



# Do big shareholders participate in earnings management? Empirical evidence from Indonesia

*Participan los grandes accionistas en la gestión de resultados? Evidencia empírica de Indonesia*

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## Abstract

Concentrated ownership is often an issue of long discussion by researchers. They have different perspectives where concentrated shareholders effectively control earnings management. Conversely, concentrated shareholders encourage emerging earnings management. Therefore, this study aims to examine the effect of big shareholders on earnings management in firms listed on the Indonesian stock exchange for 2013-2021. A total of 2,238 firm-year observations were analyzed using multiple and subgroup linear regression. This study proves that big or controlling shareholders positively affect earnings management. This study also finds that big or controlling shareholders participate more in earnings management on loss than non-loss firms. These results indicate that big shareholders do not want their big investments lost. If this happens, with their power control, they pressure managers to manage earnings. These findings should be a warning for investors, regulators, and other stakeholders to give more attention to concentrated firms in terms of earnings management.

*JEL Code:* G11, G18, M21, M41

*Keywords:* big shareholders; controlling; concentrated ownership; earnings management

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## Resumen

La propiedad concentrada es a menudo un tema de larga discusión entre los investigadores. Tienen diferentes perspectivas en las que los accionistas concentrados controlan efectivamente la gestión de las ganancias. Por el contrario, los accionistas concentrados alientan la gestión de ganancias emergentes. Por lo tanto, este estudio tiene como objetivo examinar el efecto de los grandes accionistas en la gestión de ganancias de las empresas que cotizan en la bolsa de valores de Indonesia durante el período 2013-2021. Se analizaron un total de 2238 observaciones por año empresa mediante regresión lineal múltiple y de subgrupos. Este estudio demuestra que los accionistas grandes o mayoritarios afectan positivamente la gestión de ganancias. Este estudio también encuentra que los accionistas grandes o mayoritarios participan más en la gestión de ganancias en caso de pérdidas que las empresas que no presentan pérdidas. Estos resultados indican que los grandes accionistas no quieren perder sus grandes inversiones. Si esto sucede, con su control de poder, presionan a los gerentes para que administren las ganancias. Estos hallazgos deberían ser una advertencia para que los inversores, reguladores y otras partes interesadas presten más atención a las empresas concentradas en términos de gestión de ganancias.

*Código JEL:* G11, G18, M21, M41

*Palabras clave:* grandes accionistas; controlador; propiedad concentrada; gestión de ingresos

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## Introduction

Concentrated ownership for firms is a threat or a solution to earnings management problems. Recently, a trend of concentrated ownership has emerged worldwide (Medina et al., 2022). There are three major trends in concentrated ownership: first, the dominance of group structures, especially markets in developing countries; second, increasing state ownership through state-controlled investors; third, reconcentration of ownership of institutional investors, especially passive index investment investors. This trend has started in Asia, where firms are characterized by controlling shareholders of corporations, families, and the state (see, Claessens et al., 2000). Theoretically, concentrated ownership has raised hopes and concerns regarding the dominance of big shareholders and management.

There has long been a debate about the alignment of the dominance of big shareholders and management. Firms with concentrated ownership will have greater dominance than those with distributed ownership. In the context of research in Asia and especially Indonesia, shareholder dominance over managers can have positive and negative impacts. It has a positive impact if shareholders can control management from the opportunity of their interests so that it does not harm all shareholders. However, it becomes negative when the controlling shareholders are involved in earnings management to protect their interests. Previous research has confirmed that big shareholders tend to manage earnings in countries with a concentrated structure.

This study tries to reconfirm and also find the cause. As large and controlling shareholders, it is very reasonable that they do not want their significant investment to experience losses. When a company is under pressure, big shareholders will certainly be the most panicked and also under pressure. To change this situation, they will pressure managers to protect their interests. Earnings management actions are taken so that financial reports look good to avoid market panic, which can decrease share prices. Therefore, pressure on firms, especially internal pressure in the form of firm losses, is also the focus of this research. When a firm experiences a loss, is the earnings management level higher than when a firm does not lose? Empirically, this study needs to examine this question for an increased understanding of management behavior.

## **Literature review and hypothesis**

Modern companies with widespread ownership require professional managers. As a consequence, there is a separation between owners and managers, where the owners assign the manager to operate the company and be accountable to the owners. Managers must operate the company and act in the interests of the owners. However, occasionally they act in their interests, which creates a principal-agency problem (Tahir et al., 2019; Kristanti et al., 2024). Managers cannot possibly act the best for the principal because both try to maximize their utilities (Jensen & Meckling, 1976).

The emergence of big shareholders is expected to be able to solve the principal-agent problem. Control by big shareholders improves corporate governance mechanisms and reduces conflicts between shareholders and managers (Zhang, 2022). They can effectively monitor earnings management behavior through their voting rights (Gillan & Starks, 2003; Demiralp et al., 2011; Reyna, 2018). They are an effective control mechanism in financial reporting (Bedard et al., 2004; Bos & Donker, 2004; Yeo et al., 2020). They can effectively monitor management that commits overstatement violations to increase the credibility of the company's financial reports. Empirically, previous studies show that the presence of big shareholders has decreased earnings management (Farouk & Bashir, 2017; Maatougui & Halioui, 2019; Amir et al., 2019).

The Big shareholders are large investors who must ensure their investments are not losses. When the company performs poorly, they pressure and encourage managers to maximize their benefits (Jaggi & Tsui, 2007). They pressure managers to improve performance and stabilize profits (Ely & Song, 2000; Zhong et al., 2007). Big shareholders can replace the manager if he does not comply with their wishes (Ayogu, 2021). They have voting rights that impact the election of directors (Kristanti et al., 2024). Previous studies prove that the presence of big shareholders can increase share prices and top manager turnover (Shleifer & Vishny, 1986; Holderness & Sheehan, 1988; Barclay & Holderness, 1991). It

indicates that big shareholders are able to pressure managers so that the company's performance looks better and can increase the share price. Besides the weak control of minority shareholders, big shareholders act opportunistically for personal interest. This behavior creates agency conflicts between majority and minority shareholders (Shleifer & Vishny, 1997). Several studies show that big shareholders and concentrated ownership positively affect earnings management (Zhong et al., 2007; Kim & Yoon, 2008; Lassoued et al., 2018; Nguyen et al., 2021; Le & Nguyen, 2023).

The differences in the research results above have created two perspectives: the alignment of interest and entrenchment (Shahzad et al., 2017; Lassoued et al., 2018). The alignment of interests states that big shareholders have strong incentives to monitor and influence company management efficiently to protect their interests. Furthermore, according to the entrenchment perspective, big shareholders have strong control, so they influence managers and take advantage of the weak control of minority shareholders to carry out opportunistic actions for personal interests. In Indonesia's research context, which perspective is more appropriate, alignment or entrenchment?

Companies in Indonesia have a concentrated ownership structure. Concentrated ownership is a small number of shareholders in a company, but they have a large share composition. Concentrated ownership occurs because lawful protection for investors is weak (see La Porta et al., 1997; La Porta et al., 2002). When lawful protection for investors is weak, outside investors are unwilling to join, so firms are only owned by a certain group, such as a family. Such an ownership structure tends to create conflict between majority and minority shareholders (Margono et al., 2019). Unlike firms in the U.S. and Europe with a distributed ownership structure, many Asian firms have a concentrated ownership structure (Diyanti et al., 2013). From the perspective of agency theory, concentrated ownership causes conflict between the majority and minority (Pindado et al., 2014; Wang, 2018; Bensaadi et al., 2021). Empirically, the study shows that concentrated ownership tends to protect their interests, so it positively affects earnings management (Nguyen et al., 2021).

In East Asian countries, especially Indonesia, Japan, and Singapore, more than two-thirds of firms are controlled by a single shareholder, especially family control (Claessens et al., 2000), so the ownership structure tends to be large and concentrated. Therefore, separation of management and controlling shareholders is rare, and sixty per cent of top management has a relationship with controlling shareholders. Its implication is the ability and incentives of controlling shareholders to take over minority shareholders. This structure tends to cause a shift in conflict from agency type I to type II, namely, a conflict of interest between shareholders and management, to become a conflict of interest between controlling and non-controlling shareholders (Villalonga & Amit, 2006). Big shareholders who are getting bigger will have stronger control over management. If the legal conditions are unfavourable, it incentivizes

big shareholders and management to manage earnings to protect their interests. Therefore, the proposed hypothesis is as follows:

H1a: Big shareholders positively affect earnings management.

H1b: Controlling shareholders positively affect earnings management.

Big shareholders with significant investments will always try to protect their interests in investments. They want their significant investment to avoid losses. When the company is under pressure or performing poorly, Big shareholders pressure managers to maximize their benefits (Jaggi & Tsui, 2007). They pressure management to improve performance and stabilize profits (Ely & Song, 2000; Zhong et al., 2007). It can be seen from the behavior of managers, where managers tend to increase current earnings when previous earnings are low (Tabassum et al., 2015; Boachie & Mensah, 2022). Therefore, the big shareholders in firms with losses tend to be more involved in earnings management than firms in non-losses. Therefore, the hypothesis proposed is as follows:

H2a: Big shareholders participate more in earnings management in loss firms than non-loss.

H2b: Controlling shareholders participate more in earnings management in loss firms than non-loss.

## Methodology

The sample used is all firms listed on the Indonesia Stock Exchange (IDX) for 2015-2021. Samples from the financial sector (banking, insurance, corporate securities, and other financial institutions) were excluded from the analysis because this sector has special characteristics and regulations that differ from other firms (Zhong et al., 2007; Korkmaz et al., 2017). In addition, suspended firms and incomplete data during seven years were also excluded. The final data used was 2,238 observation data. The details of the company observation data used can be seen in Table 1.

Table 1  
Sample selection

Firms registered in IDX (2015-2021)	Firms	Num. obs.
Sector of Agriculture	26	
Sector of Mining	50	
Sector of Basic Industry and Chemistry	85	
Sector of Various Industries	51	
Sector of Goods and Consumption Industry	70	
Sector of Property, Real Estate & Building of Construction	90	
Sector of Infrastructure, Utilities, and Transportation	96	
Sector of Finance	124	
Sector of Trade, Services and Investment	185	
Total of firms	777	5,439

Less financial sector firms	(868)
Less suspended company and incomplete data for seven years	(2,268)
Less extreme data	(65)
Total of samples used	2,238

Source: our calculation use data from IDX.

### *Measurement of variables*

Several earnings management measurements have been used in prior literature. This study used the discretionary accruals (DA) Jones (1991) model, modified by Dechow et al. (1995), as a proxy for earnings management. DA of the modified Jones model is considered the most powerful estimation model compared to other models (Guay et al., 1996; Ashbaugh et al., 2003; Jaggi & Tsui, 2007). Prior studies have widely used this DA (see Kothari et al., 2005; Jaggi & Tsui, 2007; Perols & Lougee, 2011; Alves, 2012; Liu et al., 2018; Jiang et al., 2020). The DA of the modified Jones Model is presented as follows:

$$TAC_{it} = NI_{it} - CFO_{it} \quad (1)$$

$$\frac{TAC_{it}}{TA_{it-1}} = \beta_1 \left( \frac{1}{TA_{it-1}} \right) + \beta_2 \left( \frac{\Delta Rev_{it}}{TA_{it-1}} \right) + \beta_3 \left( \frac{PPE_{it}}{TA_{it-1}} \right) + \varepsilon \quad (2)$$

$$NDA_{it} = \beta_1 \left( \frac{1}{TA_{it-1}} \right) + \beta_2 \left( \frac{\Delta Rev_{it} - \Delta Rec_{it}}{TA_{it-1}} \right) + \beta_3 \left( \frac{PPE_{it}}{TA_{it-1}} \right) + \varepsilon \quad (3)$$

$$DA_{it} = \frac{TACC_{it}}{TA_{it-1}} - NDC_{it} \quad (4)$$

Where,  $TAC_{it}$ : total accruals at the company  $i$  in year  $t$ ,  $NI_{it}$ : net income at company  $i$  in year  $t$ ;  $CFO_{it}$ : cash flow operating at the company  $i$  in year  $t$ ;  $TA_{it-1}$ : total assets in company  $i$  in year  $t-1$ ,  $\Delta Rev_{it}$ : change in company  $i$ 's revenue in year  $t$  compared to  $t-1$ ,  $PPE_{it}$ : property, plant and equipment of company  $i$  in year  $t$ ;  $NDA_{it}$ : non-discretionary accruals of company  $i$  in year  $t$ ;  $\Delta Rec_{it}$ : change in receivables of company  $i$  in year  $t$  compared to  $t-1$ ;  $DA_{it}$ : discretionary accruals at the company  $i$  in year  $t$ .

Furthermore, the DA value can be positive or negative. Positive DA means discretion to increase profits. On the other hand, negative DA means discretion to reduce profits. The direction of DA is ignored to capture the magnitude of earnings management (Klein, 2002; Bergstresser & Phillipon, 2006). Therefore, this study used the absolute value of DA to capture the magnitude of the company's earnings management (Chen et al., 2007; Liu et al., 2018; Jiang et al., 2020).

Big shareholders (BS) own a larger proportion of the company's shares than others. In this study, big shareholders use two measurements:

- a. Big shareholders with the criteria, shareholders with ownership of at least 5% of outstanding shares (Zhong et al., 2007; Thomsen et al., 2006), then the largest percentage of shares is used as a proxy big shareholders, both individuals and institutions (McConnell & Servaes, 1990; Du et al., 2016).
- b. Controlling shareholder. The measurement controlling shareholders use a dummy variable, where the value is 1 if ownership is greater than or equal to 50%. Conversely, the value is 0 if ownership is less than 50%.

The big shareholder (BS) and controlling shareholder (CS) are similar variables but use different measurements. It is said to be similar because both are proxies for large shareholders. BS is seen from the number of large shareholdings owned by individuals or institutions in the company. Meanwhile, CS is seen from the perspective of whether they are in the controlling category or not. Measurement as a controlling is necessary in this study because it is an indicator that controlling shareholders have a great ability to influence policy and management in the company.

Therefore, this study uses two empirical models in analysis. They are based on: first, two alike independent variables with different measurements, namely the BS and CS variables. It is not possible to put two alike variables in one model because they commonly have high multicollinearity (see Table 3), so they are separated into two models as follows:

$$\text{Model 1, } DA = \alpha + \beta_1 BS + \beta_2 \text{Control variable} + \varepsilon \quad (5)$$

$$\text{Model 2, } DA = \alpha + \beta_1 CS + \beta_2 \text{Control variable} + \varepsilon \quad (6)$$

### *Control variables*

Control variables are intended to control the influence of certain situations that can influence earnings management. This study used control variables such as size, profitability, leverage, and big4. Company

size uses ln (natural log) of total assets. Profitability uses return on assets. Leverage is calculated by total debt divided by total assets. Big4 uses a dummy variable, where the value is 1 if audited by big4 and 0 otherwise.

## Results and discussion

### *Descriptive statistics*

Table 2 presents descriptive statistics of the variables. EM has a minimum value of 0.000 and a maximum value of 0.870. The average EM for the full sample is 0.083, while the average loss samples have earnings management bigger than the non-loss sample (0.092 > 0.080). It indicates that loss firms tend to act in earnings management than non-loss firms. The loss firms try to manage earnings to look better and stable.

BS averages 0.521 with a minimum ownership of 0,074 and a maximum of 0.999. BS in loss samples are smaller than in non-loss samples (0.499 < 0.529). It means larger share ownership tends to be a profit (non-loss) than smaller share ownership. Furthermore, CS averages 0.55 on the full sample, which means 55% are controlling shareholders, and 45 % are non-controlling shareholders. The number of controlling shareholders in loss samples is smaller than in non-loss samples (0.48 < 0.58). It means the existence of controlling shareholders in loss samples is only 48% and in non-loss samples 58%. It indicates that firms with larger controlling shareholders show more profit.

Table 2  
 Descriptive statistics

Variables	Min.	Max.	Full samples		Loss samples		Non-loss samples	
			Mean	Std.	Mean	Std.	Mean	Std.
EM	0.000	0.870	0.083	0.085	0.092	0.094	0.080	0.081
BS	0.074	0.999	0.521	0.218	0.499	0.223	0.529	0.215
CS	0	1	0.550	0.497	0.480	0.500	0.580	0.494
Lv	0.003	8.308	0.499	0.386	0.608	0.481	0.459	0.336
Sz	2.485	18.92	13.560	2.074	13.141	2.089	13.708	2.048
Pr	-1.538	0.716	0.024	0.114	-0.088	0.131	0.066	0.071
B4	0	1	0.383	0.486	0.272	0.445	0.424	0.494
Observation (N)			2,238		603		1,635	

Source: our calculation uses data from firms listed IDX, where EM is earnings management; BS is Big shareholders; CS is controlling shareholders; Lv is leverage; Sz is the size of firms; Pr is profitability; B4 is firms audited by big4 auditors.

Lv shows an average of 0.499 for full samples, 0.608 for loss samples, and 0.459 for non-loss samples. Firms with greater leverage show more losses because they pay interest expenses, which can reduce profits. Sz shows an average of 13.560 for full samples, 13.141 for loss samples, and 13.708 for non-loss samples. Larger company sizes tend to experience profits (non-loss). They have greater



resources, and if managed well, they will gain large profits. Pr (profitability) shows an average of 0.024 for full samples, -0.088 for loss samples, and 0.066 for non-loss samples. B4 has an average of 0.383 for full samples, which means that 38.3 % of firms were audited by the Big4, and 61.7 % were audited by non-Big4. B4 on loss samples have an average of 27.2%, and non-loss samples have 42.4 %. It shows that firms audited by big4 show an average profit better.

### Correlation

Table 3 presents the correlation coefficient between the independent variables. Based on this table, the highest correlation results between the independent variables are BS and CS ( $r = 0.826$ ). Except for the correlation between BS and CS, there is no absolute value of the correlation coefficient more than 0.5, so it can overcome the multicollinearity problem (Zhang, 2022). Furthermore, a multicollinearity problem occurs for BS and CS because both variables are alike with different measurements. Therefore, these two variables were tested with different models, namely model 1 and model 2.

Table 3  
 Pearson correlation

Variables	BS	CS	Lv	Sz	Pr	B4
BS	1					
CS	0.826**	1				
Lv	-0.039	-0.014	1			
Sz	0.058**	0.112**	0.054**	1		
Pr	0.110**	0.113**	-0.260**	0.109**	1	
B4	0.145**	0.154**	-0.049*	0.350**	0.226**	1

\*\*-. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

This study also uses the variance inflation factor (VIF) to diagnose collinearity problems in regression. Based on Table 5, the highest VIF in model 1 is 1.204, and model 2 is 1.202. Both are less than 2, so no multicollinearity problem exists (Johnston, 1984).

### Residual normality test

In this study, the normality test did not use the Shapiro-Wilk and Kolmogorov-Smirnov tests. According to Kim (2013), the Shapiro-Wilk test and Kolmogorov-Smirnov test can be used for small to medium samples ( $n < 300$ ) but are not reliable for large samples. This problem can be overcome by using the skewness and kurtosis test because this test is appropriate for small samples and large samples (Kim,

2013). Criteria for assessing normality distribution if skewness  $\leq \pm 2$  and kurtosis  $\leq \pm 7$  (West et al., 1995; Kim, 2013; Ghozali, 2021).

Table 4  
 Test results of skewness and kurtosis

	Model 1	Model 2
Skewness	1.607	1.608
Std.Error of skewness	0.052	0.052
Kurtosis	3.366	3.378
Std.Error of kurtosis	0.103	0.103
Number of observations	2,238	

Source: results of processed data.

Based on Table 4 above, model 1 has a skewness of 1.607 and a kurtosis of 3.366. Model 2 has a skewness of 1.608 and a kurtosis of 3.378. Both have values of skewness  $\leq \pm 2$  and kurtosis  $\leq \pm 7$ . Therefore, model 1 and model 2 have normally distributed residual values.

### *Multiple linear regression analysis*

The analysis steps are as follows: First, regression analysis uses the full sample to answer H1a and H1b. Second, the sample was grouped into loss and non-loss firms to answer H2a and H2b. Because this study uses two models, testing will be conducted on each model as in the steps above. The regression results of models 1 and 2 can be seen in Table 5. Model 1 shows that big shareholders (BS) significantly positively affect earnings management ( $\beta = 0.022$ ;  $p$ -value = 0.005). Model 2 also shows that controlling shareholders (CS) significantly positively affects earnings management ( $\beta = 0.009$ ;  $p$ -value = 0.011). Therefore, H1a and H1b are accepted.

Table 5  
 Multiple linear regression (full sample)

Variables	Model 1		Model 2	
	$\beta$ ( $p$ -value)	VIF	$\beta$ ( $p$ -value)	VIF
BS	0.022 (0.005)	1.028		
CS			0.009 (0.011)	1.035
Lv	0.057 (0.000)	1.081	0.057 (0.000)	1.081
Sz	-0.009 (0.000)	1.150	-0.009 (0.000)	1.154
Pr	-0.071	1.137	-0.071	1.138

	(0.000)		(0.000)	
B4	0.008 (0.031)	1.204	0.008 (0.027)	1.202
F-test	66.883 (0.000)		66.520 (0.000)	
Adj. R <sup>2</sup>	0.128		0.128	
Obs.	2,238		2,238	

Source: results of processed data.

Furthermore, the control variable. Leverage (Lv) reflects external pressure. Model 1 and model 2 are the same, where leverage significantly positively affects earnings management ( $\beta = 0.057$ ;  $\rho$ -value = 0.000). It means that the higher the debt level, the higher the creditor pressure on the company. It will encourage big shareholders to pressure managers to manage earnings to protect their interests. Size (Sz) reflects the company's size. In both models, size significantly negatively affects earnings management ( $\beta = -0.009$ ;  $\rho$ -value = 0.000). It means that the bigger the company, the smaller the earnings management actions. It indicates that the bigger a company, the greater the public's attention. Large firms tend to report high-quality earnings due to the focus of attention of analysts and investors (Chen et al., 2005).

Profitability (Pr) significantly negatively affects earnings management in both models ( $\beta = -0.071$ ;  $\rho$ -value = 0.000). It shows that firms that perform poorly tend to act in earnings management and vice versa. Finally, control variable B4 (Big4 firms). B4 has a significant positive effect on earnings management in model 1 ( $\beta = 0.008$ ;  $\rho$ -value = 0.031) and model 2 ( $\beta = 0.008$ ;  $\rho$ -value = 0.027). Contrary to Francis & Yu (2009), the firms audited by Big4 decreased earnings management. This means there is no guarantee that firms audited by big4 firms will have low earnings management. For example, there are several cases involving Big4 firms, for example, the Andersen and Enron scandals in 2001, the Lehman Brothers (mortgage) scandal with Erns & Young in 2008, the failure of Deloitte to detect fraud in the financial statements of SNP Finance (Columbia business group) 2018, and others.

Furthermore, this study will explore in more detail whether the big shareholder is involved in earnings management when the company experiences losses or vice versa. The study performed tests to prove the involvement of big shareholders by separating the full sample into subgroups, samples of loss and non-loss firms. The results of this subgroup regression are presented in Table 6.

Table 6  
 Subgroup multiple linear regression

Variables	Loss sample				Non-loss sample			
	Model 1		Model 2		Model 1		Model 2	
	$\beta$ (p-value)	S.E.	$\beta$ (p-value)	S.E.	$\beta$ (p-value)	SE	$\beta$ (p-value)	SE
BS	0.031** (0.021)	0.014			0.011 (0.194)	0.009		
CS			0.014** (0.015)	0.006			0.002 (0.515)	0.004
Lv	0.041*** (0.000)	0.006	0.040*** (0.000)	0.006	0.063*** (0.000)	0.006	0.063*** (0.000)	0.006
Sz	-0.003* (0.054)	0.002	-0.003* (0.058)	0.002	-0.010*** (0.000)	0.001	-0.010*** (0.000)	0.001
Pr	-0.397*** (0.000)	0.024	-0.396*** (0.000)	0.024	0.230*** (0.000)	0.027	0.231*** (0.000)	0.027
B4	0.005 (0.465)	0.007	0.006 (0.419)	0.007	0.000 (0.909)	0.004	0.001 (0.862)	0.004
F-test	84.721 (0.000)		84.899 (0.000)		58.980 (0.000)		58.681 (0.000)	
Adj.R <sup>2</sup>	0.410		0.411		0.151		0.150	
Obs.	603		603		1,635		1,635	

Source: results of processed data.

Based on Table 6, the regression on model 1 shows that big shareholders (BS) significantly positively affect earnings management in the loss sample ( $\beta = 0.031$ ;  $p$ -value = 0.021). Meanwhile, big shareholders do not affect earnings management in the non-loss sample ( $\beta = 0.011$ ;  $p$ -value = 0.194). Model 2, controlling shareholders (CS) significantly positively affect earnings management in the loss sample ( $\beta = 0.014$ ;  $p$ -value = 0.015), and controlling shareholders do not affect earnings management in the non-loss sample ( $\beta = 0.002$ ;  $p$ -value = 0.515). It means big or controlling shareholders participate in earnings management when the company loses. In contrast, big or controlling shareholders cannot participate in earnings management when firms do not make losses (profit). Therefore, H2a and H2b are accepted.

This result proves that firms with large ownership and controlling shareholders participate in managing earnings. Big shareholders have invested a lot of their money in shares. They aim to get high returns and avoid large losses falling on themselves. When the company loses, they will pressure management to manage profits so price share looks better in the market. They must secure this large investment using their power to avoid going bankrupt. They have the power to intervene in management and encourage earnings management (Zhong et al., 2007). They can replace the manager if they do not comply with their wishes (Ayogu, 2021). These results support previous studies that large shareholders positively affect earnings management (Zhong et al., 2007; Usman & Yero, 2012; Jiang et al., 2020).

In addition, this finding supports the entrenchment perspective, where shareholders are involved in earnings management. It differs from the alignment perspective, where large shareholders act as

effective controls to reduce earnings management. This result also supports the paradigm that the entrenchment perspective often occurs in countries with concentrated ownership structures, whereas the alignment perspective often occurs in countries with dispersed ownership structures.

Based on the analysis above, the involvement of big shareholders in earnings management can occur in a concentrated structure, and the company experiences pressure from losses. Indonesia and Asia have a concentrated ownership structure (see Claessens et al., 2000; Diyanti et al., 2013). Indonesia's firms are owned by several individuals or institutions with large ownership, which is a concentrated characteristic. This study also shows that the average number of big shareholders is 52.1%, and the number of controlling shareholders is 55% (Table 2). Therefore, Indonesian and Asia firms are characterized by controlling shareholders, whether corporations, families, or states (OECD, 2022).

This study strengthens the agency theory (type II). Concentrated ownership has given rise to strong control by the majority and neglect of the minority. If concentrated ownership crosses a certain threshold, majority shareholders can fully control the company and tend to make policies that benefit themselves (Shleifer & Vishny, 1997). It causes conflicts between majority and minority shareholders (Shleifer & Vishny, 1997; Zhuang et al., 2001; Margono et al., 2019), and agency conflicts will increase if the ownership is more concentrated Gugler et al. (2003).

### *Additional analysis*

This additional analysis aims to strengthen the research results that earnings management in loss firms is greater than in non-loss firms. The descriptive statistics in Table 2 show that loss firms have average higher earnings management than non-loss firms ( $0.092 > 0.080$ ). However, statistically, is this average significantly different? Therefore, additional analysis of different means tests is needed using an independent samples test. The independent test results can be seen in Table 7 below.

Table 7  
 Independent samples test

EM	Loss	Non-loss	Levene's Test		T-test for Equality for Means	
			F	Sig.	Sig. (2-tailed)	Mean Diff.
Mean	0.092	0.080				
Equal var. assumed			20.561	0.000	0.002	0.012
Equal var. not assumed					0.005	0.012

Source: results of processed data.

Based on the table above, Levene's test has an F-value of 20.561 with sig. 0,000. Because Sig. 0.000 < 0.05, then the variance is homogeneous between the EM groups. Because there is homogeneity, the t-test results used are Equal variances assumed, sig. 0.002 < 0.05. Therefore, it can be stated that earnings management in loss firms (0.092) is greater than in non-loss firms (0.080) and it is very significantly different.

## Conclusions

This study shows that firms in Indonesia have a concentrated structure. This structure has proven that big or controlling shareholders have a positive effect on earnings management, specifically in loss firms. Meanwhile, for non-loss firms, a big or controlling shareholder does not affect earnings management.

Theoretically, this study has supported and complemented the entrenchment perspective that big shareholders are involved in earnings management to protect their large investments from losses. This occurs more easily in countries with concentrated ownership because protection for minority shareholders is weak (majority and minority problem).

This study contributes to additional understanding for practitioners, especially small investors. They should be careful when investing in countries with highly concentrated ownership. They must choose firms that have good earnings prospects because this study has proved that there is no earnings management in non-loss firms (profit firms). For regulators, concentrated ownership indicates that protection for minority shareholders is still weak. Therefore, they should make a regulation to protect the interests of the minority from abuse by the majority.

This study focuses on the involvement of big shareholders in earnings management only on internal pressures, namely company losses. Future research expects researchers to examine external pressures, such as the pressure of debtholders and the share market, to strengthen and expand this study.

## References

- Alves, S. (2012). Ownership structure and earnings management: evidence from Jordan. *Australasian Accounting, Business and Finance Journal*, 6(1), 135–161.  
<https://ro.uow.edu.au/aabfj/vol6/iss1/12/>
- Amir, A., Shaari, H., & Husna, A. (2019). Ownership Structure And Real Earnings Management In Malaysian Corporation. E - Proceeding of the International Conference on Economic, Entrepreneurship and Management (ICEEM), 2019(2005), 1–13.  
<https://www.researchgate.net/publication/338028748>

- Ashbaugh, H., LaFond, R., & Mayhew, B. (2003). Do nonaudit services compromise auditor independence? *Accounting Review*, 78(3), 611–639. <https://www.jstor.org/stable/3203219>
- Ayogu, M. D. (2021). Corporate Governance in Africa: The Record and Policies for Good Governance. *African Development Review*, 13(2), 175–332. <https://doi.org/10.1111/1467-8268.00041>
- Barclay, M. J., & Holderness, C. G. (1991). Negotiated Block Trades and Corporate Control. *The Journal of Finance*, 46(3), 861–878. <https://ideas.repec.org/a/bla/jfinan/v46y1991i3p861-78.html>
- Be'dard, J., Chtourou, S. M., & Courteau, L. (2004). The effect of audit committee expertise, independence, and activity on aggressive earnings management. *Auditing: A Journal of Practice & Theory*, 23(2), 13–35. <https://doi.org/10.2308/aud.2004.23.2.13>
- Bensaadi, I., Azis, N., Musnadi, S., & Abd. Majid, M. S. (2021). Can Debt Mitigate Majority-Minority Shareholders Agency Problem? *Montenegrin Journal of Economics*, 17(1), 121–131. <https://doi.org/0.14254/1800-5845/2021.17-1.9>
- Bergstresser, D. ., & Phillipon, T. (2006). CEO Incentives and earnings management. *Journal of Financial Economics*, 80(3), 511 – 529. <https://doi.org/10.1016/j.jfineco.2004.10.011>
- Boachie, C., & Mensah, E. (2022). The effect of earnings management on firm performance: The moderating role of corporate governance quality. *International Review of Financial Analysis*, 83, 1–16. <https://doi.org/10.1016/j.irfa.2022.102270>
- Bos, A. D., & Donker, H. (2004). Monitoring accounting changes: Empirical evidence from the Netherlands. *Corporate Governance: An International Review*, 12(1), 60–73. <https://doi.org/10.1111/j.1467-8683.2004.00343.x>
- Chen, K. Y., Elder, R. J., & Hsieh, Y.-M. (2007). Corporate Governance and Earnings Management: The Implications of Corporate Governance Best-Practice Principles for Taiwanese Listed Companies. *Journal of Contemporary Accounting & Economics*, 3(2), 73–105. [https://doi.org/10.1016/S1815-5669\(10\)70024-2](https://doi.org/10.1016/S1815-5669(10)70024-2)
- Chen, K. Y., Lin, K., & Zhou, J. (2005). Audit Quality and Earnings Management for Taiwan IPO Firms. *Managerial Auditing Journal*, 20(1), 86–104. [ssrn.com/abstract=2926247](https://ssrn.com/abstract=2926247)
- Claessens, S., Djankov, S., & Lang, L. H. P. (2000). The separation of ownership and control in East Asian Corporations. *Journal of Financial Economics*, 58(2000), 81–112. <https://doi.org/10.2139/ssrn.206448>
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting Earnings Management. *The Accounting Review*, 70(2), 193–225. <https://www.jstor.org/stable/i302551>
- Demiralp, I., D'Mello, R., Schlingemann, F. P., & Subramaniam, V. (2011). Are there monitoring benefits to institutional ownership? Evidence from seasoned equity offerings. *Journal of Corporate Finance*, 17(5), 1340–1359. <https://doi.org/10.1016/j.jcorpfin.2011.07.002>

- Diyanti, V., Utama, S., Rossieta, H., & Veronica, S. (2013). Pengaruh Kepemilikan Pengendali Akhir, Kepemilikan Keluarga serta Praktek Corporate Governance Terhadap Transaksi Pihak Berelasi dan Kualitas Laba. *Simposium Nasional Akuntansi XVI*, I(September), 1–25. <chrome-extension://efaidnbmnnpbceajpcglefindmkaj/https://www.researchgate.net/profile/Sylvia-Siregar/publication/281236381>
- Du, X., Jian, W., Zeng, Q., & Chang, Y. (2016). Religious influence, blockholder ownership, and corporate over-investment: evidence from Chinese Buddhism. *China Journal of Accounting Studies*, 4(2), 109–142. <https://doi.org/10.1080/21697213.2016.1196059>
- Ely, D. P., & Song, M. H. (2000). Acquisition activity of large depository institutions in the 1990s: An empirical analysis of motives. *Quarterly Review of Economics and Finance*, 40(4), 467–484. [https://doi.org/10.1016/S1062-9769\(00\)00052-1](https://doi.org/10.1016/S1062-9769(00)00052-1)
- Farouk, M. A., & Bashir, N. M. (2017). Ownership Structure and Earnings Management of Listed Conglomerates in Nigeria. *Indian-Pacific Journal of Accounting and Finance (IPJAF)*, 1(4), 42–54. <https://doi.org/10.52962/ipjaf.2017.1.4.27>
- Ghozali, I. (2021). *Aplikasi Analisis multivariate: Program IBM SPSS 26* (10th ed.). Badan Penerbit Undip. [https://lib.uniku.ac.id/koleksi\\_detail\\_MjAyMzAxMDQwMDAwMDI=.html](https://lib.uniku.ac.id/koleksi_detail_MjAyMzAxMDQwMDAwMDI=.html)
- Gillan, S. L., & Starks, L. T. (2003). Corporate governance, corporate ownership, and the role of institutional investors: A global perspective. *Journal of Applied Finance*, 13(2), 4–22. [ssrn.com/abstract=480983](http://ssrn.com/abstract=480983)
- Guay, W., Kothari, S., & Watts, R. (1996). A market-based evaluation of discretionary accrual models. Guay, W., Kothari, S., & Watts, R. (1996). A Market-Based Evaluation of Discretionary Accrual Models. *Journal of Accounting Research*, 34, 83–105. [Journal of Accounting Research, 34, 83–105. https://doi.org/10.2307/2491427](https://doi.org/10.2307/2491427)
- Gugler, K., Dennis, C., Mueller, & Yurtoglu, B. B. (2003). The Impact Of Corporate Governance On Investment Returns In Developed And Developing Countries. Klaus Gugler, Dennis C. Mueller and B. Burcin Yurtoglu, 113(November), 11–39. [www.jstor.org/stable/3590252](http://www.jstor.org/stable/3590252)
- Holderness, C. G., & Sheehan, D. P. (1988). The role of majority shareholders in publicly held corporations. An exploratory analysis. *Journal of Financial Economics*, 20(C), 317–346. [https://doi.org/10.1016/0304-405X\(88\)90049-9](https://doi.org/10.1016/0304-405X(88)90049-9)
- Jaggi, B., & Tsui, J. (2007). Insider Trading, Earnings Management and Corporate Governance: Empirical Evidence Based on Hong Kong Firms. *Journal of International Financial Management and Accounting*, 18(3), 192–222. <https://doi.org/10.1111/j.1467-646X.2007.01012.x>
- Jensen, M. C., & Meckling, W. H. (1976). Theory Of The Firm : Managerial Behavior, Agency Costs And Ownership Structure. *Journal of Financial Economics*, 3(4), 305–360.



- [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Jiang, F., Ma, Y., & Wang, X. (2020). Multiple blockholders and earnings management. *Journal of Corporate Finance*, 64, 1–21. <https://doi.org/10.1016/j.jcorpfin.2020.101689>
- Johnston, J. (1984). *Econometric methods* (3rd ed). NY: McGraw-Hill.  
<https://doi.org/10.1002/jae.3950030311>
- Jones, J. J. (1991). Earnings Management During Import Relief Investigations. *Journal of Accounting Research*, 29(2), 193. <https://doi.org/10.2307/2491047>
- Kim, H.-Y. (2013). Statistical notes for clinical researchers: assessing normal distribution (2) using skewness and kurtosis. *Restorative Dentistry & Endodontics*, 38(1), 52. <https://doi.org/10.5395/rde.2013.38.1.52>
- Kim, H. J., & Yoon, S. S. (2008). The Impact of Corporate Governance on Earnings Management in Korea. *Malaysian Accounting Review*, 7(1), 43–59. <https://ir.uitm.edu.my/id/eprint/194>
- Klein, A. (2002). Audit committee, board of director characteristics and earnings management. *Journal of Accounting and Economics*, 33(3), 375–400. [https://doi.org/10.1016/S0165-4101\(02\)00059-9](https://doi.org/10.1016/S0165-4101(02)00059-9)
- Korkmaz, A. G., Ma, Q., & Zhou, H. (2017). Blockholder Characteristics and Earnings Quality. *Journal of Accounting and Finance*, 17(3), 63–80. <https://www.articlegateway.com/index.php/JAF/article/view/957>
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163–197. <https://doi.org/10.1016/j.jacceco.2004.11.002>
- Kristanti, F. T., Riyadh, H. A., Ahmed, M. G., Alfaiza, S. A., Steelyana W, E., Lutfi, A., & Beshr, B. A. H. (2024). Ownership shares and directors' proportion as majority shareholders on earnings management moderated by board activity. *Cogent Business and Management*, 11(1), 1–21. <https://doi.org/10.1080/23311975.2024.2331099>
- La Porta, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. W. (1997). Legal determinants of external finance. *Journal of Finance*, 52(3), 1131–1150. <https://doi.org/10.1111/j.1540-6261.1997.tb02727.x>
- La Porta, R., Lopez-de-Silanes, F., Vishny, R., & Shleifer, A. (2002). Investor Protection and Corporate Valuation. *The Journal of Finance*, 57(3), 1147–1170. <https://doi.org/10.1111/1540-6261.00457>
- Lassoued, N., Attia, M. B. R., & Sassi, H. (2018). Earnings management in islamic and conventional banks: Does ownership structure matter? Evidence from the MENA region. *Journal of International Accounting, Auditing and Taxation*, 30(C), 85–105. <https://doi.org/10.1016/j.intaccudtax.2017.12.003>
- Le, Q. L., & Nguyen, H. A. (2023). The impact of board characteristics and ownership structure on

- earnings management: Evidence from a frontier market. *Cogent Business & Management*, 10(1), 1–19. <https://doi.org/10.1080/23311975.2022.2159748>
- Liu, C., Chung, C. Y., Sul, H. K., & Wang, K. (2018). Does hometown advantage matter? the case of institutional blockholder monitoring on earnings management in Korea. *Journal of International Business Studies*, 49(2), 196–221. <https://doi.org/10.1057/s41267-017-0093-9>
- Maatougui, A. J., & Halioui, K. (2019). The effect of outside blockholders on earnings management around seasoned equity offerings in French listed companies on the SBF120. *Journal of Financial Reporting and Accounting*, 17(3), 449–467. <https://doi.org/10.1108/JFRA-02-2018-0012>
- Margono, A. S., Tanujaya, Y. I., Hidayat, A. A., & Yulianti, R. (2019). Pengaruh Kontrol Keluarga Terhadap Manajemen Laba. *Akuntansi Keuangan*, 8(2), 239–250. <https://doi.org/10.46806/ja.v8i2.622>
- Mcconnell, J. J., & Servaes, H. (1990). Additional evidence on equity ownership and corporate value. *Journal of Financial Economics*, 27, 595–612. [https://doi.org/10.1016/0304-405X\(90\)90069-C](https://doi.org/10.1016/0304-405X(90)90069-C)
- Medina, A., De La Cruz, A., & Tang, Y. (2022). Corporate ownership and concentration. In *Corporate Governance Working Paper (Issue 27)*. <https://dx.doi.org/10.1787/bc3adca3-en>
- Nguyen, H. A., Le, Q. L., & Vu, T. Ki. A. (2021). Ownership structure and earnings management: Empirical evidence from Vietnam. *Cogent Business & Management*, 8(1), 1–21. <https://doi.org/10.1080/23311975.2021.1908006>
- OECD. (2022). Corporate ownership and concentration: Background note for the OECD-Asia Roundtable on Corporate Governance (Issue October). <https://www.oecd.org/corporate/background-note->
- Perols, J. L., & Lougee, B. A. (2011). The relation between earnings management and financial statement fraud. *Advances in Accounting*, 27(1), 39–53. <http://dx.doi.org/10.1016/j.adiac.2010.10.004>
- Pindado, J., Requejo, I., & Torre, C. D. (2014). Family Control, Expropriation, and Investor Protection: A Panel Data Analysis of Western European Corporations. *Journal of Empirical Finance*, 27(C), 58–74. <https://doi.org/10.1016/j.jempfin.2013.10.006>
- San Martin Reyna, J. M. (2018). The effect of ownership composition on earnings management: evidence for the Mexican stock exchange. *Journal of Economics, Finance and Administrative Science*, 23(46), 289–305. <https://doi.org/10.1108/JEFAS-01-2017-0011>
- Shahzad, F., Rauf, S. A., ur Rehman, I., Saeed, A., & Al Barghouthi, S. (2017). Earning management strategies of leveraged family and non-family controlled firms: An empirical evidence. *International Journal of Business and Society*, 18(Special Issue 3), 503–518.
- Shleifer, A., & Vishny, R. W. (1986). Large Shareholder and Corporate Control. *The Journal of Political Economy*, 94(3), 461–488. [www.jstor.org/stable/1833044](http://www.jstor.org/stable/1833044)

- Shleifer, A., & Vishny, R. W. (1997). A Survey of Corporate Governance. *Journal of Finance*, 52(2), 737–783. [ssrn.com/abstract=10182](https://ssrn.com/abstract=10182)
- Tabassum, N., Kaleem, A., & Nazir, M. S. (2015). Real Earnings Management and Future Performance. *Global Business Review*, 16, 21–34. <https://doi.org/10.1177/0972150914553505>
- Tahir, M., Ibrahim, S., & Nurullah, M. (2019). Getting compensation right: The choice of performance measures in CEO bonus contracts and earnings management. *The British Accounting Review*, 51(2), 148–169. <https://doi.org/10.1016/j.bar.2018.09.004>
- Thomsen, S., Pedersen, T., & Kvist, H. K. (2006). Blockholder ownership: Effects on firm value in market and control based governance systems. *Journal of Corporate Finance*, 12(2), 246–269. <https://doi.org/10.1016/j.jcorpfin.2005.03.001>
- Usman, S. H., & Yero, J. I. (2012). Ownership Concentration and Earnings Management Practice of Nigerian Listed Conglomerates. *American International Journal of Contemporary Research*, 2(7), 157–171. <https://doi.org/10.30845/aijcr>
- Villalonga, B., & Amit, R. (2006). How do family ownership, control, and management affect firm value? *Journal of Financial Economics*, 80(2), 385–417. <https://doi.org/10.1016/j.jfineco.2004.12.005>
- Wang, B. (2018). Ownership, Institutions and Firm Value: Cross-Provincial Evidence from China. *Research in International Business and Finance*, 44, 547–565. <https://doi.org/10.1016/j.ribaf.2017.07.125>
- West, S. G., Finch, J. F., & Curran, P. J. (1995). Structural Equation Models with Nonnormal Variables: Problems and Remedies. In R. H. Hoyle (Ed.), *Structural Equation Modeling: Concepts, Issues, and Applications*. CA: Sage Publications. <https://search.gesis.org/publication/zis-WestFinch1995Structural>
- Yeo, G. H., Tan, P., Ho, K. W., & Chen, S. S. (2020). Corporate ownership structure and the informativeness of earnings. *Journal of Business Finance & Accounting*, 29(7-8), 1023–1046. <https://doi.org/10.1111/1468-5957.00460>
- Zhang, L. (2022). Do Largest Shareholders Incentively Affect Financial Sustainability Under Holdings Heterogeneity? Regulation/Intermediary of Financial Constraints Through Managerial Behavior Games. *Frontiers in Psychology*, 13, 1–15. <https://doi.org/10.3389/fpsyg.2022.754608>
- Zhong, K., Gribbin, D. W., & Zheng, X. (2007). The effect of monitoring by outside blockholders on earnings management. *Quarterly Journal of Business and Economics*, 46(1), 37–60. [www.jstor.org/stable/40473429](http://www.jstor.org/stable/40473429)
- Zhuang, J., Edwards, D., Webb, D., & Capulong, M. V. (2001). Corporate governance and finance in East Asia: a study of Indonesia, Republic of Korea, Malaysia, Philippines, and Thailand. In *Asian Development Bank* (Vol. 1). Asian Development Bank.