



# Institutional Ownership, External Auditor Reputation, and Income Smoothing: Evidence from Indonesia

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## Abstract

This study investigates how institutional ownership and external auditor reputation affect the income smoothing of the LQ45 index non-financial firms with firm size as the control variable. Because of the consistency of the companies shaping this index between 2017 and 2022, this study utilizes the population and samples of 18 and 15 as the total. Then, this investigation applies the multiple regression model to analyze the data. Based on the statistical testing outcome, this study infers the negative tendency of institutional ownership and external auditor reputation toward income smoothing. It indicates that institutions and reputable external auditors can cut this earning smoothing. Hence, it practically suggests that the company should utilize the Big Four auditor to overcome this smoothing, leading to the trust of public shareholders to buy the stocks. Also, these shareholders should select companies with a high share portion of institutions to obtain trusted earning reporting.

**Keywords:** Earnings management, External auditor reputation, Income smoothing, Institutional possession.

## 1. Introduction

For companies listed on the capital market, their managers focus no longer on achieving profits but on the value of the company they manage, i.e., the share price, which reflects shareholder welfare (Hanafi, 2016). However, several previous researchers believe that share prices are influenced by the firm ability to generate profits (Akhmadi & Januarsi, 2021; Al-Tamimi et al., 2011; Arisanty & Riyanto, 2022; Awalakki & H.N., 2021; Dang et al., 2018; Muniroh & Yulianti, 2021).

Managers can manage profits using smoothing techniques (Abogun et al., 2021; Sumani et al., 2021) by deliberately cutting anomalous earning variation to suit accounting principles (Beidleman, 1973). Changing the time of purchase, production, investment, and revenue to the end period is a related effort (Raihi-Belkaoui, 2004). Thus, this earning management type will reduce public trust because managers do not report actual profits; hence, company value falls (Abogun et al., 2021). Moreover, institutional share ownership is effectively needed to overcome income smoothing, as shown by Purwanti and Nugrahanti (2016) and Chen et al. (2020). In contrast, other research shows that institutional ownership increases income smoothing (IS) (Trisanti, 2019; Yang et al., 2012) and does not influence IS (Agustina et al., 2021; Suyono, 2018).

Apart from institutional ownership, external auditors affiliated with the Big 4 are believed to diminish income smoothing, as proven by Fauzan et al. (2020). In their study, Bala et al. (2022) confirm this situation when researching the companies hiring audit committee members dominated with accounting expertise. Nevertheless, several other studies, such as Yang et al. (2012) and Trisanti (2019), document positive influence. Meanwhile, Pinto et al. (2020) demonstrate no relationship.

Based on research results that are still varied, this research intends to reexamine the influence of institutional possession and external auditor reputation on income smoothing of non-financial companies selected for the LQ45 Index from 2017 to 2022 by treating company size as a control variable [see Yang et al. (2012), Suyono (2018), Trisanti (2019), Pinto et al. (2020), and Abogun (2021)].

The LQ45 index companies are used because of their reputation in the Indonesian stock exchange, especially for market capitalization and transactions, and they are ranked 60th largest in the regular market (Hartono, 2017). Besides, the risk of the LQ45 index share is lower than that of the non-LQ45 index (Polakitan, 2015). Ideally, these reputable companies do not want to manage their earnings; therefore, they use governance mechanisms (Putri & Prasetyo, 2020). Following Putri and Prasetyo (2020), this investigation employs non-financial enterprises.

2. Literature Review and Hypothesis Development

2.1. The Relationship between Institutional Ownership and Income Smoothing

In the stock exchange, institutions such as insurance firms, investment enterprises, and banks have a significant ownership portion in the company (Solikhah et al., 2022). Thus, they have substantial power to monitor and control top managers, leading to cutting earnings smoothing (Chen et al., 2020; Purwanti & Nugrahanti, 2016). This circumstance is affirmed by Purwanti and Nugrahanti (2016) and Chen et al. (2020), declaring the negative propensity between institutional possession and income smoothing. Based on this description, the first hypothesis is:

*H<sub>1</sub>: The institutional ownership negatively affects income smoothing.*

2.2. The Relationship Between External Auditors with Reputation and Income Smoothing

The external auditors are the parties giving opinions to the company's financial report, and their opinion affects market reaction (Guimarães et al., 2022). Related to income smoothing, this tendency can be minimized when companies hire auditors affiliated with the Big 4, as Fauzan (2020) and Bala et al. (2022) demonstrate. According to Purwanti and Nugrahanti (2016), it occurs because the Big Four auditors have better competency and experience in auditing financial reports than the Non-Big Four auditors. Based on this description, the second hypothesis is:

*H<sub>2</sub>: The reputable external auditor negatively affects income smoothing.*

2.3. The Research Model

By mentioning hypotheses one and two in part 2.1. and 2.2, the research model is visible in Picture 1. According to Ghozali (2017), the rectangle for institutional ownership, reputable external auditor, and income smoothing indicates the directly observed variable.

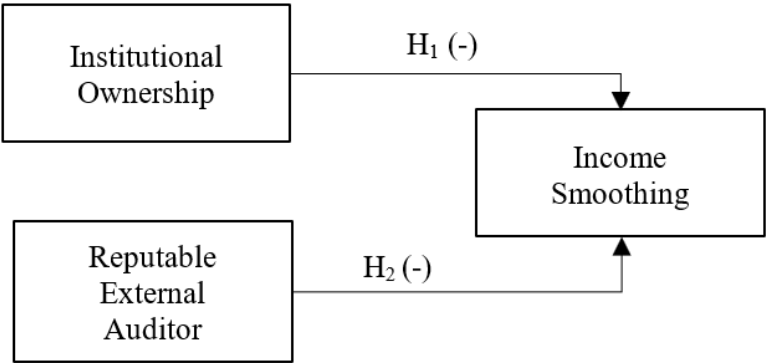


Figure 1. Research Model.

3. Research Methods

This study utilizes the Eckel index as the proxy of earnings smoothing based on Yang et al. (2012). This index divides the coefficient variation (CV) of the change in income with the CV of the change in revenue. Income smoothing exists when this index is below one. Therefore, we inverse it to support the direction of the hypotheses. Following Yang et al. (2012), Purwanti and Nugrahanti (2016), Suyono (2018), Trisanti (2019), Chen et al. (2020), and Agustina et al. (2021), this study uses the share portion belonging to the institutions. Tracing Fauzan et al. (2020), Yang et al. (2012), Trisanti (2019), and Pinto et al. (2020), this study employs the dummy variable to measure external auditor reputation: 1, 0 is for the companies using big-four auditors and non-big-four auditors, correspondingly. As the control variable, this study utilizes company size, measured by the logarithm of total assets by referring to Yang et al. (2012), Suyono (2018), Trisanti (2019), Pinto et al. (2020), and Abogun (2021).

Furthermore, this research uses archival techniques in collecting secondary data, as Hartono (2014) explains, and a multiple regression model to analyze the data, considering that the dependent variable data scale is the ratio for earnings management. The independent variable scale is the ratio for institutional ownership and nominal for external auditor reputation and the industry type, as Hartono (2014) enlightens. Next, the classical assumption tests must be carried out: multicollinearity, heteroscedasticity, autocorrelation, and normality (Ghozali, 2021). Regarding the research sample, researchers used 18 non-financial companies selected as shares, forming the LQ45 index from 2017 to 2022, and their names are as follows.

- (1) Adaro Energy Tbk (ADRO)
- (2) Aneka Tambang (Persero) Tbk (ANTM)
- (3) Astra International Tbk (ASII)
- (4) XL Axiata Tbk (EXCL)
- (5) HM. Sampoerna Tbk. (HMSP)
- (6) Indofood CBP Sukses Makmur Tbk. (ICBP)
- (7) International Nickel Indonesia, Tbk. (INCO)
- (8) Indofood Sukses Makmur Tbk. (INDF)
- (9) Indocement Tunggal Prakasa Tbk. (INTP)
- (10) Kalbe Farma Tbk. (KLBF)
- (11) Media Nusantara Citra, Tbk. (MNCN)
- (12) Perusahaan Gas Negara (Persero) Tbk (PGAS)
- (13) Tambang Batubara Bukit Asam Tbk. (PTBA)
- (14) Semen Indonesia (Persero) Tbk. (SMGR)
- (15) Telekomunikasi Indonesia Tbk (TLKM)

- (16) United Tractors Tbk. (UNTR)
- (17) Unilever Indonesia Tbk. (UNVR)
- (18) Wijaya Karya Tbk. (WIKA)

Additionally, this study uses the Slovin formula, cited in Firdaus (2021), with a border of error of 10% to determine the number of samples. By mentioning this formula, the total representative samples of 18 companies are  $15.25 = 15$  (rounded), and the companies are taken randomly. Based on this random process and the irrelevant situation causing the insignificant impact of the main determinants of income smoothing, as conducted by Erna et al. (2024), this study only uses 14 companies, such as ADRO, ASII, EXCL, INCO, INDF, INTP, KLBF, MNCN, PGAS, PTBA, SMGR, TLKM, UNTR, and UNVR.

Moreover, this investigation employs the regression model to analyze the data, where the model is in the first equation (Note: IS = income smoothing, IO = institutional ownership, EAR = external auditor reputation, and LN(TA) = natural logarithm of total assets to measure firm size).

$$IS = \beta_0 + \beta_1 \cdot IO + \beta_2 \cdot EAR + \beta_3 \cdot LN(TA) + \varepsilon \text{ (Equation 1)}$$

This model adopts the ordinary least square to estimate the regression coefficient. Therefore, it must meet the classical assumptions, like normality, non-heteroskedasticity, non-autocorrelation, and non-multicollinearity (Gujarati et al., 2019). Furthermore, to detect them respectively, this study uses Jarque-Bera (Gujarati et al., 2019), White (Ghozali, 2021; Gujarati et al., 2019), runs (Ghozali, 2021), and variance inflation factor (Ghozali, 2021; Gujarati et al., 2019).

4. Results

4.1. Descriptive Statistics

Table 1A displays the descriptive statistics of income smoothing, institutional ownership, and company size based on 84 firm-year observations: 14 companies for six years.

- a. The smallest, the largest, average, and standard deviation are -8.76, 10.53, 0.8041, and 1.98709. for income smoothing (IS).
- b. The smallest, most prominent, average, and standard deviation are 43.91%, 85.00%, 59.4170%, and 11.19063 for institutional ownership (IO).
- c. The minimum, maximum, mean, and standard deviation are 15.95, 19.84, 17.9124, and 0.96393 for the natural logarithm of total assets, LN(TA).

Table 1A. Descriptive Statistics with 84 observations

Variable	The smallest	The largest	Average	Standard Deviation
IS	-8.76	10.53	0.8041	1.98709
IO	43.91	85.00	59.4170	11.19063
LN(TA)	15.95	19.84	17.9124	0.96393

Table 1B exhibits the number of companies hiring external auditors affiliated with the Big Four and non-Big Four from 2017 to 2022: 13 firms utilize the Big Four auditors yearly (92.86%). Only one firm, MNCN, uses non-Big Four consistently (7.14%).

Table 1B. The total companies utilizing big-four and non-big-four auditors.

Time	2017	2018	2019	2020	2021	2022
Total firms hiring Big-Four auditors.	13	13	13	13	13	13
Total firm hiring non-Big Four auditors.	1	1	1	1	1	1
Total firms becoming the samples	14	14	14	14	14	14

4.2. Classical Assumption Examination Result

After processing data statistically, this study presents the classical assumption test results, i.e., heteroskedasticity, autocorrelation, multicollinearity, and normality:

- For heteroskedasticity, this study cannot prove it based on the White test, which is informed by the probability of Chi-square above 5%: 0.1164 (see Table 2).
- For autocorrelation, this study cannot prove it based on a run test with a mode cut-off point noticed by the two-tailed asymptotic significance of 0.876 (see Table 2).
- For multicollinearity, this study cannot detect it, reflected by a variance inflation factor (VIF) below 10: 1.323 for IO, 1.185 for DBIG4, and 1.498 for LN(TA) (see Table 2).
- For normality, this study cannot prove it because the probability of Jarque-Bera is lower than 5%: 0.000 (see Table 2). According to the central limit theorem, this situation can be allowed when the number of observations is large: greater than 30 (Islam, 2018), and this study confirms it, reflected by total observations of 84 (see Table 1).

Table 2. Classical assumption examination result.

Classical Assumption	Statistical information
White Heteroskedasticity $RES^2 = f[IO, DBIG4, LN(TA)]$	The probability of Chi-Square of R-square observation is = 0.1183
Run autocorrelation based on the mode.	The two-tailed asymptotic significance of the Z-statistic is 0.876.
Multicollinearity detection	VIF for IO, DBIG4, and LN(TA) is partially 1.323, 1.185, and 1.498.
Normality	The probability of the Jarque-Bera statistic is 0.0000.

4.3. Regression model estimation result

Table 3 displays the regression model estimation result of the statistical probability to examine the influence of institutional possession, reputable external auditor (DBIG4), and firm size on earning smoothing, i.e.,

0.0931, 0.0722, and 0.3713, respectively. For main determinants, the probability is still lower than the loosen significance level of 10%; therefore, the negative sign is meaningful, indicating that institutional ownership and reputable external auditors can diminish the earning smoothing.

**Table 3.** The estimation result of the regression model.

Determining factor	Coefficient	Std. Error	t-Statistic	Probability
C	8.810583	5.288557	1.665971	0.0996
IO	-0.036865	0.021693	-1.699387	0.0931
DBIG4	-1.615706	0.886808	-1.821936	0.0722
LN_TA	-0.240938	0.267982	-0.899083	0.3713

5. Discussion

Based on the first hypothesis testing result, the greater the institutional ownership (IO), the lower the earnings management. It indicates that institutions are responsible to the public by disallowing managers to manage earnings. Based on this tendency, this study result aligns with Purwanti dan Nugrahanti (2016), disclosing that, in total, the income smoothing (IS) for the companies with high IO is lesser than those with low IO, happening when investigating 70 manufacturing firms from 2011 to 2013 in the Indonesian capital market. Furthermore, this evidence supports Chen et al. (2020), declaring that high institutional ownership reduces the informativeness of earnings for firms with income smoothing in Taiwan between 2001 and 2009.

Based on the second hypothesis testing result, the greater the tendency of companies to use reputable auditors, the lower the earnings management. It indicates the effectiveness of external auditors; although they burden the company more, they can reduce earnings smoothing. Based on this tendency, this study confirms Fauzan et al. (2020), investigating 62 Indonesian companies becoming the Kompas 100 index from 2015 to 2018 as the sample. This positive propensity also exists when Bala et al. (2022) researched Nigerian companies appointing audit committee members dominated with accounting expertise.

6. Conclusion

Under the stated research objectives, this study concludes that institutional possession and reputable external auditors can reduce earnings management in non-financial corporations establishing the LQ45 index on the Indonesian Capital Market from 2017 to 2022. Based on this inclination, this study recommends that the ownership structure remains concentrated on controlling shareholders, considering that they can be trusted to reduce earnings management, and reputable auditors are used to reduce this earnings management. Theoretically, it is recommended for subsequent researchers to add determinants of earnings management based on governance mechanisms such as the supervisory board based on size and independence, the gender-based supervisory board diversity, and audit committees. The use of cross-country companies also aims to enrich further research outcomes. Practially, this study recommends that the companies utilize the Big Four auditor to overcome this income smoothing, leading to the trust of public shareholders to buy the stocks. Also, these shareholders should choice companies with a high share portion of institutions to obtain trustworthy earning reporting.

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