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Institutional Ownership, External Auditor Reputation, Financial Leverage, and Earnings Management

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Abstract
Profits show the performance of managers before the related parties, such as investors and creditors. Therefore, managers often incorrectly state them in the published annual financial reports to protect their reputation. Undoubtedly, this action needs to be reduced by the governance mechanism, like supervision by institutions as the owner and audit by the external public accountant firm. To control these two effects on profits management, additionally, this study employs financial leverage. This study aims to prove the impact of institutional ownership, the external auditor reputation, and financial leverage on profits management. The population and the samples are the non-financial companies establishing the LQ45 index from 2014 to 2018, getting taken by the simple random sampling technique. Also, the regression model performs as the technique to examine the data. By denoting the testing of the hypothesis results and the discussion section, this study summarizes that institutional ownership and reputable external auditor effectively decrease profits management. Additionally, although firms have much debt, they cut the tendency to manage their profits because of applying transparency.

Keywords: External Auditor Reputation, Financial Leverage, Institutional Ownership, Profits Management

I. INTRODUCTION

For a company, profits are the end goal. By owning them, the company can positively contribute to shareholder prosperity, business expansion (Kasmir, 2013), and build a reputation before creditors (Gitman & Zutter, 2012). Moreover, these profits are recorded and announced to the public (Siallagan & Machfoedz, 2006). Regarding these profits directly reflect the manager's operational performance (Kasmir, 2013); consequently, to protect their reputation, managers do not correctly report them (Merchant & Rockness, 1994).

One way to decrease the possibility of profit management is by implementing a virtuous governance mechanism. In this context, the company can handle it by demanding institutions as its owner (Herawaty, 2008). According to Herawaty (2008), enhancing the proportion of institution shares is an effective way to reduce it. This action stands affirmed by the study result of Sumanto, Asrori, & Kiswanto (2014), Ajay & Madhumathi (2015), Gumilang,

Suhadak, & Mangesti (2015) that reports the higher portion of the share the institutions have, the lower the profit management occurs.

Besides, hiring the auditors affiliated with the big-4 is another way to reduce profits management. This situation stays affirmed by Kao & Chen (2004), Yang, Chun, & Ramadili (2009), Herlambang & Darsono (2015), Shirzad & Haghighi (2015), Sastrawati & Hatane (2016), Lopes (2018), and Firnanti et al. (2019) revealing a negative effect of this reputable auditor on profit management.

Additionally, high leverage can cut the firm's tendency to manage its profits as long as it applies transparency. This propensity stands confirmed by the study of Kao & Chen (2004), Emamgholipour, Bagheri, Mansourinia, & Arabi (2013), Firnanti, Pirzada, & Budiman (2019), showing a negative effect of financial *leverage* on profits management.

To prove the effectiveness of institutions becoming the owner, the external auditor's reputation, and financial leverage on profits management, this study takes the companies forming the LQ45 index between 2014 and 20188. As reputable companies in their market capitalization, these companies should be able to overcome profits management.

The institutions having the dominant stock portion in the public company usually consist of banks, pension funds, investment trust, investment companies (Yang, Chun, & Ramadili, 2009). In good governance, these institutions actively monitor and supervise top managers. Consequently, the propensity of managers for managing profits goes down (Ajay & Madhumathi, 2015). They do it because of the institutions' proxy fight, which probably makes them fired up (Rose, Westerfield, & Jaffe, 2010). This argument obtains the confirmation of Sumanto et al. (2014), Ajay & Madhumathi (2015), and Gumilang et al. (2015), showing a negative effect of institutional ownership on profits management. By mentioning this explanation, planned hypothesis one is as follows.
H_1: The influence of institutional ownership on profits management is negative.

When the audit function runs perfectly, profits management does not certainly occur. To attain this condition, the public accounting firm needs to exist (Lopes, 2018). As the service scope, besides tax consulting, this firm provides the auditing service (Wen, Yang, Bu, Diers, & Wang, 2018). Because of the unsatisfactory situation, the technical competence and independence possessed by the auditors affiliated with the big four can only shrink the tendency of earnings management (Lopes, 2018). This statement also obtains confirmation from Kao & Chen (2004), Yang et al. (2009), Herlambang & Darsono (2015), Shirzad & Haghighi (2015), Sastrawati & Hatane (2016), Lopes (2018), and Firnanti et al. (2019). They reveal that the existence of the big four affiliated with public accounting firms can reduce the potency of managing profits. By mentioning this explanation, planned hypothesis two is as follows.
H_2: The influence of reputable external auditors on profits management is negative.

Financial leverage shows the use of debt for funding the company's assets (Sartono, 2008). The managers in the company with high liabilities usually tend to manage the profits because they want to ensure the creditors that the company managed still look good (Yang et al., 2009). Unlike this company, a company implementing transparency will disclose its real condition to the public (Tjager, Alijoyo, Djemat, & Soembodo, 2003). As a consequence, the managers do not tend to manipulate profit even though the firm has a significant portion of the debt, as Kao & Chen (2004), Emamgholipour et al. (2013), Firnanti et al. (2019) express. By mentioning this explanation, planned hypothesis three is as follows.
H_3: The influence of financial leverage on profits management is positive.

II.   RESEARCH METHOD

2.1.   The Variable Definition

There are two types of variables employed in this study. Firstly, the explained variable, profit management, is measured by the ratio of accrual working capital to revenue (AWCR) at the end of the year. This proxy refers to

Suhardianto & Harymawan (2011). Secondly, the explaining variables: i.e., institutional ownership, external auditor reputation, and financial leverage.

a. Related to institutional ownership (IO), the ratio of shares owned by institutions at the end of the year becomes this proxy. It denotes Asrori & Kiswanto (2014), Ajay & Madhumathi (2015), and Gumilang et al. (2015).

b. Related to the reputation of external auditors (DBIG4), the dummy variable of the firms hiring the big four auditors (DBIG4=1) and non-big four auditors (DBIG4=0) at the end of the year becomes this proxy. It denotes Kao & Chen (2004), Yang et al. (2009), Herlambang & Darsono (2015), Shirzad & Haghighi (2015), Sastrawati & Hatane (2016), Lopes (2018), and Firnanti et al. (2019).

c. Related to financial leverage, we use the debt to total asset ratio (DAR) at the end of the year as the proxy. It denotes Kao & Chen (2004), Emamgholipour et al. (2013), and Firnanti et al. (2019).

2.2. Population and Samples

This study utilizes the non-financial companies forming the LQ45 index on the Indonesia Stock Exchange between 2014 and 2018 as the population. These companies get picked up because of the same structure of the debt. Unfortunately, during this period, not all companies are consistently present as constituents. Thus, the relevant number of companies is essential to know based on the observation form lists of the LQ45 index members. After observing them, 31 non-financial companies exist.

Moreover, to know the sample sum (SS), this study employs the Slovin formula with the error boundary (EB) of 10%, as seen in the first equation.

$$SS = \frac{N}{1+N(EB)^2}$$ .... (1)

By indicating this formula, the sum of samples is $\frac{31}{1+31(10\%)*(10\%)} = 23.66 \approx 24$ firms, selected by a simple random sampling method; their name is available in Table 1.

<div align="center">Table 1: The name of the samples</div>

No.	Code	The name of the firm
1	ADRO	Adaro Energy Tbk
2	AKRA	AKR Corporindo Tbk
3	ANTM	Aneka Tambang (Persero) Tbk
4	ASII	Astra International Tbk
5	BSDE	Bumi Serpong Damai Tbk
6	CPIN	Charoen Pokphan Indonesia Tbk
7	EXCL	XL Axiata Tbk
8	GGRM	Gudang Garam Tbk
9	ICBP	Indofood CBP Sukses Makmur Tbk
10	INCO	Vale Indonesia Tbk
11	INDF	Indofood Sukses Makmur Tbk
12	INTP	Indocement Tunggal Prakasa Tbk
13	ITMG	Indo Tambangraya Megah Tbk
14	JSMR	Jasa Marga (Persero) Tbk
15	KLBF	Kalbe Farma Tbk
16	LPKR	Lippo Karawaci Tbk
17	LPPF	Matahari Department Store Tbk
18	SCMA	Surya Citra Media Tbk
19	SMGR	Semen Indonesia (Persero) Tbk
20	TLKM	Telekomunikasi Indonesia (Persero) Tbk

Table 1: The name of the samples

No.	Code	The name of the firm
21	UNTR	United Tractors Tbk
22	UNVR	Unilever Indonesia Tbk
23	WIKA	Wijaya Karya (Persero) Tbk
24	WSKT	Waskita Karya (Persero) Tbk

2.3. The method for analyzing the data

By checking the nature of the research variables, the suitable method to analyze data is the regression model with pooled data, as seen in the second equation.

$$AWCR_{it} = \beta_0 + \beta_1 IO_{it} + \beta_2 DBIG4_{it} + \beta_3 DAR_{it} + \varepsilon_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

According to Nacrohwi & Usman (2006), the ordinary least square becomes the regression model technique to estimate its coefficients. Consequently, this model must meet the requirement of classical assumptions, like normality, homoscedasticity, non-multicollinearity, and non-autocorrelation, as explained by Ghozali (2016).

III. RESULT AND DISCUSSION

The result displayed in this section consists of the explanation of the classical assumption test (see point 3.1), the regression model estimation (see point 3.2), the hypothesis testing (see point 3.3), and the discussion presenting the hypothesis testing clarification (see point 3.4)

3.1. The result of the classical assumption tests

In this study, the regression model's residuals do not meet the normality test, mirrored by the asymptotic probability (2-tailed) of the Z-statistic Kolmogorov-Smirnov of 0.001, as displayed in Table 2, which is less than 5% significance level. By seeing the number of observations, this condition gets allowed because of the central limit (Bowerman & O'Connell, 2003).

Table 2: The test result of the normality

Description	Unstandardized Residual
N	120
Kolmogorov-Smirnov Z	1.922
Asymptotic Sig. (2-tailed)	0.001

a. Test distribution is Normal.
b. Calculated from data.

Source: Resulted by IBM SPSS 20

This study confirms that homoscedasticity by the White test with cross-term, reflected by the probability of t-statistic of IO, IO^2, IO*DBIG4, IO*DA, DBIG4, DBIG4*DAR, DAR, DAR^2 of 0.5878, 0.4311, 0.2732, 0.5666, 0.1028, 0.1749, 0.1032, 0.9809, exceeding 5% significance level, showing no effect on variance residual (see Table 3).

Table 3: The test result of White heteroscedasticity with the cross term: Variance
residuals = f (IO, IO^2, IO*DBIG4, IO*DA, DBIG4, DBIG4*DAR, DAR,
DAR^2)

Variable	Coefficient	Std. Error	t-Statistic	Probability.
C	0.405593	0.234067	1.732808	0.0859
IO	-0.001863	0.003426	-0.543590	0.5878
IO^2	-1.84E-05	2.32E-05	-0.790194	0.4311
IO*DBIG4	0.003808	0.003458	1.101165	0.2732
IO*DAR	0.000559	0.000973	0.574725	0.5666

Table 3: The test result of White heteroscedasticity with the cross term: Variance residuals = f (IO, IO^2, IO*DBIG4, IO*DA, DBIG4, DBIG4*DAR, DAR, DAR^2)

Variable	Coefficient	Std. Error	t-Statistic	Probability.
DBIG4	-0.451206	0.274286	-1.645021	0.1028
DBIG4*DAR	0.224598	0.164486	1.365448	0.1749
DAR	-0.242100	0.147364	-1.642869	0.1032
DAR^2	-0.001403	0.058518	-0.023980	0.9809

Source: Resulted by E-views 6.

This study shows the autocorrelation test result (see Table 4) and multicollinearity detection (see Table 5).

- As seen in Table 4, the Z-statistic's asymptotic probability of the runs test based on mean is 0.365. Because this value goes beyond a 5% significance level, the autocorrelation does not exist.

Table 4: The test result of runs

Description	Unstandardized Residual
Test Value of mean	0.0000000
Cases < Test Value	62
Cases >= Test Value	58
Total Cases	120
Number of Runs	56
Z	-0.906
Asymptotic Sig. (2-tailed)	0.365

Source: Resulted by IBM SPSS 20

- As displayed in Table 5, IO, DBGIG4, and DAR's variance inflation factor is 1.002, 1.099, and 1.098. All these values are less than 10; therefore, the multicollinearity is not available.

Table 5: The detection result of multicollinearity

Independent Variable	IO	DBIG4	DAR
Tolerance	0.998	0.910	0.910
Variance inflation factor	1.002	1.099	1.098

Source: Resulted by IBM SPSS 20

3.2. The result of the regression model estimation

Table 6 exhibits the regression model's estimation result showing the influence of institutional ownership, reputable external auditor, and debt policy on profits management and the information related to the hypotheses testing, like the probability of t-statistic for each independent variable: IO, DBIG, and DAR.

Table 6: The estimation result of the regression model of the influence of institutional ownership, reputable external auditor, and debt policy on profits management

Independent Variable	Coefficient	Std. Error	t-Statistic	Probability
C	0.395428	0.085214	4.640388	0.0000
IO	-0.002414	0.001018	-2.372647	0.0193
DBIG4	-0.173513	0.040887	-4.243728	0.0000
DAR	-0.199083	0.083251	-2.391343	0.0184
R-squared	0.180172	Mean dependent variable		0.016371
Adjusted R-squared	0.158969	S.D. dependent variable		0.173634
SE of regression	0.159236	Akaike info criterion		-0.804091
Sum squared residual	2.941315	Schwarz criterion		-0.711175
Log-likelihood	52.24547	Hannan-Quinn criterion		-0.766357
F-statistic	8.497683	Durbin-Watson statistic		2.383873
Prob. (F-statistic)	0.000038			

Source: Resulted by E-Views 6.

3.3. The result of the hypothesis testing

Contrasting the probability value of the t-statistic (see Table 6) with the significance level (α) of 5% is vital to test the null hypotheses one, two, and three. This value has to be less than 5% to reject these hypotheses.

- IO has a probability value of 0.0193. Therefore, the first null hypothesis becomes banned. Instead, the first hypothesis becoming the alternative gets accepted.
- DBIG4 has a probability value of 0.0000. Hence, the second null hypothesis becomes disallowed. Instead, the second hypothesis becoming the alternative gets supported.
- DAR has a probability value of 0.0184. Consequently, the third null hypothesis becomes rejected. Instead, the third hypothesis becoming the alternative gets acknowledged.

3.4. Discussion

Based on the hypotheses testing, this research expresses three pieces of evidence. Firstly, institutional ownership decreases profits management. This situation means the monitoring done by the institutions is effective because of the proxy fight right. If they use this proxy, they can replace the position of existing managers with the new ones. Therefore, managers will obey what the institutions want. Based on this fact, this research affirms Sumanto et al. (2014), Ajay & Madhumathi (2015), and Gumilang et al. (2015).

Secondly, the reputable external auditor reduces profits management. This condition means the public accountant firms (PAF) allied with the big four auditors can diminish earnings management. Unlike the PAFs associated with non-big four auditors, the PAFs connected with the big four auditors have more competency and independence. Based on this fact, this research confirms Kao & Chen (2004), Yang et al. (2009), Herlambang & Darsono (2015), Shirzad & Haghighi (2015), Sastrawati & Hatane (2016), Lopes (2018), and Firnanti et al. (2019).

Finally, debt policy lessens profits management. This circumstance is only for the firms applying transparency. The managers in these firms attempt to report the actual earnings while the liabilities position goes up. Based on this fact, this research supports Kao & Chen (2004), Emamgholipour et al. (2013), and Firnanti et al. (2019).

By considering the results, this study recommends several things to the firms to reduce the manager's tendency to manage the profits. Firstly, to monitor managers effectively, the institutions must participate actively and operate the proxy contest if managers do not want to follow the reputable firm's rules without the earnings management issue. Secondly, the firms suggest employing public accountant firms affiliated with the big four auditors. Thirdly, applying the transparency principle as the foundation of the managers to work.

IV. CONCLUSION AND RECOMMENDATIONS

This study aims to prove the effect of institutional ownership, the external auditor reputation, and financial leverage on profits management of the non-financial companies becoming the member LQ45 index from 2014 to 2018 as the sample. Based on the examined hypotheses and the discussed results, this study infers three pieces of evidence.
1. The effect of institutional ownership on profits management is negative.
2. The effect of the external auditor's reputation on profits management is negative.
3. The effect of financial leverage on profits management is negative.

As the limitations, this study only uses the non-financial companies forming the LQ45 index, five years as the number of periods, and three contributing factors of earnings management. Three situations expose the chance for the next research to:
a. Utilize all the non-financial firms in the Indonesia stock exchange to result in the broader conclusion about these three determinants of earnings management;
b. Outstretch number of periods into 10 or 15 years;
c. Apply the other explaining variables of profit management like managerial ownership, the supervising board-related measures (board size, independence, meeting), audit committee size, firm size, firm growth,

growth opportunity, company age, profitability, free cash flow, asymmetric information, cash flow from operating activity.

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