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The Role of Institutional Ownership and Audit Quality in Moderating the Effect of Free Cash Flow on Earnings Management

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ABSTRACT

This study aims to examine the effect of institutional ownership and audit quality in moderating the relationship between free cash flow and earnings management of non-financial firms in Indonesia. This study uses 179 observations for the year 2019-2023 of non-financial companies listed in the Indonesia Stock Exchange and sampling technique used is proportionate stratified random sampling. Then, data are analyzed using multiple linear regression analysis and moderated regression analysis (MRA). The study's findings suggest that free cash flow has positive effect on earnings management. It has been demonstrated that audit quality plays a role in reducing or mitigating the positive influence of free cash flow on earnings management. However, on the other hand, institutional ownership does not play a role in moderating the effect of free cash flow on earnings management. Unless audited by a reputable public accounting firm, investors and prospective investors should be cautious in funding businesses with significant free cash flow since it may encourage managers to engage in earnings management. If financial statements of a company are audited by a reputable public accounting firm, the manager's motivation to engage in earnings management may be reduced. In order to explain how free cash flow affects earnings management, this study adopts a novel strategy by combining audit quality and institutional ownership characteristics as moderating variables.

Keywords: *Free cash flow, institutional ownership, audit quality, earnings management*

INTRODUCTION

Accounting income is the most important aspect of financial statements. According to Jiang, Song, & Zhu (2023), stock returns will decrease when reported earnings are lower than investors' expectations, and their decline will be slower when reported earnings are higher than analysts' analysis. In addition to increasing investor expectations, accounting earnings also serve as a performance measure for CEO compensation (Ghazali, Shafie, & Sanusi, 2015). Healy & Wahlen (1998) found that when managers are compensated based on profitability, they may be motivated to maximize the value of their bonuses by controlling accounting policy choices and processes. Managers are strongly incentivized to engage in earnings management, a practice known as earnings management, to the benefit of the company and the managers themselves (Callao, Jarne, & Wroblewski, 2021). In order to keep the company's image attractive to stakeholders and shareholders, especially investors, this action is often used to improve the company's performance.

Earnings management is not new in companies. One of the most famous scandals that is still remembered by the global community is the accounting fraud case involving the United States energy company, namely Enron. This company was revealed to have committed massive accounting fraud in 2001. The firm, along with accounting firm Arthur Andersen, manipulated financial statements to hide $30 billion in debt through creative accounting practices and the use of special purpose entities to move financial obligations off the balance sheet. The main goal of this tactic is to cover the huge losses resulting from high-risk energy businesses, giving the illusion of stable financial performance and increase profits, thereby giving the impression of financial performance that is much better than the actual condition (Sukarya et al., 2024).

In addition to Enron, there have been several other financial scandals that show how manipulation of financial statements can have a major impact on investor confidence and market stability. One fairly well-known case is Xerox, which in the early 2000s was known to have engaged in misleading accounting practices by admitting revenue earlier than it should. This strategy makes the company's financial statements look better and attractive to investors, even though the reported revenue has not been actually realized (Sgate, 2002). Xerox inflated its revenue by about $3 billion during the period 1997-2000 to meet market expectations and increase its stock price. As a result, the U.S. Securities and Exchange Commission (SEC) imposed sanctions on Xerox, which eventually had to pay a fine of $10 million and restatement its financial statements (Wiyogo et al., 2021). Cases such as Enron and Xerox show that manipulation of financial statements, whether by concealing debt or inflating revenues, has serious consequences. Lack of transparency and compliance with accounting standards not only harms investors, but can also lead to the collapse of companies and a loss of public trust in financial markets.

One of the techniques that is common in the corporate world, especially in Indonesia, is earnings management of the 31 countries that often do earnings management, Indonesia is ranked 15th (Zulaikha & Fuad, 2022). In Indonesia, PT Garuda Indonesia (Persero) Tbk is a well-known example. Despite a third-quarter loss of $114.08 million (Rp1.66 trillion), the company was accused of inflating its 2018 net income to $809.85 thousand or Rp11.33 billion at an exchange rate of Rp14,000. In violation of the Financial Accounting Standards Statement (PSAK) 23, the company's management acknowledged receivables as income at the General Meeting of Shareholders (GMS) on January 24, 2019. PT Mahata reported sales of US$239.94 million, including US$28 million from profit sharing with PT Sriwijaya Air (CNN Indonesia, 2019).

This behavior shows an attempt to manipulate using the phenomenon of window dressing, which is a tactic used to embellish financial data to attract investors. The same thing also happened to PT Tiga Pilar Sejahtera Food Tbk. The 2017 financial statements contained allegations of embezzlement of funds amounting to 4 trillion rupiah. An audit conducted by Ernst & Young Indonesia and the company's new management found manipulation of fixed assets, accounts receivable, and inventories as well as significant discrepancies between internal financial records and external auditor data. The data shows that the company performs earnings management, which is inflating profits or reducing losses unfairly to improve financial statements (Arief, 2019). Net income of PT Akasha Wira Internasional Tbk increased by 38.48% from IDR 38.24 billion in 2017 to IDR 52.96 billion in 2018. Sales decreased by 1.25 percent in 2018 from Rp814.49 billion to Rp804.3 billion (Ayuningtyas, 2019).

This inequality shows the existence of earnings management strategies used to maintain business attractiveness for investors (Jannah, Kusumawati, & Pribadi, 2024). Decision-making can be influenced by the profit margin shown in the financial statements (Al-Absy et al., 2017). In order to show strong performance to investors, management will strive to report large profits. In the face of fierce competition, businesses will strive to maximize profits to increase their overall value. According to the facts, financial statements are only used to present earnings information. The method of generating such profits is not taken into account. The amount of income indicates the company's efforts to increase its value. Companies can use earnings management to boost or show high income levels (Hernawati et al., 2021). Earnings management is defined by Healy & Wahlen (1998) as "management actions to influence the occurrence of profits according to the desired through internal factors controlled by the organization" through the selection of accounting standards using certain methodologies. Jensen & Meckling (1976) stated that earnings management in agency theory is driven by the competition of interests between managers and shareholders.

When the interests of management and the interests of owners or investors conflict, a situation known as agency conflict will arise. A manager can breach his agency's duties if he acts against the interests of his principal, who is often the owner, shareholder, or investor. When owners and managers put themselves first, it can lead managers to take advantage of the situation to advance their own interests, even if it means endangering others (such as owners or investors). Managers can take advantage of the situation by manipulating their earnings (Dewi & Priyadi, 2016). Another way managers can manipulate profits to change the time of recognition of expenses and revenue (Xu, Zhang, & Zhao, 2024).

Earnings management strategies do not violate GAAP, but their popularity from a procedural point of view can undermine investors' confidence in external financial statements. According to Asyik, Agustia, & Muchlis (2023), because the figures provided do not accurately describe the business situation, earnings management techniques can damage the credibility of financial statements. To influence reported profits, management can use earnings management techniques. These actions can reveal financial benefits that the business doesn't actually enjoy and can even be detrimental to the business. Given the aforementioned incidents, it is interesting and important to investigate the elements that motivate managers to engage in earnings management as well as the elements that can prevent it. One explanation for why managers are involved in earnings management is free cash flow (Clara & Susanto, 2022).

The presence of free cash flow can cause agency problems. This is because management and shareholders have different interests. While management wants current funds to be used to grow the company beyond its ideal size so that they can continue to invest even when the investment has a negative net present value, and on the other hand, shareholders want the rest of the money to be distributed to improve their well-being. The option is seen by shareholders as an option that is not in their favor (Hastuti, Arfan, & Diantimala, 2018). Free cash flow refers to the amount of money a business has after paying all of its operating and investment costs (Oh & Penman, 2020).

This concept centers on the money generated by a business from its operations after covering all operating expenses and investment for its development. Company's management must make the best use of free cash flow to maximize profitability. Effective management will wisely use free cash flow for high-yield investments that increase business revenue (Hastuti, Arfan, & Diantimala, 2018).

If cash flow is high, organizations can benefit from free cash flow. This explains why businesses have strong capital recovery capabilities for both loans and equity capital (Erawati & Jedaru, 2022). "A company with high free cash flow means that the company is financially healthy. High free cash flow means that companies can invest more freely, pay off debt, repurchase stock, or increase liquidity. Companies that have solid financial conditions increase shareholder value through dividends, strong stock price returns, or retained earnings for future investments".

Although on the one hand free cash flow is one of the measurements of the company's financial performance, however, on the other hand, free cash flow can cause agency problems if used for opportunistic purposes by managers, for example not distributed as dividends, but instead invested in projects that do not bring profits to the company (NPV is negative). To cover up their exploitative actions, the managers engage in earnings management operations, which include an increase in reported income. Managers exert more control over profits when free cash flow is high. According to a number of studies, free cash flow can improve earnings management (Dewi & Priyadi, 2016; Ghazali, Shafie, & Sanusi, 2015; Irawan & Apriwenni, 2021; Shadmehri et al., 2017; Tavakolnia, 2017).

If there are effective control variables, then the earnings management tactics carried out by managers can be reduced. Institutional ownership is one of the elements that influences the opportunistic behavior of managers. Institutional ownership is expected to reduce the positive impact of free cash flows on earnings management. Therefore, managers' opportunistic behavior in conducting earnings management can be reduced by the presence of institutional ownership (Saraswati & Atiningsih, 2021). According to the point of view of agency theory, managers often run businesses for their own benefit rather than considering the interests of shareholders.

According to Ramadhani et al. (2023), institutional ownership is considered more efficient than managerial ownership in carrying out supervisory functions in this situation. Furthermore, other studies, such as those conducted by Puspaningrum & Indriyani (2022); and Saraswati & Atiningsih (2021) show that institutional ownership can also reduce the beneficial impact of free cash flows on earnings management. Therefore, institutional ownership plays a role in moderating the positive effect of free cash flow on earnings management. More specifically, institutional ownership serves to weaken the positive effect of free cash flow on earnings management.

Moreover, audit quality also plays a moderating role in the positive relationship between free cash flow and earnings management. Audit quality refers to the extent to which an audit effectively detects and reports material misstatements or fraud in financial statements. High-quality audits offer stronger assurance that a company's financial reports accurately represent its actual financial position, thereby enhancing the reliability of information for stakeholders such as investors, creditors, and regulators. Audit quality plays a pivotal role in corporate governance, especially in curbing managerial opportunism, including practices like earnings management. It can function as a robust external monitoring mechanism that mitigates or weakens the positive association between free cash flow and earnings management. Auditors of high quality are typically more independent, professional, and better equipped to identify and report financial misstatements or manipulations (Hasan, Kassim, & Hamid, 2020).

A credible public accounting firm must build an effective corporate control system with its audit quality (Alexander, 2021). In order for businesses to provide high-quality financial statements, particularly income statements, these controls seek to limit managers' opportunistic behavior when creating financial statements. Thus, the company will be more trusted by investors. Audit quality is an essential element because it reflects the auditor's ability to collect adequate audit evidence, identify unnatural activities, reduce the possibility of manipulation of accounting information, and provide an accurate opinion on the material aspects of financial statements (Soliman, Ragab, & Eldin, 2014).

High-quality audits also increase the trust of financial information users in the integrity and independence of auditors as well as the reliability of financial reporting (Hasan, Kassim, & Hamid, 2020). Therefore, audit quality moderates the impact of free cash flow on earnings management, making it an efficient monitoring tool. Audit quality is expected to help identify earnings management strategies and reduce the opportunistic activities of managers in financial statements (Siala & Jarboui, 2019). The company's financial statement audited by a reputable (qualified) of public accounting firm will be able to reduce or eliminate the beneficial effects of free cash flow on earnings management. Audited financial statements are often used to assess the quality of audits in research. The quality of subsequent audits improves along with the earnings quality shown in the financial statements. This shows how a good audit improves the accuracy and openness of business financial reporting, which in turn strengthens stakeholders' trust in the company.

Previous studies have examined the effect of free cash flow on earnings management (Achyani & Lestari, 2019; Dewi & Priyadi, 2016; Ghazali et al. 2015; Irawan & Apriwenni, 2021; Shadmehri, 2017). However, they have not concurrently explored the moderating roles of institutional ownership and audit quality in this relationship. To address this gap, the present study investigates the combined moderating effects of institutional ownership and audit quality on the relationship between free cash flow and earnings management. This integrated approach distinguishes the current research from prior studies. Savannah & Jenny (2023); Nazalia & Triyanto (2018) found that free cash flow has no effect on earnings management and even has a negative relationship. The differences in previous studies were reflected in these variations in results. Nonetheless, two moderation variables of audit quality and institutional ownership have not been included in this investigation.

The lack of previous research in this area has emerged as an attractive catalyst for additional investigations. Previous studies have not simultaneously explored the moderating role of institutional ownership and audit quality in the relationship between free cash flow and earnings management (Achyani & Lestari, 2019; Dewi & Priyadi, 2016; Ghazali et al. 2015; Irawan & Apriwenni, 2021; Shadmehri, 2017). The study adopted a new technique to fill a gap in previous research by combining audit quality variables and institutional ownership as moderation factors to explain how free cash flow affects earnings management. Taking into account external variables that can influence manager behavior, this method seeks to provide a more thorough explanation of how free cash flow can affect earnings management procedures. The high quality of audits can act as a monitoring tool to reduce the likelihood of manipulation of financial statements, while the institutional ownership factor is anticipated to reduce the tendency of managers to manipulate profits.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The Relationship Between Free Cash Flow and Earnings Management

Free cash flow refers to the cash generated from operating activities after accounting for capital expenditures and cash dividend payments (Weygandt et al., 2008). According to Kono & Yuyetta (2013), positive free cash flow can be allocated for purposes such as business expansion, debt repayment, and dividend distribution. In contrast, negative free cash flow indicates that a company's internal financing is insufficient to support its investment needs. Management may exploit free cash flow to engage in earnings management. Firms with high levels of free cash flow are more likely to inflate reported earnings in order to obscure inefficient managerial behavior in the use of corporate resources. On the other hand, firms with low free cash flow have limited capacity to manipulate earnings, as investors may already view them as less capable of generating adequate profits.

The greater the amount of free cash flow held by large firms, the higher the likelihood that management will engage in earnings management. This tendency is consistent with agency theory as proposed by Jensen & Meckling (1976) further developed by Bosse & Phillips (2016), which emphasizes the conflict of interest between principals and agents. While principals typically prefer that excess free cash flow be distributed as dividends, managers may choose to reinvest these funds—even in projects that do not yield meaningful returns for the firm. Although such reinvestment may increase the size of the firm, it can ultimately lead to financial decline and losses due to the misallocation of resources. When a company fails to meet earnings expectations, managers may be driven to engage in earnings management as a means to conceal losses resulting from the inefficient or suboptimal use of free cash flow (Dewi & Priyadi, 2020; Nazalia & Triyanto, 2018; Tavakolnia, 2017; Shadmehri et al., 2017; Hashemi & Kamali, 2020; Nobakht & Acar, 2021).

Therefore, the proposed hypothesis is as follows:

H_1: Free cash flow positively influence earnings management.

Institutional Ownership as a Moderator of the Relationship Between Free Cash Flow and Earnings Management

Institutional ownership contributes to the enhancement of corporate governance by strengthening internal controls, reducing managerial opportunism, and promoting transparency and long-term sustainability. In the presence of information asymmetry, managers may act opportunistically, thereby posing risks to the firm's long-term performance. Consequently, institutional investors play a pivotal role in ensuring that managerial decisions align with shareholder interests (Edmans et al., 2019). In general, institutional investors possess significant advantages in monitoring corporate governance and are capable of curbing managerial discretion, including the misuse of corporate assets for arbitrage purposes. Moreover, they can detect early signs of excess cash flow and implement monitoring mechanisms and early warning systems across firms within their investment portfolios (Edmans et al., 2019; Liu & Hou, 2022).

Agency theory provides a valuable framework for explaining the relationship between free cash flow and earnings management, particularly in the presence of moderating factors such as institutional ownership. According to Jensen & Meckling (1976), agency theory outlines a contractual relationship between management (the agent) and shareholders (the principals), wherein the principal delegates decision-making authority to the agent to manage the company on their behalf. However, agency problems may emerge due to information asymmetry—a condition in which management holds more comprehensive and timely information than shareholders. This imbalance in information access can lead to conflicts of interest, as both parties seek to maximize their individual utility based on the information available to them.

Several prior studies, including those by Saraswati & Atiningsih (2021) and Puspaningrum & Indriyani (2022), have found that institutional ownership weakens the positive relationship between free cash flow and earnings management. Similarly, Ding (2024) concluded that excess corporate cash flow can be effectively constrained through joint institutional ownership. Such ownership structures strengthen internal control mechanisms and enhance financial flexibility, thereby limiting managerial discretion over free cash flow.

Therefore, the proposed hypothesis is as follows:

H_2: Institutional ownership moderates by weakening the positive effect of free cash flow on earnings management.

Audit Quality as a Moderator in the Relationship Between Free Cash Flow and Earnings Management

Free cash flow is defined by Eugene & Houston (2010) as the cash available for distribution to investors. According to Brigham & Houston (2010), companies typically seek to invest heavily in fixed assets, new products, and working capital required to maintain existing operations. However, in the absence of consistent monitoring, excess free cash flow may accumulate when managers fail to allocate cash efficiently or divert it for personal interests. Such mismanagement can lead to increased earnings management in financial reporting, allowing managers to obscure inefficient use of corporate resources (Bukit & Iskandar, 2009).

Agency theory, in the context of the relationship between free cash flow and earnings management moderated by audit quality, underscores the interconnectedness of these variables. The theory posits that the motivation to misrepresent a firm's financial performance arises from conflicts of interest between managers and shareholders due to the separation of ownership and control. While directors are granted discretion in selecting accounting methods to best reflect the company's economic reality, such discretion can also open opportunities for earnings manipulation. Managers may intentionally operate within the boundaries of generally accepted accounting principles (GAAP) to present earnings that align with specific performance targets (Salehi et al., 2020). Because financial statements serve as indicators of both firm performance and managerial competence, managers may distort earnings within permissible limits to portray themselves as effective and competent leaders. This behavior becomes more pronounced when managerial incentives are driven by factors such as compensation maximization, job security, reputational enhancement, tax minimization, labor negotiation advantages, reduction of agency costs, and regulatory gains (Ajina & Habib, 2017). Several prior studies, including those by Iqbal and Darsono (2020), Katry & Sholihah (2022), Wahyuni (2023), Toumeh et al. (2023), provide empirical evidence that audit quality serves as a moderating variable that weakens the positive relationship between free cash flow and earnings management. High-quality audits can limit managerial discretion by increasing the likelihood of misstatement detection, thereby reducing opportunities for opportunistic behavior.

Therefore, the proposed hypothesis is as follows:

H_3: Audit quality moderates by weakening the positive effect of free cash flow on earnings management.

METHOD

The population of this study consisted of 435 non-financial companies listed on the Indonesia Stock Exchange (IDX). These companies had been listed on the IDX for at least one year prior to the observation period and had not been delisted during the observation year. Based on calculations using the Slovin formula, a total of 81 companies were selected as sample subjects, resulting in a total of 405 observations (5 years of observation). Only 179 observations could be used in the analysis of this study, as 226 data were found as outliers after the identification process. Multiple linear regression analysis and moderated regression analysis (MRA) is the analytical approach used. The criteria used to define the population are presented in Table 1.

Table 1 Research Population

No	Criterion	Sum
1	Non-financial companies that have been listed on the Indonesia Stock Exchange before 2019 and until 2023 have not been *delisted*	563
2	Companies with financial years not closed on December 31, 2023	(46)
3	Companies whose financial statements are not declared in rupiah	(82)
	Number of companies	**435**

In this study, there are 4 variables studied, namely free cash flow (FCF) which acts as an independent variable, institutional ownership (IO) and audit quality (AQ) as moderation, and earnings management (EM) which acts as a dependent variable. The measurement of the variables used has been adopted from the previous literature, and a summary of the variables and their measurements is listed in Table 2.

Table 2 Variables and Their Measurements

Research Variables	Operational Definition	Measurement	Scale
Variable Dependency			
Earnings Management (EM)	The difference between the total accrual and the non-discretionary accrual	DACit = (TACit / Ait-1) – NDAit Information: DACit=Discretionary accruals of the company i in the year t TACit=Total accruals of the company i in year t Ait-1 =Total assets of the company i in year t-1 NDAit=Non*discretionary accruals* of the company i in year t (Wawo et al., 2023)	Ratio
Moderation Variables			
Institutional Ownership (IO)	The proportion of share ownership by an institution, which is calculated by dividing the number of shares owned by the institution by the total number of shares outstanding in the company.	$\frac{\text{Number of shares held by institutions}}{\text{Number of outstanding shares}}$ (Githaiga, 2023)	Ratio
Audit quality (AQ)	A measure that shows how well the audit can keep financial statements within a reasonable range.	1 if using Big 4 and 0 otherwise. (Wawo et al., 2023)	Dummy
Independent Variables			
Free cash flow (FCF)	Deduction of various expenses, including interest costs, tax expenses, ordinary and preferred dividends, from operating income before depreciation then divided by total assets	*FCFmt = (INCmt - TAXmt – ITEXPmt – PSDIVmt - CSDIVmt*) / TAmt-1 Information: FCFmt = Free Cash Flow of the company m in period t INCmt = Net income of operations before company depreciation m in period t TAXmt = The amount of corporate income tax m in period t ITEXPmt = Company interest expense m in period t PSDIVmt = Dividend of the preferred stock of the company m in the period t CSDIVmt = Dividend of ordinary shares of company m in period t TAmt-1 = The total book value of the company's assets m in the year t − 1 (Wawo et al., 2023)	Ratio

The hypothesis is tested using multiple linear regression and moderated regression analysis (MRA). The multiple linear regression is used to test hypothesis 1, with the following equation model:

$$EM_{it} = a + b_1FCF_{it} + b_2IO_{it} + b_3AQ_{it} + e$$

MRA is used to test hypothesis 2 and hypothesis 3 with the following equation model:

$$EM_{it} = a + b_1FCF{*}IO_{it} + b_2FCF{*}AQ_{it} + e$$

Where EM is earnings management; a is a constant; b1, b2, b3 are the coefficients of the variables; FCF is free cash flow; IO is institutional ownership; AQ is audit quality; e is an error term, i is a non-financial company; t is the year of observation.

RESULTS AND DISCUSSION

Table 3 shows the descriptive statistics of the research data.

Table 3 Descriptive Statistics

	EM	FCF	IO	AQ
Mean	0.735	-0.085	0.497	0.162
Median	0.350	-0.081	0.501	0.000
Maximum	8.145	1.669	0.961	1.000
Minimum	0.001	-2.800	0.000	0.000
Std. Dev.	1.215	0.426	0.292	0.369
Observations	179	179	179	179

Source: Data processed (2024)

Table 3 presents the descriptive statistics of the observed variables. An average earnings management of 0.735 indicates relatively moderate practices, but a maximum value of 8.145 reflects the presence of companies that are aggressively managing profits, while a minimum value of 0.001 indicates almost no such practices. The standard deviation of 1,215 shows considerable variation between companies. Meanwhile, free cash flow has a negative average of -0.085, indicating cash constraints in most companies. A minimum value of -2,800 indicates extreme negative cash flow, while a maximum value of 1,669 indicates the magnitude of free cash flow within the company with a standard deviation of 0.426 which reflects considerable variation. In the institutional ownership variable, an average ownership of 0.497 indicates that almost half of the shares in the sample are controlled by institutions, with a maximum value of 0.961 indicating institutional dominance in some companies, while a minimum value of 0.000 indicates no institutional ownership at all. The standard deviation of 0.292 indicates a fairly high variation in institutional ownership between companies. Finally, the audit quality variable showed that only 16.2% of companies in the sample used high-quality auditors such as Big Four firms. A maximum value of 1,000 indicates that some companies choose a high-reputation auditor, but a median value of 0.000 indicates that the majority of companies do not use high-reputation auditors. These results reflect considerable variation in financial practices and corporate governance in the study sample.

The researchers in this study used multiple linear regression and MRA to test their hypotheses. After looking at the results of the chow and thirsty tests, it is clear that the Random Effects Model is the best choice, surpassing the General Effects and Fixed Effects models. Conventional assumption tests are not necessary because the Random Effects Model (REM) produces the best model selection results in these investigations. This is due to the characteristics of REM using the Generalized Least Squares (GLS) method, where this method automatically addresses the problems of heteroscedasticity and autocorrelation in the regression of panel data (Setyawan et al., 2019). In contrast to the Ordinary Least Squares (OLS) used in the Common Effect Model (CEM) and the Fixed Effect Model (FEM), the GLS method in REM already takes into account individual and time variations, so it does not rely on classical assumptions such as homogenedasticity and the absence of autocorrelations. Therefore, in this study, the analysis can directly focus on the interpretation of regression results without having to test classical assumptions.

The results of hypothesis testing using multiple linear regression with the random effects model are presented in Table 4, and the results of hypothesis testing using MRA are presented in Table 5.

Table 4 The Results of Hypothesis Testing Using Multiple Linear Regression Analysis

Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	0.772886	0.249737	3.094792	0.0023
FCF	0.326617	0.081106	4.027057	0.0001
IO	0.060544	0.237107	0.255345	0.7988
AQ	-0.377179	0.549935	-0.685861	0.4937
	Effects Specification		S.D	Rho
	Cross-section random		1.223756	0.9405
	Idiosyncratic random		0.307740	0.0595
	Weighted Statistics			
R-squared	0.089370		Mean dependent var	0.082308

Variables	Coefficient	Std. Error	t-Statistic	Prob.
Adjusted R-squared	0.073759	S.D. dependent var		0.317162
S.E. of regression	0.305534	Sum squared resid		16.33641
F-statistic	5.724896	Durbin-Watson stat		0.932862
Prob(F-statistic)	0.000926			
Unweighted Statistics				
R-squared	0.022399	Mean dependent var		0.735263
Sum squared resid	257.0358	Durbin-Watson stat		0.059290

Source: Data processed (2024)

Table 5. The Results of Hypothesis Testing Using Moderated Regression Analysis (MRA)

Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	0.737090	0.204394	3.606222	0.0004
FCF*IO	-0.252650	0.421110	-0.599961	0.5493
FCF*AQ	-0.728794	0.293491	-2.483190	0.0140
Effects Specification			S.D	Rho
Cross-section random			1.235392	0.9466
Idiosyncratic random			0.293321	0.0534
Weighted Statistics				
R-squared	0.158937	Mean dependent var		0.077766
Adjusted R-squared	0.144519	S.D. dependent var		0.314205
S.E. of regression	0.290869	Sum squared resid		14.80587
F-statistic	11.02335	Durbin-Watson stat		0.983760
Prob(F-statistic)	0.000001			
Unweighted Statistics				
R-squared	-0.006344	Mean dependent var		0.735263
Sum squared resid	264.5929	Durbin-Watson stat		0.055048

Source: Data processed (2024)

According to the study's findings, free cash flow has a positive impact on earnings management. Businesses with more free cash flow tend to use earnings management techniques to improve market perception of financial performance or achieve income targets (Iqbal & Darsono, 2020). Managers often use free cash flow for personal projects, even when those projects do not generate the best returns for the business (Clara & Susanto, 2022). This practice can increase reported earnings, although it risks lowering the quality of financial statements in the long run.

Agency theory explains that managers and shareholders have conflicting interests (Jensen & Meckling, 1976). Managers who have a lot of free cash flow are more likely to manipulate their earnings. Previous research by Achyani & Lestari (2019), Dewi & Priyadi (2016), Ghazali et al. (2015), Irawan & Apriwenni (2021), Shadmehri et al. (2017) found that free cash flow also drives earnings management. The result of the second hypothesis test shows that institutional ownership is not able to moderate the positive effect of free cash flow on earnings management. Large institutional ownership does not necessarily reduce earnings management practices (Lavenia et al., 2023). Institutional shareholders with large shareholdings do not always act as active supervisors of the company's management, especially when they have a business relationship or other interests with the company that could potentially give rise to a conflict of interest. In these circumstances, institutional shareholders may prefer to be passive in order to avoid disruption to their business relationships or to maintain certain profits derived from their involvement in the company. In this context, institutional shareholders tend to be less active in overseeing managerial decisions, including earnings management practices, due to the interests they need to protect.

The findings of this study are consistent with several recent studies, in which institutional ownership fails to weaken the positive effect of free cash flow on earnings management. For example, the study conducted by Saraswati & Atiningsih (2021) shows that the positive effect of free cash flow on earnings management cannot be reduced by institutional ownership structure. This implies that although institutional investors may hold a significant portion of shares, they may not actively monitor management or may be incompetent in overseeing earnings management practices. Furthermore, the research findings by Lavenia et al. (2023) reveal that institutional ownership does not always succeed in constraining earnings management practices. This may be because institutional shareholders are less likely to examine earnings management strategies strictly or because their goals align with management's interests. This research suggests that institutional ownership may not always serve as an effective monitoring mechanism to limit earnings management activities related to free cash flow.

Therefore, to prevent management from misusing free cash flow through earnings management techniques, more oversight mechanisms are needed, including a more active role of external auditors.

The result of the third hypothesis test reveal that audit quality can reduce the positive impact of free cash flow on earnings management. High-quality auditors, such as "Big Four" firms, can maintain reputations and improve the transparency of a company's financial statements (Iqbal & Darsono, 2020). In other words, the higher the quality of audits implemented in a company, the less likely management is to use free cash flow to carry out earnings management practices. This is consistent with the role of high-quality auditors, such as "Big Four" firms or reputable auditors, who tend to implement stricter auditing standards as well as increase transparency in financial reporting. Auditors with high credibility can safeguard their reputation by ensuring that the company's financial statements have been prepared in accordance with applicable accounting principles and do not contain excessive manipulation of earnings. Credible auditors serve as an effective external oversight mechanism to limit earnings management and ensure more efficient free cash flow allocation (Wawo et al., 2023).

Without proper oversight, managers can use financial reporting flexibility to increase profitability, deceive investors, and influence their decisions. The results of this study are consistent with the findings of Iqbal & Darsono (2020); Toumeh et al. (2021); Wawo et al. (2023), whose studies show that high-quality audits can hinder the opportunistic effects of excessive free cash flow on earnings management, indicating that audit quality plays a moderating role in the positive relationship between free cash flow and earnings management. More specifically, audit quality serves to weaken the positive effect of free cash flow on earnings management. So, having competent auditors among the staff is one of the strategies to control the opportunistic behavior of managers. Auditors with high reputations, such as Big Four companies, have stricter auditing standards and can improve the transparency of financial statements.

With high-quality auditors, the space for managers to perform earnings management becomes narrower, as a rigorous audit process will identify irregularities in income reporting. In addition, the presence of credible auditors provides a disciplinary effect for management, so they are more careful in presenting financial statements and are more likely to allocate free cash flow efficiently. Therefore, in an effort to mitigate opportunistic earnings management practices, stakeholders, including investors and regulators, need to emphasize the importance of strong oversight through the selection of high-quality auditors, which not only improves financial transparency but also maintains the credibility of the information presented to the market.

CONCULASION

According to this study, free cash flow has positive influence on earnings management. Companies that have excess free cash flow tend to use the money to increase reported earnings, although this strategy usually backfires. The opportunistic actions of managers who seek to meet market expectations or achieve certain profit goals are what motivate this activity. Audit quality has been shown to reduce the positive impact of free cash flow on earnings management, although institutional ownership cannot moderate this impact. This is because competent auditors can make financial statements more transparent and limit the opportunities for earnings manipulation.

There are various limitations to this study. First, the results may not accurately reflect the state of affairs in nonpublic companies because this study only looked at companies listed on the stock exchange. Second, it may be that the metrics used to assess audit quality and earnings management are not comprehensive enough to account for all aspects of practice.

The results of this study support agency theory, which states that conflicts of interest between managers and shareholders can motivate managers to engage in earnings management practices. These results also advance our knowledge of how managers' opportunistic behavior is affected by free cash flow and how audit quality can reduce the likelihood of manipulation of financial statements. Furthermore, this study highlights the value of external oversight by qualified auditors in enhancing the accuracy and transparency of financial statements, and consequently reducing managers' opportunistic behavior in engaging in earnings management practices. The findings of this study shed light on the importance of effective cash flow management and the choice of qualified auditors for practitioners. Investors and potential investors should be cautious when funding businesses with high amounts of free cash flow because without being audited by a reputable public accounting firm , this can encourage managers to manipulate earnings. If a reputable public accounting firm audits the company, managers will be less likely to be involved in earnings management. To maintain investor confidence, businesses must make their financial disclosures more transparent. Companies and regulators should think about other oversight mechanisms, such as stricter regulations and a greater role for external auditors in ensuring the accuracy of financial statements, as large institutional ownership is not always effective in reducing earnings management practices.

REFERENCES

Achyani, F., & Lestari, S. (2019). The Influence of tax planning on profit management (Empirical study on manufacturing companies listed on the Indonesia Stock Exchange in 2015-2017). *Indonesian Accounting and Finance Research*, *4*(1), 77–88. https://doi.org/10.23917/reaksi.v4i1.8063

Agustia, Y. P., & Suryani, E. (2023). The effect of company size, company age, leverage and profitability on profit management: A study on mining companies listed on the Indonesia Stock Exchange for the 2018-2020 period. *Journal of Assets (Research Accounting*), *5*(2), 899–917. https://doi.org/10.47467/elmal.v5i2.5527

Al-Absy, M. S. M., Ismail, K. N. I. K., & Chandren, S. (2017). Board chairmen's involvement in audit committees and earnings management practices. *Jurnal Akuntansi*, *11*, 1–26.

Alexander, N. 2021. Effect of corporate governance of earnings management in banking companies listed in Indonesia Stock Exchange. *Review of Integrative Business and Economics Research*, *10*(1), 55–61.

Arief, I. A. (2019). For heaven's sake! The three pillars are called financial bubbles of Rp 4 trillion Https://Www.Cnbcindonesia.Com/.

Asyik, N. F., Agustia, D., & Muchlis, M. 2023. Valuation of financial reporting quality: is it an issue in the firm's valuation? *Asian Journal of Accounting Research*, *8*(4), 387–399. https://doi.org/10.1108/AJAR-08-2022-0251

Ayuningtyas, D. (2019). ADES sales are down, why can profits increase by 39%? Https://Www.Cnbcindonesia.Com/.

Callao, S., I. Jarne, J., & Wroblewski, D. 2021. A Systematic approach to the motivations for earnings management: A literature review. *International Journal of Emerging Trends in Social Sciences*, *10*(1), 1–20. https://doi.org/10.20448/2001.101.1.20

Clara, A.B., & Susanto, L. 2022. Faktor yang berpengaruh terhadap manajemen laba dengan komite audit sebagai variabel moderasi. *Jurnal Paradigma Akuntansi*, *4*(3), 1401–1411. https://doi.org/10.24912/jpa.v4i3.20024

CNN Indonesia. (2019). Dissecting the strangeness of Garuda Indonesia's 2018 financial statements. https://www.cnnindonesia.com/ekonomi/20190424204726-92-389396/membedah-keanehan-laporan-keuangan-garuda-indonesia-2018

Dewi, R. P., & Priyadi, M. P. 2016. Pengaruh free cash flow, kinerja keuangan terhadap earnings management dimoderasi corporate governance. *Jurnal Ilmu Dan Riset Akuntansi*, *5*(2), 1–24.

Ding, H. (2024). Can common institutional ownership inhibit corporate over-financialization? Evidence from China. *Managerial Finance*, *50*(7), 1291–1308. https://doi.org/10.1108/MF-10-2023-0677

Erawati, T., & Ayu Novita Jedaru, F. 2022. Arus kas bebas dan nilai perusahaan manufaktur yang terdaftar di bursa efek Indonesia. *Reslaj : Religion Education Social Laa Roiba Journal*, *5*(2), 533–547. https://doi.org/10.47467/reslaj.v5i2.1663

Ghazali, A. W., Shafie, N. A., & Sanusi, Z. M. 2015. Earnings management: An analysis of opportunistic behaviour, monitoring mechanism and financial distress. *Procedia Economics and Finance*, *28*, 190–201. https://doi.org/https://doi.org/10.1016/S2212-5671(15)01100-4

Githaiga, P. N. 2023. Board gender diversity, institutional ownership and earnings management: evidence from East African community listed firms. *Journal of Accounting in Emerging Economies*. https://doi.org/10.1108/JAEE-10-2022-0312

Hasan, S., Md Kassim, A. A., & Hamid, M. A. 2020. The Impact of audit quality, audit committee and financial reporting quality: Evidence from Malaysia. *International Journal of Economics and Financial Issues*, *10*(5 SE - Articles), 272–281. https://www.econjournals.com/index.php/ijefi/article/view/10136

Hastuti, C. S. F., Arfan, M., & Diantimala, Y. 2018. The influence of free cash flow and operating cash flow on earnings management at manufacturing firms listed in the Indonesian Stock Exchange. *International Journal of Academic Research in Business and Social Sciences*, *8*(9), 1133–1146. https://doi.org/10.6007/ijarbss/v8-i9/4686

Healy, P. M., & Wahlen, J. M. 1998. A Review of the earnings management literature and its implications for standard setting. *SSRN Electronic Journal*, *November*. https://doi.org/10.2139/ssrn.156445

Hernawati, R. I., Ghozali, I., Yuyetta, E. N. A., & Prastiwi, A. 2021. The effect of income and earnings management on firm value: Empirical evidence from Indonesia. *Journal of Asian Finance, Economics and Business*, *8*(4), 105–112. https://doi.org/10.13106/jafeb.2021.vol8.no4.0105

Iqbal, M., & Darsono. 2020. Pengaruh surplus arus kas bebas terhadap manajemen laba dengan kualitas auditor sebagai variabel moderasi (studi empiris pada perusahaan manufaktur yang terdaftar di bursa efek indonesia dan bursa malaysia tahun 2015). *Diponegoro Journal of Accounting*, *9*(2), 1–12.

Irawan, S., & Apriwenni, P. 2021. Pengaruh free cash flow, financial distress, dan investment opportunity set terhadap manajemen laba. *Jurnal Akuntansi Bisnis*, *14*(1), 24–37. https://doi.org/10.30813/jab.v14i1.2458

Jannah, R., Kusumawati, Y., & Pribadi, M. 2024. Pengaruh earning power dan aset pajak tangguhan terhadap manajemen laba pada perusahaan makanan dan minuman yang terdaftar di bursa efek Indonesia. *Manajemen: Jurnal Ekonomi*, *6*(2), 328–343. https://doi.org/10.36985/jhtf0135

Jensen, M. C., & Meckling, W. H. 1976. Theory of the firm: Managerial behavior, agency cost and ownership structure. *Journal of Financial Economics*, *3*(4), 305–360. https://doi.org/10.1177/0018726718812602

Jiang, D., Song, P., & Zhu, H. 2023. Earnings seasonality, management earnings forecasts and stock returns. *China Journal of Accounting Research*, *16*(2), 100303. https://doi.org/https://doi.org/10.1016/j.cjar.2023.100303

Lavenia, L., Rahma, A., P, Prasetyani, Ridho, Wachid, & Pramesti. (2023). The Influence of institutional ownership on profit management. *Journal of Academic Media*, 1(1), 181–195.

Nazalia, N., & Triyanto, D. N. 2018. Pengaruh free cash flow, financial distress dan employee diff terhadap manajemen laba. *Jurnal Akuntansi, Audit Dan Sistem Informasi Akuntansi*, *2*(3), 93–104.

Oh, H. Il, & Penman, S. H. 2020. The accruals-cash flow relation and the evaluation of accrual accounting. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3616871

Puspaningrum, F. E., & Indriyani, F. 2022. Moderasi kepemilikan manajerial terhadap hubungan profitabilitas, leverage, free cash flow dan manajemen laba. *MALIA: Journal of Islamic Banking and Finance*, *6*(1), 28. https://doi.org/10.21043/malia.v6i1.10685

Ramadhani, L., Budiyanti, H., Ramli, A., & Sahabuddin, R. 2023. The effect of managerial ownership, institutional ownership, and dividend policy on the value of the company (case study of food & beverages companies listed on the indonesia stock exchange for the 2015-2021 period). *Journal of Management & Economics Review (JUMPER)*, *1*(2), 2–3.

Saraswati, R., & Atiningsih, S. 2021. Peran kepemilikan institusional dalam memoderasi pengaruh earning power, leverage, dan free cash flow terhadap earning management. *Jurnal Akuntansi*, *1*(1), 47–58. https://doi.org/10.37058/jak.v1i1.2994

Savannah, P., & Jenny, V. (2023). The influence of free cash flow, dividend policy and other factors on profit management. *E-Journal of Accounting TSM*, 3(1), 251–266. http://jurnaltsm.id/index.php/EJATSM

Shadmehri, S. A., Khansalar, E., Giannopoulos, G., & Dasht-Bayaz, M. L. 2017. The Impact of surplus free cash flow, corporate governance and firm size on earnings predictability in companies listed in tehran stock exchange. *International Business Research*, *10*(11), 20. https://doi.org/10.5539/ibr.v10n11p20

Siala, S. B., & Jarboui, A. 2019. The moderating effect of audit quality on the relation between shareholder activism and earnings management: Evidence from France. *Contemporary Economics*, *13*(1), 63–78. https://doi.org/10.5709/ce.1897-9254.299

Soliman, M. M., Ragab, A. A., & Eldin, M. B. 2014. Board composition, ownership structure and voluntary disclosure: An empirical study of the listed companies in Egypt. *Corporate Ownership and Control*, *11*(2 E), 415–425. https://doi.org/10.22495/cocv11i2c4p6

Sukarya, G.A., Sheva, M., Salam, M., Yudiantoro, N. A., & Indonesia, U. 2024. Enron corporation: Studi kasus tentang peran etika bisnis dalam pandangan etika terapan. *Jurnal Ilmiah Wahana Pendidikan*, *10*(14), 116–125. https://doi.org/10.5281/zenodo.13360166

Tavakolnia, E. 2017. Auditor industry specialization, free cash flow and earning management through related party transactions. *Accounting and Auditing Review*, *24*(1), 41–60. https://doi.org/10.22059/acctgrev.2017.61842

Toumeh, A. A., Yahya, S., Yassin, M. M., & Ayoush, M. D. 2021. The moderating effect of audit quality on the links between stock market segmentations, surplus free cash flow, and income-increasing discretionary accruals. *Australasian Accounting, Business and Finance Journal*, *15*(4), 153–174. https://doi.org/10.14453/aabfj.v15i4.9

Wawo, A., Mediaty, Habbe, A. H., & Syamsuddin. 2023. *The effect of financial distress and free cash flow on earnings management with quality of audit as a moderator*. Atlantis Press International BV. https://doi.org/10.2991/978-94-6463-146-3_15

Wiyogo, A., Sumiati, A., Zulaihati, S., & Respati, D. K. 2021. Pengaruh leverage, ukuran perusahaan, free cash flow terhadap manajemen laba perusahaan manufaktur yang terdaftar di BEI. *Indonesian Journal of Economy, Business, Entrepreneurship and Finance*, *1*(2), 151–166.

Xu, Y., Zhang, Y., & Zhao, J. 2024. Playing it ethical or safe? Examining the effects of executive military experience on earnings management. *Chinese Management Studies*, *ahead-of-print*(ahead-of-print). https://doi.org/10.1108/CMS-11-2023-0632

Zulaikha, N., & Fuad, F. 2022. How market competition can influence business strategies induced real earnings management: an empirical evidence from Indonesia. *Jurnal Akuntansi dan Auditing*, *19*(2), 157–171.