, but ownership by managers can be used to encourage managers to act in the interests of shareholders (Bhagat & Bolton, 2008).

Mahariana and Ramantha (2014) found that managerial ownership proved to have a negative effect on earnings management, while Anggit and Shodiq (2014) proved that managerial ownership did not affect earnings management. Siregar (2017) study also found that managerial ownership proved to have a significant effect on earnings management.

Chung, Firth, and Kim (2002), finding large institutional ownership inhibits managers from increasing or decreasing reported earnings to the level desired by managers. Koh (2003) concludes that institutional investors can act as complementary corporate governance mechanisms in reducing aggressive earnings management by companies when investors have a high level of ownership. Ajinkya, Bhojraj, and Sengupta (2005) concluded that institutional ownership has a relationship to earnings management actions. While other studies, Andini and Sulistyanto (2011); Anggit and Shodiq (2014) concluded that institutional ownership does not affect earnings management.

Murwaningsari (2009) research proves that managerial and institutional ownership has an influence on company performance. The results of Berke-Berga, Dovladbekova, and Abula (2017) revealed that there is a positive relationship between managerial ownership and internal performance measures (ROA) while it does not significantly affect market performance measures.

Earnings management as a moderator variable has been widely studied, including by Suteja, Gunardi, and Mirawati (2016) which concluded that earnings management variables managed to moderate the effect of Corporate Social Responsibility (CSR) disclosures on banking profitability. Similarly, Septia and Rahmawati (2011) stated that earnings management variables managed to moderate the influence of CSR on firm value. However, especially in Indonesia, research is still rare which places earnings management as an intervening variable or mediates between the influence of institutional ownership and managerial ownership on Corporate Financial Performance.

Prior, Surroca, and Tribó (2008) examined panel samples from 593 multi-national companies from 26 countries between 2002 and 2004, finding a positive impact from earnings management practices on CSR. In addition, there are also many studies which show that the combination of earnings management and CSR has a negative impact on financial performance, such as research: Septia and Rahmawati (2011); Anggit and Shodiq (2014); Johnson and Greening (1999); Khabibah and Mutmainah (2013). In addition to the inconsistency of results, especially in Indonesia, there are still few studies linking the influence of managerial ownership and institutional ownership on the company's financial performance with earnings management as an intervening variable. The importance of this research is to remember the need for effective ways to reduce the effects of conflict of interest and motivate managers to improve management performance and increase the value of the company through the company's financial performance, without neglecting the honest information needs of users of financial statements.

According to Jensen and Meckling (1976), agency relations are a contract between the manager (agent) and investor (principal). According to Eisenhardt (1989) there are three assumptions of human nature in agency theory, namely: (1) in general, human selfishness, (2) the limited thinking power possessed by humans regarding the perception of the future (bounded rationality), and (3) humans always avoid risk (risk averse). From the assumption of human nature, it can be concluded that agency conflicts that occur between managers and shareholders arise because humans will act opportunistically, namely by prioritizing their personal interests (Chung et al., 2002).

Company ownership structure is an aspect of corporate governance that can affect organizational control (Jensen & Meckling, 1992). The company's ownership structure consists of managerial

ownership, institutional ownership, directors ownership, and individual ownership. Differences in interests between company owners are explained through agency conflict. The managerial ownership and institutional ownership variables in this study are proxied by the percentage of the number of shares owned by the manager and owner of the total number of shares of the company in circulation.

The relationship between earnings management and agency theory has been examined by Davidson, Jiraporn, Kim, and Nemec (2004) which concludes that the separation between the owner (principal) and controlling (agent) in the company causes information asymmetry, so that the agent can act opportunistically because it has an interest which is different from the principal. In this case, earnings management is the action of managers who tend to maintain their personal interests by issuing financial statements that do not present the actual economic picture of the company. As a consequence, shareholders can make misleading decisions. Earnings management is the actions of managers in the use of accounting policies in accounting reporting that are not in accordance with the actual conditions of the company, and cause the amount of earnings information to mislead stakeholders in economic decision making (Watts & Zimmerman, 1983). Actions that are done intentionally within the limits of standards or rules, to lead to the desired level of reported earnings (Assih, 1998).

This study aims to examine the relationship between managerial ownership and institutional ownership of the entity's financial performance through earnings management in banks in Indonesia. Most of the previous research on corporate governance mechanisms have been linked to CSR, sustainability reports, and others, but studies are still rarely conducted that link corporate governance mechanisms to corporate financial performance, especially in the banking sector.

Based on the theoretical framework and previous research review above, the conceptual framework of this research can be described as follows.

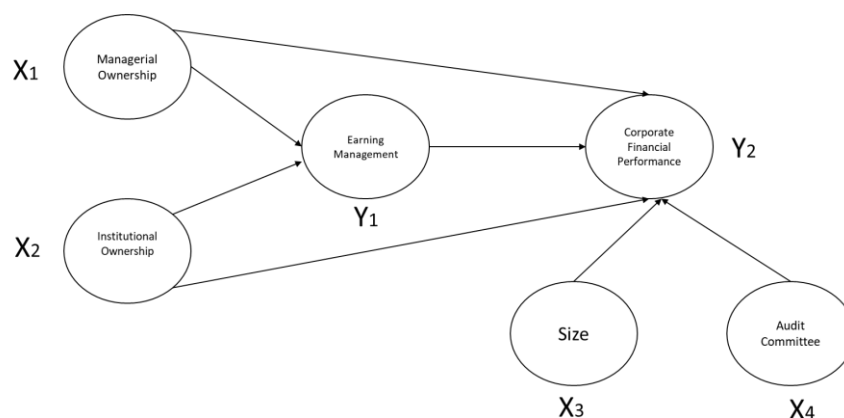


Figure 1 Research Conceptual Framework

Based on the research framework, the following hypotheses can be stated.

H<sub>1</sub>: Managerial ownership (MO) has a significant effect on earnings management (EM).

H<sub>2</sub>: Institutional ownership (IO) has a significant effect on earnings management (EM).

H<sub>3</sub>: Managerial ownership (MO) has a significant direct effect on the company's financial performance (CFP).

H<sub>4</sub>: Institutional ownership (IO) has a significant direct effect on the company's financial performance (CFP).

H<sub>5</sub>: Managerial ownership (MO) affects the company's financial performance (CFP) through earning management.

H<sub>6</sub>: Institutional ownership (IO) affects the company's financial performance (CFP) through earning management.

## Methods

The data used are secondary data from the annual banking report listed on the Indonesia Stock Exchange (IDX) in 2012-2016. Samples were selected using purposive sampling with the following criteria: banking companies listed on the Stock Exchange and consistently published audited financial statements, presenting the structure of managerial and institutional ownership, and financial reports can be accessed through BEI Corner STIE Indonesia Banjarmasin. Based on these criteria, a total sample of 15 companies from the banking companies listed on the IDX. So this study uses 5-year panel data for each bank, so there are 75 data units.

This study uses the following variable measurement methods:

**Corporate financial performance (CFP).** CFP is measured using CFROA (Cash Flow Return on Asset). CFROA is a cash flow derived from the results of operations whose funds have been received in cash by the company and are burdened with cash and actually incurred expenses by the company.

$$CFROA = \frac{EBIT + Dep}{Assets} \quad [1]$$

Where CFROA = Cash flow return on assets; EBIT = Earning before interest and tax; Dep = Depreciation; Assets = Total assets.

**Managerial ownership (MO).** MO is the number of shares owned by management in a company. The proportion of managerial ownership is measured by the percentage of ownership.

$$\text{Percentage of Managerial Ownership} = \frac{\text{Management shares}}{\text{Number of shares outstanding}} \quad [2]$$

**Institutional Ownership (IO).** IO is the number of shares owned by an institution in a company. The proportion of Institutional Ownership is measured based on the percentage of ownership.

$$\text{Percentage of Institutional Ownership} = \frac{\text{Number of Institutional Shares}}{\text{Number of Shares outstanding}} \quad [3]$$

**Earning management (EM).** There are several ways to measure earnings management. Recent empirical studies in accounting and finance have used the approach that divides current accruals into their discretionary and nondiscretionary components. Following Jones (1991) and Dechow, Sloan, and Sweeney (1996), we define current accruals as:

$$Accruals = (\Delta CA - \Delta cash) - (\Delta CL - \Delta STD) - DEP \quad [4]$$

Where  $\Delta CA$  is the change in current assets;  $\Delta Cash$  is the change in cash;  $\Delta CL$  is the change in current liabilities;  $\Delta STD$  is the change in debt included in current liabilities, and  $DEP$  is the depreciation and amortization.

**Company Size (SIZE).** The size of the company can be seen from the level of sales, the amount of equity, or the number of assets owned by the company along with its stock market capitalization (Prior et al., 2008). The size of the company in this study uses the natural log proxy of total assets. Total assets are used as proxies considering that the company's total assets are relatively more stable than the number of sales and market capitalization value.

**Audit Committee (AC).** The size of the audit committee is the total number of members of the audit committee in one company. The audit committee in this study, measured by a dummy variable, where 1 for companies that have an audit committee and 0 for companies that do not have an audit committee.

The data analysis technique used in this study is Path Analysis using the Statistical Product and Service Solution (SPSS) V.22 software. The equation for this study is as follows:

$$Y_1 = \rho X_1 Y_1 + \rho X_2 Y_1 + \epsilon_1 \dots\dots\dots \text{(Substructural Model 1)}$$

$$Y_2 = \rho X_1 Y_2 + \rho X_2 Y_2 + \rho X_3 Y_2 + \rho X_4 Y_2 + \rho Y_1 Y_2 + \epsilon_2 \dots\dots \text{(Substructural Model 2)}$$

## Results and Discussion

### The Sub structural Model 1 test.

The test results produce the following outputs and equations.

Table 1 Regression Model 1				
Model		Coefficients (Path)	T	Sig.
1	MO (X1)	-0,301	-4,516	0,008
	IO (X2)	-0,430	-3,478	0,003
R2 = - 0,478				
Sig. F =0 ,000 <sup>a</sup>				

Sumber: Data Process by SPSSV.22

The results of testing the first model show that simultaneously MO and IO have a significant effect on EM with a significance below 0.05 ( $p = 0,000$ ) and the coefficient of R2 is -47.8 or rounded to -48 percent, which means that EM is influenced by observed variables. The remaining 52 percent is explained by other factors outside the model. Based on the coefficient of the path,  $\rho Y_1 X_1 = -0.301$  or 30 percent; and  $\rho Y_1 X_2 = -0.430$ , and significant with sig <0,008 on path X1, sig <0,003 on path X2. This explains that simultaneously and partially MO (X1) and IO (X2) can be used as variables that affect earnings management. Furthermore, the empirical causal influence between variables (X1) and (X2) can be described through the first substructural equation below.

$$Y_1 = \rho Y_1 X_1 + \rho Y_1 X_2 + \rho Y_1 \epsilon_1, \text{ or}$$

$$Y_1 = -0,301 X_1 + (-0,430) X_2 + 0,722 \epsilon_1.$$

### The Substructural Model 2 test.

The test results produce the following outputs and equations.

Table 2 Regression Model 2				
Model		Coefficients	T	Sig.
1	(Constant)	16,780	0,591	0,002
	MO	0,401	1,220	0,003
	IO	0,550	3,137	0,104
	EM	-0,372	-0,215	0,000
	Size	1,040	7,831	0,256
	AC	-0,004	-0,249	0,123
R2 = 0,536				
Sig. F = 0,000 <sup>b</sup>				

Sumber: Olah Data, SPSSV.22

The results of testing the second substructural model shows that simultaneously MO, IO, EM, Control Variable SIZE, and AC have a significant effect on CFP with a significance below 0.05 ( $p = 0,000$ ), and R2 value coefficient of 53.6 or rounded to 54 percent, which means that the CFP is influenced by the observed variables. The remaining 46 percent is explained by other factors outside the model. While partially, based on the coefficient of the path, it can be explained in the second structural equation below. Based on the significance of 0.05, the variables IO, SIZE, and AC are



declared to have no significant effect on the CFP. Means partially, only MO and EM have a significant effect on CFP. Furthermore, the empirical causal influence between these variables can be described through the following substructural equation.

$$Y_2 = \rho_{Y_2 X_1} X_1 + \rho_{Y_2 X_2} X_2 + \rho_{Y_2 Y_1} Y_1 + \rho_{Y_2 X_3} X_3 + \rho_{Y_2 X_4} X_4 + \epsilon_2, \text{ or}$$

$$Y_2 = 0,179 X_1 + 0,240 X_2 + (-0,348) Y_1 + 0,248 X_3 + 0,335 X_4 + 0,681 \epsilon_2.$$

Based on the results of the analysis and equation above, it can be obtained the following causal research model diagram.

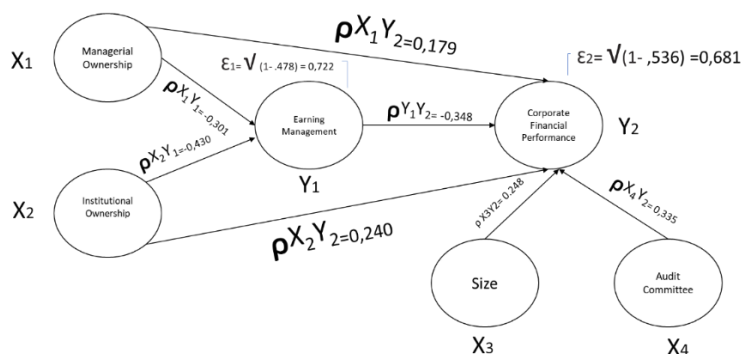


Figure 2 Model Result

Based on the significance test, MO has a significant effect on EM, with a significance of  $P = 0.008 < 0.05$ . The magnitude of the MO effect on EM is -0.301 or rounded to -30 percent. The  $X_1$  path coefficient is negatively marked, which means that the increase in MO can affect EM decline by 30 percent. Thus, the hypothesis  $H_1$ : MO has a significant effect on EM, accepted. The results of this study have not confirmed the results of Anggit and Shodiq (2014) study which rejects the hypothesis of managerial ownership influencing earnings management. This research is in line with the research conducted by Mahariana and Ramantha (2014).

IO has a significant effect on EM with a significance of  $P = 0.003 < 0.05$ . The magnitude of the direct effect of IO on EM is -0.430 or rounded to -43 percent. The  $X_2$  path coefficient also has a negative sign which means that the increase in IO can affect the decline in EM by 43 percent. Thus this study confirms the hypothesis  $H_2$ : IO has a significant effect on EM. These results support the research of Chung et al. (2002); Ajinkya et al. (2005). However, this research is not in line with the research of Mahariana and Ramantha (2014) dan Anggit and Shodiq (2014).

**Managerial ownership (MO) has a significant direct effect on corporate financial performance (CFP).** Based on the significance test MO has a significant effect on CFP with a significance of  $P = 0.003 < 0.05$ . The magnitude of the direct influence of MO on CFP is 0.179 or rounded to 18 percent. The  $X_1$  path coefficient is positively marked, which means that the increase in MO is able to influence the increase in CFP by 18 percent. Based on this analysis, the hypothesis  $H_3$ : MO has a significant direct effect on the CFP. This result is in line with Murwaningsari (2009) research; which shows Good Corporate Governance, namely managerial and institutional ownership has an influence on the company's performance (as measured by TOBINS'Q).

**Institutional Ownership (IO) has a significant direct effect on corporate financial performance (CFP).** Based on the results of the significance test, IO directly did not have a significant effect on CFP, because the significance of  $P = 0.104 > 0.05$ . Thus the hypothesis  $H_4$ : IO (Institutional Ownership) has a significant direct effect on corporate financial performance (CFP) rejected. This is not in line with the research of Chung et al. (2002); Murwaningsari (2009);

**Effect of Company Size Control variables (SIZE) and Audit Committee (AC) on corporate financial performance (CFP).** In this study, there are two control variables, SIZE, and AC. Based on the results of data processing and analysis, it is known that these two control variables have no

significant effect on the company's financial performance, with a significance of above 0.05, namely  $P = 0.256$  and  $P = 0.123$ .

**Indirect Influence of Managerial Ownership (MO) and Institutional Ownership (IO) on corporate financial performance (CFP).** The direct effect of MO on EM is 0.179. Whereas the indirect effect of MO on CFP is through EM  $= 0.301 \times -0.348 = 0.104$ . So the total path coefficient between MO ( $X_1$ ) to CFP ( $Y_2$ ) is  $0.179 + 0.104 = 0.283$ . Thus it is known that the magnitude of the effect of MO on CFP through EM is 0.283 or 28 percent, so it can be concluded that the indirect effect (28 percent) is greater than the direct influence (18 percent). So, hypothesis  $H_5$ : MO affects the CFP through EM. This is in line with research Chung et al. (2002); and McConnell and Servaes (1990).

## Conclusions

Managers have the opportunity to change reported earnings from what should have happened, using discretionary accruals. This earnings management action benefits managers because its performance is measured based on earnings performance. On the other hand, other shareholders can be harmed by obtaining information that can be misleading. Managerial ownership, through bonus shares, can reduce managers' motivation to make earnings management, because managers have an interest in the investment they have. The greater the managerial ownership, the more reducing the opportunistic action of managers to make earnings management. Likewise, the role of institutional ownership or in other words, institutional investors with significant investments in the company will easily and directly monitor the accounting choices that will be made by managers and can force change if it is believed that managers have made opportunistic earnings management.

There are several limitations in research including (1) A relatively small number of samples, namely only 15 banking companies; (2) data taken from 2012-2016, because it involves the availability and completeness of the company's financial report data published; (3) the interpretation of the results of this study is not supported by personal deepening of company managers, because it only uses secondary data.

For the next research, it is recommended to conduct similar research using the longer and closest observation period for the current year. It should also be considered to use a sample of companies other than banking, which is also listed on the Indonesia Stock Exchange, as well as adding qualitative studies through the personal deepening of company managers so that the conclusions of the study will be more comprehensive.

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