



The Mediating Effect of Earnings Management on Financial Performance: The Importance of Good Corporate Governance

Fahmi Rizani¹, Akhmad Yafiz Syam² and L. Lisandri³

Abstract

Purpose: This study investigates the effect of corporate governance on financial performance by taking into account the mediating effect of earnings management.

Design: By using a structural equation modeling and partial least squares approach and a sample of listed banks in Indonesia observed between 2010 and 2015, this research proves that good corporate governance has a significant effect on earnings management and, in turn, that earnings management has an adverse impact on a company's financial performance.

Findings: An increase in managerial and institutional ownership leads to a decrease in earnings management, which can improve a company's financial performance.

Originality: This research shows that by applying good corporate governance mechanisms, a company can avoid agency conflicts, minimize earnings manipulation by managers, and obtain reliable company performance valuations.⁴

JEL classification: G30, G34, O10, O16.

Keywords: corporate governance, corporate financial performance, earnings management, institutional ownership, managerial ownership, Indonesia

¹ Universitas Lambung Mangkurat, Indonesia. dr.fahmi.rizani@gmail.com

² STIE Indonesia Banjarmasin, Indonesia.

³ STIE Indonesia Banjarmasin, Indonesia.

⁴ **Acknowledgements:** This research was conducted in collaboration with the lecturers of Sekolah Tinggi Ilmu Ekonomi Indonesia (STIEI) and Faculty of Economics and Business, Universitas Lambung Mangkurat (FEB ULM). We thank Ketua STIEI for their financial support. **Funding:** The study was supported by Sekolah Tinggi Ilmu Ekonomi Indonesia. [Grant no. 125-2017-STIEI]. The funders did not have any role in the study design, data collection and analysis, or the decision to publish the article. **Conflicts of Interest:** The authors have no conflicts to declare.

INTRODUCTION

Corporate governance (CG) is a management concept that refers to all the mechanisms used to control and monitor management performance as well as ensure corporate accountability to stakeholders. The implementation of corporate governance mechanisms is strategically important to achieve good corporate governance (GCG), which controls the performance of business entities. GCG is expected to meet the demands of national and international stakeholders, thereby creating value to achieve competitive advantage. The concept of GCG requires four key elements: fairness, transparency, accountability and responsibility. The consistent application of these principles can improve the quality of financial reporting and can become an obstacle to performance engineering activities which results in financial reporting not reflecting the company's core values (Kaen, 2003; Shaw, 2003). This concept has developed relatively since the 1990s. The concept of good corporate governance has been known in the UK since 1992. Developed countries that are members of the OECD Group (a group of developed countries in Western Europe and North America) were implemented in 1999. In Indonesia, in Law no. 10 of 1998 concerning Banking, in general, provisions related to GCG have been regulated, including the governance structure, governance process, and governance outcome. In particular, regarding governance outcomes, Bank Indonesia has also issued several regulations, including transparency regarding bank financial conditions and increasing the role of external auditors. Banks are required to disclose non-performing loans (NPLs), controlling shareholders and affiliates, and risk management practices in financial reporting.

Corporate value and stakeholder value are determined by management's economic, environmental, and social performance. These three aspects are known as the Triple Bottom Line (Halpern *et al.*, 2013). While environmental and social aspects are important for measuring a company's performance, the firm's core value is still measured by financial performance, which is closely linked to the rise and decline of stock prices and is easier to use to predict future company performance. Stakeholders use earnings as a key indicator for economic decision making. Indeed, they rely on it to make investment decisions; lenders rely on it to make credit decisions; the government, for calculating corporate income tax; and employees (labor organization), to ensure employee welfare. As a result, management focuses on achieving earnings as a key indicator of its performance. Therefore, a conflict of interest arises between the stakeholders (the principal) and management (the agent) regarding the measurement of corporate earnings (Watts and Zimmerman, 1983), which is known as the agency theory effect (Jensen and Meckling, 1976).

Issues may arise when the earnings of a company are reported asymmetrically (Brealey, Leland, and Pyle, 1977) and used as a performance measurement tool. According to the agency problem, management has an incentive to manipulate the reporting of earnings (Jensen and Meckling, 1976). The flexibility of generally accepted accounting principles allows managers to use accrual accounting, and this affects earnings management as well as the reporting of financial performance (Cornett, Marcus, and Tehranian, 2008).

Several studies have shown the relationship between CG mechanisms and earnings management by corporate managers (Ajinkya, Bhojraj, and Sengupta, 2005; Cornett, Marcus, and Tehranian, 2008; Davidson *et al.*, 2004; Iraya, Mwangi, and Muchoki, 2015, Koh, 2003; Siregar and Utama, 2008; Xie, Davidson, and DaDalt, 2003). By applying CG mechanisms, a company can minimize the manipulation of earnings by managers and ensure that the reported performance best describes the actual economic situation of the company. The implementation of sound CG

principles (i.e., decline in earnings management) thus has a substantial impact on the quality of financial statements.

Based on the foregoing, this study investigates the relationship between CG and the financial performance of a company by assessing the role of earnings management. The focus is on empirically proving the application of CG as a management control tool to prevent earnings management by managers. This research contributes to the literature by providing evidence on how to overcome the conflict of interest between the owners (principal) and managers (agent), which affects the value and financial performance of the company. The findings recognize the need to effectively reduce conflicts of interest and motivate managers to improve their performance and enhance corporate value through corporate financial performance (CFP).

The remainder of the paper is organized as follows. Section 2 introduces the theoretical framework and research hypotheses, section 3 outlines the methodology, section 4 describes the data and empirical results, and section 5 provides our concluding remarks.

THEORETICAL FRAMEWORK AND RESEARCH HYPOTHESES

Jensen and Meckling (1976) suggested that earnings management problems can be avoided or solved by adopting a self-control mechanism based on CG to align the differences in interests between owners and management, namely. Such mechanisms include the ownership of the company's shares by management (i.e., managerial ownership) and the institutional ownership of shares (i.e., institutional ownership). Cornett, McNutt, and Tehranian (2009) examined whether CG mechanisms affect earnings management and financial performance at the largest holding companies of US public banks, finding that CG mechanisms, board independence, and capital are positively associated with earnings, which in turn are negatively related to earnings management. Bhagat and Bolton (2008) concluded that better governance positively and significantly correlates with higher current and future operating performance. In this study, CG is proxied by managerial and institutional ownership. Based on the theoretical framework described above, Figure 1 illustrates the approach of this research.

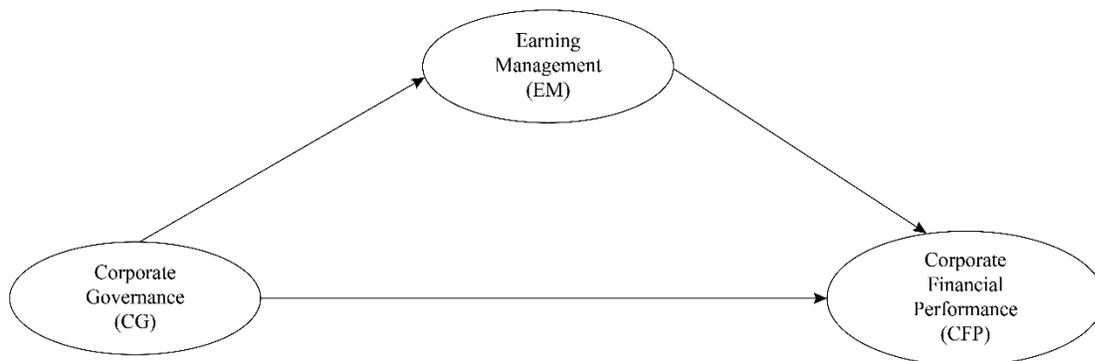


Figure 1. Theoretical framework

CG and CFP

The greater the ownership of managers within a company, the more management is expected to maximize the company's value and financial performance (Brealey, Leland, and Pyle, 1977; Cornett, Marcus, and Tehranian, 2008, Cornett, McNutt, and Tehranian, 2009; Jensen and Meckling, 1976; McConnell and Servaes, 1990) to prove that CG mechanisms affect firm performance. Jensen and Meckling (1976) argued that institutional ownership plays an essential role in minimizing agency conflicts between managers and shareholders. The existence of

institutional investors can be an effective monitoring mechanism in every decision taken by managers. McConnell and Servaes (1990) also reported statistically significant relationships between corporate values and the share ownership of institutional investors. This is because institutional investors are involved in making strategic decisions to reduce earnings manipulation, which in turn improves the company's performance. However, Siregar and Utama (2008) found inconsistent evidence on the impact of institutional ownership, company size, and the practice of CG on earning management. Alves and Sandra (2012) suggest that both managerial ownership and ownership concentration improve the quality of annual earnings by reducing the levels of earnings management. Nonetheless, a good accountant or financial economist pays considerable attention to the impact of the structure of CG and the compensation scheme on the company's behavior (Cornett, Marcus, and Tehranian, 2008). Hence, the following two hypotheses are proposed:

H_{1a}: Managerial ownership has a significant effect on CFP.

H_{1b}: Institutional ownership has a significant effect on CFP.

CG and Earnings Management

Eisenhardt (1989) identified three assumptions about human nature in agency theory: (1) human selfishness (self-interest), (2) the limited power of thought about future perceptions (bounded rationality), and (3) the avoidance of risk (risk aversion). These assumptions suggest that agency problems arise between managers and shareholders (Jensen and Meckling, 1976) because humans act opportunistically by prioritizing personal interests. Institutional ownership allows institutions to professionally monitor their investment, and the level of control over management actions is so high that the potential for fraud can be suppressed (Ajinkya, Bhojraj, and Sengupta, 2005; Cornett, Marcus, and Tehranian, 2008; Chung, Firth, and Kim, 2002; Koh, 2003).

Cornett, McNutt, and Tehranian (2009) tested CG mechanisms that affect earnings and profit management at the largest public holding company in the United States. They concluded that adjusting the impact of earnings management substantially increases the importance of CG variables and reduces the effect of incentive-based compensation on corporate performance. Further, Abed, Al-Attar, and Suwaidan (2012) confirmed the existence of a significant relationship between CG mechanisms and earnings management. Abbadi, Hijazi, and Al-Rahahleh (2016) concluded corporate governance quality has increased over time. Thus, its ability to constrain earnings management has also increased. Hence, the following two hypotheses are proposed:

H_{2a}: Managerial ownership has a significant effect on earnings management.

H_{2b}: Institutional ownership has a significant effect on earnings management.

Mediating Role of Earnings Management

According to Jensen and Meckling (1976), agency costs can be divided into three categories: (1) monitoring costs, (2) bonding costs, and (3) residual costs. Monitoring costs are incurred by the company to observe, control, and limit the behavior of agents that could harm the principal. Bonding costs are incurred by an agent to conform to the interests of the principal, while residual costs are incurred by the principal in the form of reduced prosperity because of the differences between agent and principal decisions.

Agency costs impose a burden on the earnings of the company; the higher agency costs, the more significant is the reduction in corporate profits. In addition to imposing agency costs on the company, earnings management can also reduce the value of the firm because of the opportunistic behavior of managers (Balsam, 2002). The way in which to minimize the supervisory costs borne by shareholders relies on managerial and institutional ownership (Jensen and Meckling, 1976).

Several studies have examined the relationship between earnings management and the information content of earnings and found mixed results. Warfield, Wild, and Wild (1995) found evidence that earnings management leads to a less informed earnings report. Abed, Al-Attar, and Suwaidan (2012), supported the application of CG principles to control the behavior of the board of directors, which may distort annual financial statements. These findings suggest that the reliability and transparency of financial reports can be improved. Hence, the following two hypotheses are proposed:

H_{3a}: Managerial ownership affects CFP through earnings management.

H_{3b}: Institutional ownership affects CFP through earnings management.

METHODS

Research Setting and Sample

To examine these hypotheses, a structural equation modeling (SEM) and partial least squares (PLS) approach was employed to deal with the multiple dependent and independent variables simultaneously. PLS can handle relatively small sample sizes and multicollinearity among independent variables; hence, it does not require the assumption of a normal distribution (Kock, 2011; Hair *et al.*, 2014). In this study, we used Warp-PLS version 06.00 software.

We collected secondary data from the annual report of banking companies listed on the Indonesia Stock Exchange (IDX) in 2010–2015. The sample was built by using purposive sampling with the following criteria: (i) banking companies are listed on the IDX and consistently publish audited financial statements, and (ii) banking companies present managerial and institutional ownership structures and their financial statements can be accessed through IDX Corner STIE Indonesia Banjarmasin. Based on these criteria, the final sample comprised 20 banks and the number of observed data panels was $6 \times 20 = 120$.

Variables and Measurements

CFP

CFP was measured by using *cash flow return on assets* (CFROA), a measure derived from the results of operations whose funds have been received by the company in cash, with the burden that the contribution is cash and has been issued by the company. CFROA can be expressed as

$$\text{CFROA} = \frac{\text{EBIT} + \text{Dep}}{\text{Assets}},$$

where:

EBIT = earnings before interest and taxes;

Dep = depreciation; and

Assets = total assets.

Managerial ownership

Managerial ownership is linked to the number of shares owned by management in a company, and can be expressed as follows:

$$\text{Managerial ownership percentage} = \frac{\text{The number of shares of the manager}}{\text{The number of outstanding shares}}$$

Institutional ownership

Institutional ownership is the number of shares owned by an institution in a company. The proportion of institutional ownership is measured as the percentage of ownership, and can be expressed as follows:

$$\text{Institutional ownership percentage} = \frac{\text{The number of institutional shares}}{\text{The number of outstanding shares}}$$

Earnings management

This research uses modified accruals as in the Jones model (Dechow, Sloan, and Sweeney, 1995) to detect earnings management. Modified accruals assess level estimates as a function of the difference between revenue changes and changes in the level of property, plants, and equipment. The model can be described as follows:

a. Total actual accruals:

$$\text{TAC} = \text{NI}_{it} - \text{CF}_{it}$$

where:

NI_{it} = net income of company *i* in period *t*; and

CF_{it} = operating cash flow of company *i* in period *t*.

Total accruals are estimated by ordinary least squares (OLS) as follows:

$$\frac{\text{TAC}_t}{\text{TAT}_{t-1}} = (\beta)1 \frac{1}{\text{TAT}_{t-1}} + (\beta)2 \frac{\Delta \text{SAL}_t}{\text{TAT}_{t-1}} + (\beta)3 \frac{\text{PPE}_t}{\text{TAT}_{t-1}} + e$$

where:

TAC_t = total accruals in period *t*;

TAT_{t-1} = total assets in period *t-1*;

(Δ)SAL = change in revenue or net sales in period *t*;

PPE_t = property, plants, and equipment in period *t*; and

(β)1, (β)2, and (β)3 = regression coefficients.

b. Discretionary non-accruals:

$$\text{NDTAC}_t = (\beta)1 \frac{1}{\text{TAT}_{t-1}} + (\beta)2 \frac{\Delta \text{SAL}_t - \Delta \text{RECT}_t}{\text{TAT}_{t-1}} + (\beta)3 \frac{\text{PPE}_t}{\text{TAT}_{t-1}} + e$$

where:

(Δ) RECT = change in accounts receivable in period *t*; and

(β)1, (β)2, and (β)3 = fitted coefficients obtained from the results of the regression analysis of total accruals.

c. Discretionary total accruals

$$DTACT = \frac{TACT}{TAt - 1} - NDTACT$$

where:

DTACT = discretionary total accruals in year *t*;

TACT = total accruals in year *t*; and

NDTACT = non-discretionary total accruals in year *t*.

RESULTS AND DISCUSSION

As shown in Table 1, the mean value of managerial ownership is 0.0499, which indicates that 4.99% of the company's shares are owned by management on average. By contrast, an average of 61.74% of the company's shares are owned by institutions and the average earnings management of banking companies is 7.19%. Average CFP is 31.06%.

Table 1. Descriptive statistics of the variables of interest

Variables	N	Minimum	Maximum	Mean	Std. Dev
Managerial ownership (MO)	120	.0107	.3182	.0499	.0817
Institutional ownership (IO)	120	.1076	.9306	.6174	.1911
Earnings management (EM)	120	.0017	.1669	.0719	.0471
CFROA (CFP)	120	.0190	.7340	.3106	.1780

The correlation analysis between the latent variables indicates the presence of a positive and significant correlation between managerial ownership and CFP ($r = 0.148$; $p\text{-value} = 0.038$). A positive and significant correlation is also found between institutional ownership and CFP ($r = 0.276$; $p\text{-value} = 0.049$). This result suggests that these two variables are essential for explaining firm performance. The relationship between managerial ownership and earnings management is negative and significant ($r = -0.083$; $p\text{-value} = 0.006$). The relationship between institutional ownership and earnings management is also negative and significant ($r = -0.225$; $p\text{-value} = 0,039$). This result indicates that an increase in managerial and institutional ownership decreases earnings management. The relationship between earnings management and CFP is significant and negative ($r = -0.396$; $p\text{-value} = 0.001$); this finding indicates that a decrease in earnings management is associated with an increase in CFP (see Table 2).

Table 2. Correlation and P values

Correlations among indicators				
Indicator correlations				
	MO	_IO	EM	CFP
MO	1.000		-0.083	0.148
_IO		1.000	-0.225	0.276
EM	-0.083	-0.225	1.000	-0.396
CFP	0.148	0.276	-0.396	1.000
P values for correlations				
	MO	_IO	EM	CFP
MO	1.000	<0.001	0.006**	0.038**
_IO	<0.001	1.000	0.039**	0.049**

EM	0.006	0.039	1.000	0.001***
CFP	0.038	0.049	0.001	1.000

Note:

** Significant at the 0.05 significance level

*** Significant at the 0.01 level of significance

Structural Model Analysis

In line with the literature review and research hypotheses tested in this study, the structural model in Figure 2 was implemented.

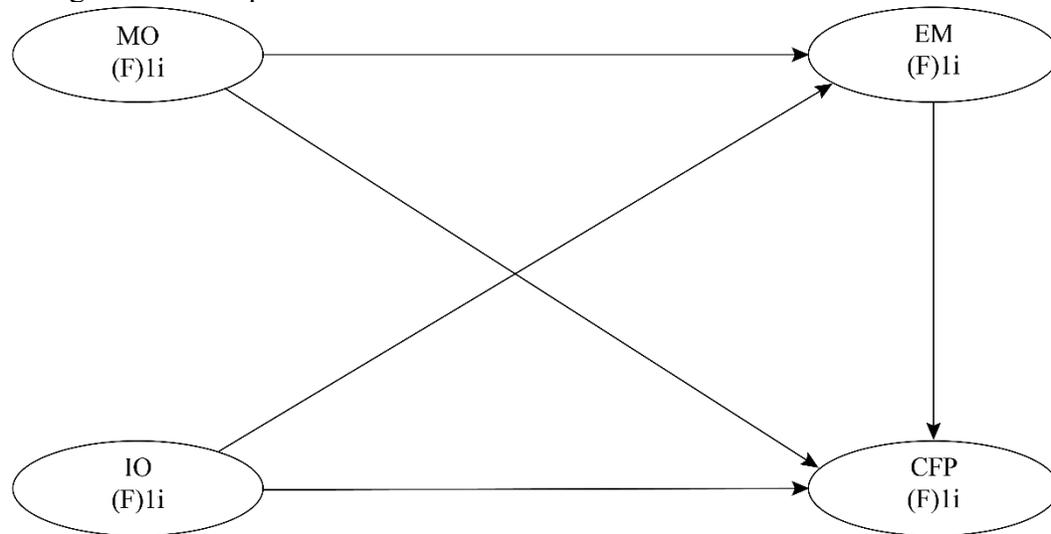


Figure 2. Research model

Note: MO = Managerial ownership; IO = Institutional ownership; EM = Earnings management; CFP = Corporate financial performance.

This study tests the quality and suitability of the model based on the calculation of the Warp-PLS applications (Table 3). Three main indicators are considered: the average path coefficient, average R², and the average block variance inflation factor. The results show that the quality of the model meets the required criteria.

Table 3. Goodness of fit and quality indices of the model

Model fit and quality indices
Average path coefficient (APC)=0.224, P=0.014
Average R-squared (ARS)=0.350, P=0.002
Average adjusted R-squared (AARS)=0.222, P=0.077
Average block VIF (AVIF)=1.209, acceptable if <= 5, ideally <= 3.3
Average full collinearity VIF (AFVIF)=2.068, acceptable if <= 5, ideally <= 3.3
Tenenhaus GoF (GoF)=0.387, small >= 0.1, medium >= 0.25, large >= 0.36
Sympson's paradox ratio (SPR)=1.000, acceptable if >= 0.7, ideally = 1
R-squared contribution ratio (RSCR)=1.000, acceptable if >= 0.9, ideally = 1
Statistical suppression ratio (SSR)=1.000, acceptable if >= 0.7

The value of the average path coefficient (0.224) is significant at the 5% level (p-value = 0.014) and average $R^2 = 0.350$; this means that the determinant coefficient is significant at the 5% level (p-value = 0.002). The value of the average block variance inflation factor is 1.209; acceptable values should be less than or equal to 5 and, ideally, less than or equal to 3.3. Similarly, the goodness of fit value is 0.387; acceptable values can be small ≥ 0.1 , medium ≥ 0.25 , or large ≥ 0.36 . This result suggests that the proposed model is supported by relevant and reliable data.

Table 4 shows that the R^2 values of both of the endogenous latent variables of EM are 0.23 and of CFP are 0.57. This result suggests that the exogenous variables hypothesized herein have a positive correlation with the endogenous variables. The variance inflation factors indicate that the result of the free model testing for multicollinearity bias must be below 3.3 (Kock, 2011). Table 3 shows that each variable has a value below 3.3. Therefore, this research model is free from vertical, lateral, and common collinearity. In line with Q^2 testing procedures, it is useful to test the predictive validity and relevance of the predictor and criterion variables, with criteria that must be greater than 0. Table 5 shows that $Q^2 > 0$; in other words, all the model variables are valid.

Table 4. Latent variable coefficients

Latent variable coefficients	MO	IO	EM	CFP
R-squared coefficients			0.23	0.57
Adjusted R-squared coefficients			0.179	0.196
Full collinearity VIFs	2.856	2.870	1.242	1.303
Q-squared coefficients			0.229	0.259

Hypothesis Testing and Discussion

The hypothesis testing procedure comprises two stages (Hair *et al.*, 2014):

1. Verify the direct effects of managerial ownership and institutional ownership on CFP and on earnings management.

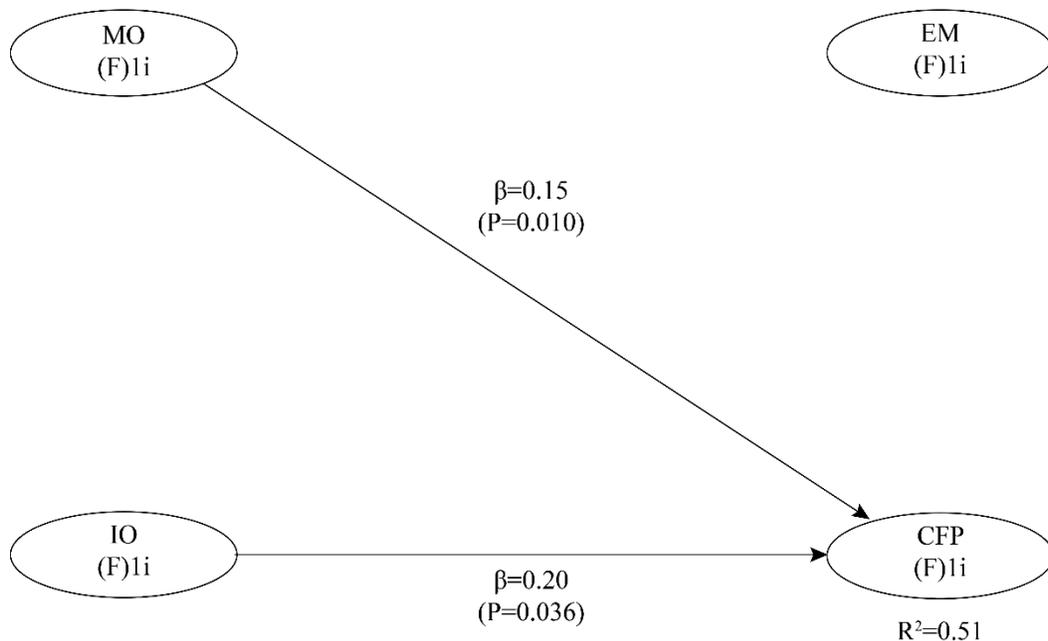


Figure 3. Direct effect of managerial and institutional ownership on CFP

Based on the results in Figure 3, the effect of managerial ownership on CFP is 0.15 (p-value = 0.01), while the impact of institutional ownership on CFP is 0.20 (p-value = 0.03). This result implies that both these variables have a positive and significant effect. Therefore, H_{1a} and H_{1b} are supported. These results confirm the findings of Abed, Al-Attar, and Suwaidan (2012), Ajinkya, Bhojraj, and Sengupta, (2005), Cornett, Marcus, and Tehranian (2008), Chung, Firth, and Kim (2002), and Koh (2003).

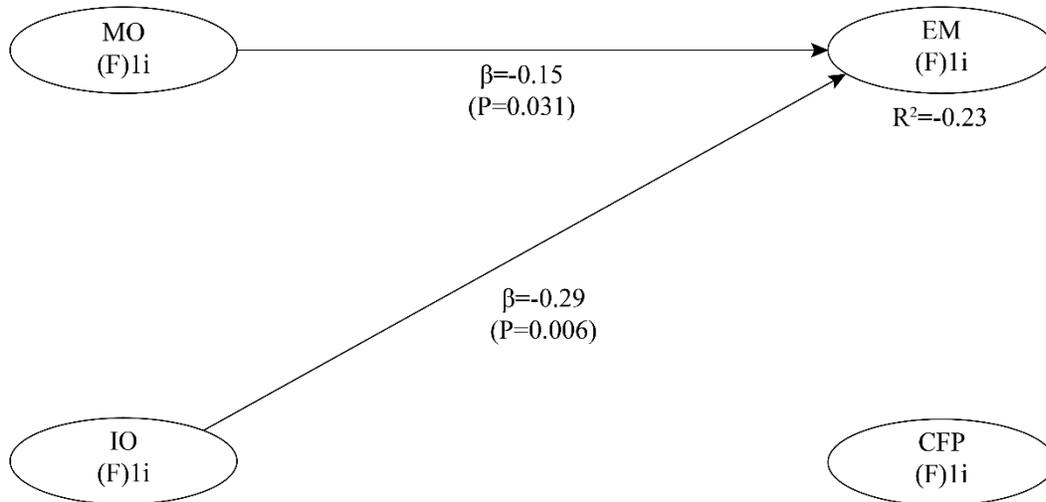


Figure 4. Direct effect of managerial and institutional ownership on earnings management

As Figure 4 shows, the effect of managerial ownership on earnings management is -0.15 (p-value = 0.031), while the impact of institutional ownership on earnings management is -0.29 (p-value = 0.006). This result shows that both the variables have a negative and significant influence on earnings management. This finding means that the larger managerial and institutional ownership, the lower is earnings management. Therefore, H_{2a} and H_{2b} are supported. These results also support the findings of Ajinkya, Bhojraj, and Sengupta (2005), Chung, Firth, and Kim (2002), and McConnell and Servaes (1990).

2. Verify the indirect effects considering the mediating effect of earnings management.

To test the indirect effect of managerial and institutional ownership on CFP through earnings management, we adopt a structural model. Figure 5 reports the results.

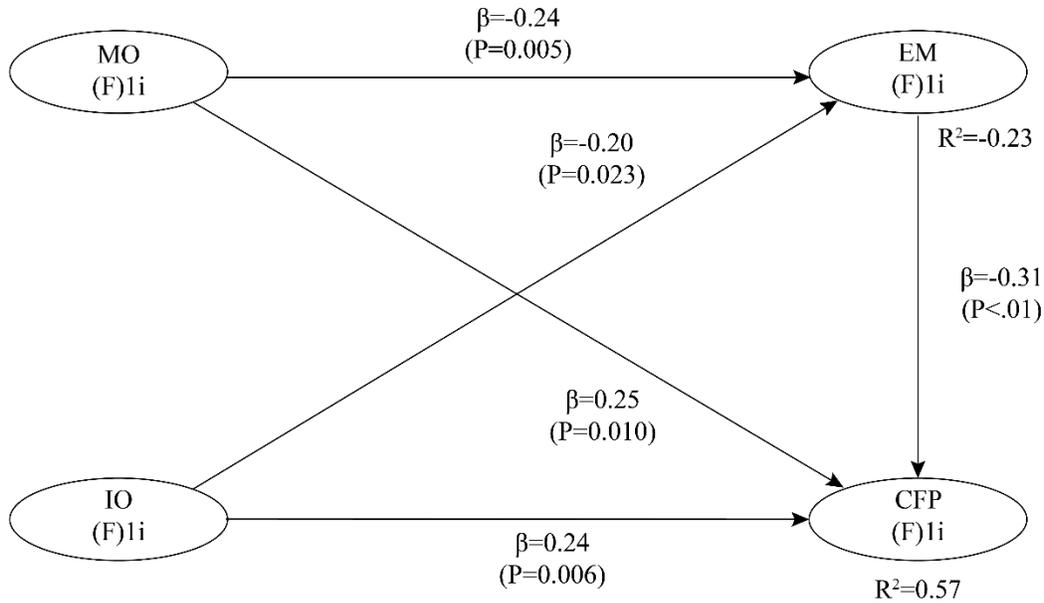


Figure 5. Estimation of the indirect effects: Structural model

Variance accounted for (VAF) measures the extent to which earnings management absorbs the direct influence of the exogenous variables on the endogenous variables. A VAF score above 80% indicates full mediation, 20–80% indicates partial mediation, and less than 20% indicates no mediation (Hair *et al.*, 2014).

Table 5. VAF results

Relationship variable	Calculation	Total	Category
MO → EM → CFP	MO → EM: -0,24	-0.55	Partial mediation
	EM → CFP: -0,31		
	Indirect effect = -0,24X-0,31	0,25	
	Direct Effect: 0,25		
	Total effect	-0,30 = -30 %	
IO → EM → CFP	IO → EM: -0,20	-0.51	Partial mediation
	EM → CFP: -0,31		
	Indirect effect = 0,26X0,14	0,24	
	Direct Effect: 0,24		
	Total effect	-0,27 = -27 %	

The VAF analysis shows that earnings management can act as a partial mediator between managerial ownership and CFP with the variance of the mediating effect equal to -0.30. The value of the mediating effect under institutional ownership is also negative. Hence, managerial and institutional ownership are considered to be proxies for good governance and can improve CFP by decreasing earnings management by 30% and 27%, respectively. This finding shows the importance of good governance in avoiding the occurrence of earnings management while improving company performance. This result is in line with that of Chung, Firth, and Kim (2002), who concluded that managers' ability to opportunistically exploit earnings management is limited by the effectiveness of external monitoring by institutional stakeholders or investors. Institutional investors have the opportunity, resources, and ability to monitor and influence managers and gather

information, monitor management actions, and promote better performance. McConnell and Servaes (1990) also reported a statistically significant relationship between firm value and the percentage of institutional ownership.

CONCLUSION

In some circumstances, managers have an incentive to manipulate a company's reported gains by using discretionary accruals. This profit management practice benefits managers with little or no (or even negative) benefits to shareholders. Managerial share ownership, through bonuses, can reduce the manager's incentive to pursue earnings management. The greater managerial ownership, the more the potential for opportunistic actions by managers, through earnings management, is reduced. Similarly, institutional ownership helps monitor the accounting choices made by managers and could force changes if they are believed to be conducting opportunistic earnings management.

The results of this study provide new empirical evidence in the field of CG. First, our findings show that managers tend to carry out earnings management, by using discretionary accruals, for their benefit. Second, managers who own shares in a company are motivated to avoid or reduce the effects of earnings management to improve CFP without manipulating financial reporting. Third, institutional investors with a significant shareholding can prevent managers from using opportunistic discretionary accruals. In other words, managerial and institutional ownership play a strategic role in achieving good CG.

There are several limitations to this study. First, the analysis focuses on the mechanism of share ownership, both from the managerial and from the institutional points of view. Hence, it ignores any other variables or proxies that may contribute to good CG. Second, the sample includes only banking companies, and the peculiarities of financial institutions are not accounted for in measuring their performance. Third, the interpretation of the results is not supported by the personal experience of corporate managers, as the analysis only uses secondary data.

Future research should conduct similar analyses by using a longer and more recent observation period. Researchers should also consider using a sample of non-banking companies listed on the IDX and add qualitative reviews that address the personal experiences of corporate managers. In this way, the conclusions of the research could more easily be generalized.

REFERENCES

- Abbadi, Sinan S.; Hijazi, Qutaiba F.; and Al-Rahahleh, Ayat S., Corporate Governance Quality and Earnings Management: Evidence from Jordan, *Australasian Accounting, Business and Finance Journal*, 10(2), 2016, 54-75. doi:10.14453/aabfj.v10i2.4
<https://doi.org/10.14453/aabfj.v10i2.4>
- Abed, S., Al-Attar, A. and Suwaidan, M. (2012). Corporate governance and earnings management: Jordanian evidence. *International Business Research*, 5(1), pp. 216-225.
<https://doi.org/10.5539/ibr.v5n1p216>
- Ajinkya, B., Bhojraj, S. and Sengupta, P. (2005). The association between outside directors, institutional investors and the properties of management earnings forecasts. *Journal of Accounting Research*, 43(3), pp. 343-376.
<https://doi.org/10.1111/j.1475-679x.2005.00174.x>
- Alves, Sandra. (2012). Ownership Structure and Earnings Management: Evidence from Portugal. *Australasian Accounting, Business and Finance Journal*, 6(1), 57-74.
- Balsam, S. (2002). Accruals management, investor sophistication, and equity valuation: Evidence from 10-Q filings. *Journal of Accounting Research*, 40(4), pp. 987-1012.
<https://doi.org/10.1111/1475-679X.00079>
- Bhagat, S. and Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, 14(3), pp. 257-273.
<https://doi.org/10.1016/j.jcorpfin.2008.03.006>
- Brealey, R., Leland, H. E. and Pyle, D. H. (1977). Informational asymmetries, financial structure, and financial intermediation. *The Journal of Finance*, 32(2), pp. 371-387.
<https://doi.org/10.1111/j.1540-6261.1977.tb03277.x>
- Chung, R., Firth, M. and Kim, J. -B. (2002). Institutional monitoring and opportunistic earnings management. *Journal of Corporate Finance*, 8(1), pp. 29-48.
[https://doi.org/10.1016/S0929-1199\(01\)00039-6](https://doi.org/10.1016/S0929-1199(01)00039-6)
- Cornett, M. M., Marcus, A. J. and Tehranian, H. (2008). Corporate governance and pay-for-performance: The impact of earnings management. *Journal of Financial Economics*, 87(2), pp. 357-373.
<https://doi.org/10.1016/j.jfineco.2007.03.003>
- Cornett, M. M., McNutt, J. J. and Tehranian, H. (2009). Corporate governance and earnings management at large US bank holding companies. *Journal of Corporate Finance*, 15(4), pp. 412-430.
<https://doi.org/10.1016/j.jcorpfin.2009.04.003>

- Davidson, W. N., Jiraporn, P., Kim, Y. S. and Nemeč, C. (2004). Earnings management following duality-creating successions: Ethnostatistics, impression management, and agency theory. *Academy of Management Journal*, 47(2), pp. 267-275.
<https://doi.org/10.5465/20159577>
- Dechow, P. M., Sloan, R. G. and Sweeney, A. P. (1995). Detecting earnings management. *Accounting Review*, 70(2), pp. 193-225.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), pp. 57-74.
<https://doi.org/10.2307/258191>
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. and Sarstedt, M. (2014). A primer on partial least squares structural equation modeling (PLS-SEM). Washington, DC: Sage Publications.
- Halpern, B. S., Klein, C. J., Brown, C. J., Beger, M., Grantham, H. S., Mangubhai, S., Ruckelshaus, M., Tulloch, V. J., Watts, M. and White, C. (2013). Achieving the triple bottom line in the face of inherent trade-offs among social equity, economic return, and conservation. *Proceedings of the National Academy of Sciences*, 110(15), pp. 6229-6234.
<https://doi.org/10.1073/pnas.1217689110>
- Iraya, C., Mwangi, M. and Muchoki, G. W. (2015). The effect of corporate governance practices on earnings management of companies listed at the Nairobi securities exchange. *European Scientific Journal*, 11(1), pp. 169-178
- Jensen, M. C. and Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), pp. 305-360.
[https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Kaen, Fred. R, A Blueprint for Corporate Governance: Strategy, Accountability, and the Preservation of Shareholder Value, AMACOM, USA. 2003.
- Kock, N. (2011). Using WarpPLS in e-collaboration studies: Descriptive statistics, settings, and key analysis results. *International Journal of e-Collaboration*, 7(2), pp. 1-18.
<https://doi.org/10.4018/jec.2011040101>
- Koh, P.S. (2003). On the association between institutional ownership and aggressive corporate earnings management in Australia. *The British Accounting Review*, 35(2), pp. 105-128.
[https://doi.org/10.1016/S0890-8389\(03\)00014-3](https://doi.org/10.1016/S0890-8389(03)00014-3)

- McConnell, J. J. and Servaes, H. (1990). Additional evidence on equity ownership and corporate value. *Journal of Financial Economics*, 27(2), pp. 595-612.
[https://doi.org/10.1016/0304-405X\(90\)90069-C](https://doi.org/10.1016/0304-405X(90)90069-C)
- Shaw, John. C, *Corporate Governance and Risk: A System Approach*, John Wiley & Sons, Inc, New Jersey, 2003.
- Siregar, S. V., and Utama, S. (2008). Type of earnings management and the effect of ownership structure, firm size, and corporate-governance practices: Evidence from Indonesia. *The International Journal of Accounting*, 43(1), pp. 1-27.
<https://doi.org/10.1016/j.intacc.2008.01.001>
- Warfield, T. D., Wild, J. J. and Wild, K. L. (1995). Managerial ownership, accounting choices, and informativeness of earnings. *Journal of Accounting and Economics*, 20(1), pp. 61-91.
[https://doi.org/10.1016/0165-4101\(94\)00393-J](https://doi.org/10.1016/0165-4101(94)00393-J)
- Watts, R. L. and Zimmerman, J. L. (1983). Agency problems, auditing, and the theory of the firm: Some evidence. *The Journal of Law and Economics*, 26(3), pp. 613-633.
<https://doi.org/10.1086/467051>
- Xie, B., Davidson III, W. N. and DaDalt, P. J. (2003). Earnings management and corporate governance: The role of the board and the audit committee. *Journal of Corporate Finance*, 9(3), pp. 295-316.
[https://doi.org/10.1016/S0929-1199\(02\)00006-8](https://doi.org/10.1016/S0929-1199(02)00006-8)