ACCOUNTING CONSERVATISM AND EARNINGS MANAGEMENT—INDONESIAN EVIDENCE

KRISMIAJI
RATNA PUJI ASTUTI

Akademi Akuntansi YKPN Yogyakarta, Jl. Gagak Rimang No.2-4, Klitren, Gondokusuman, Yogyakarta, Indonesia
xmiaji@gmail.com

Abstract: This study empirically examines the effects of accounting conservatism on earnings management. Earnings management is proxied by accrual earnings management (AEM) and measured by discretionary accruals. Accounting conservatism is measured by accrual conservatism. This study uses data from 108 companies listed on the Indonesia Stock Exchange from 2016 to 2018. By using the Multiple Regression Model that places earnings management as the dependent variable and accounting conservatism as an independent variable, this study proves that accounting conservatism has a positive effect on earnings management. Moreover, the business cycle (cycle), asset turnover (ROA), and sales growth (SG) are control variables that also control this research model.

Keywords: Conservatism, earnings management, discretionary accruals

INTRODUCTION

This study investigates the effects of accounting conservatism on earnings management in the Indonesian companies, which are listed on the Indonesia Stock Exchange (IDX) in 2016-2018. In contrast to previous studies, this study does not separate the accounting conservatism into the conditional and unconditional dimensions.

Investors are the main supplier of company resources. Therefore, investors need the complete and correct information to make investment decisions. In an efficient capital market, all data should now be absorbed by individuals and their influence is reflected in securities (Karami et al. 2014). Financial statements present the financial position and financial performance information as well as business financial flexibility, which is beneficial.
for users. One important information is the earnings information that is presented in the income statement. Earnings calculations are influenced by management's standards and judgments, including the timing of revenue and expense recognition. Management can use non-conservative procedures to show the results of company growth (Watts 2003). Although the amount of income reported is important for investors and useful for their decisions, the earnings quality features are also considered by investors (Francis et al. 2005).

Useful information contains quality features. The main qualities associated with information content are relevant and faithful representation. One element of faithful representation is neutrality. In practice, the report compiler often faces uncertainty. Therefore, they apply the principle of caution (conservatism or prudence) in justifying the uncertainty. Conservatism means that in uncertain conditions, the financial report preparer will choose the solution that is least likely to overestimate the reporting of assets or income, and or lower the burden or loss. The conceptual framework of financial reporting identifies that prudence or conservatism conflicts with the quality of neutrality. Therefore, in the conceptual framework of financial reporting, the term conservatism is omitted in the element of accounting information quality.

Another factor that also results in the bias of financial statements is earnings management, which is a considered action by a person to distort financial information from the actual conditions (Scott 2015). Earnings management connotes perversion, fraud, or mystery, similar to other criminal acts (Lo 2008). Accounting scandals and the increasing need for tighter accounting regulations reinforce this perception (Ewert & Wagenhofer 2011). Consistent with this view, the majority of previous studies found that earnings management generally harms the financial reports quality. The consequence of conservatism and earnings management on the quality of reporting is the same, which is the impact of unfairness in the financial statements. Conservatism arises because it follows accounting standards, while earnings management is a personnel action (Ewert & Wagenhofer 2011). Such situations lead to different biases between conservatism and earnings management. Moreover, conservatism is considered good whereas earnings management is considered bad. Based on the above description, the research problem is stated as follow:

RQ$_1$: What is the effect of conservatism on earnings management?

This manuscript is presented as follows. After describing the introduction in part one, this paper presents a literature review and hypotheses development in part two. Part three outlines the research method. After outlining the analysis and discussion in section four, this paper present the conclusions, limitations of the study, and further research opportunities in section five.

This study is based on agency theory. The agency theory predicts and explains agency relationships between principals and agents (Jensen & Meckling 1976). The principals and agent's relationship is colored by personal interests that conflict with each other. This conflict of interest results in the information asymmetry between them. This asymmetry arises because management carries out information engineering for personal gain, using earnings management mechanisms. This happens because most of the sources of stock market activity are financial reports issued by public companies that are used as a basis for making investment decisions by current and potential investors. By increasing resources under management authority, the number of beneficiaries associated with the company will also increase and conditions will create conflicts of interest. Managers who are at the center of this conflict must reduce the conflict by presenting financial information. They are
motivated to present the management version of company information because of the authority and opportunities they have. Therefore, there is a need for a control and monitoring mechanism in protecting the investors’ interests. Accounting principles and procedures for safeguarding the interests of stock market participants and controlling opportunistic incentives for managers suggest the principle of limiting conservatism.

Chen et al. (2010) state that conservatism is a mechanism that inhibits profit-seeking incentives by managers and at the same time reduces their power to speed up the good news reporting and delay the bad news reporting. Thus, a more conservative accounting procedure will reduce the effort to hide bad news. Therefore, Chen (2010) predicts that more conservative companies will face fewer crises due to sudden bad news publishing. Karami et al. (2014) state that accrual accounting gives managers the right to determine profits in different time frames. Thus, managers have control over time recognition of some expenses, for instance, research and development cost, advertising expenses and so on.

García Lara et al. (2012) find that conservatism is a tool to monitor the choice of accounting procedures by management, therefore, it can reduce the opportunities for accrual earnings management, whereas Pae (2007) found that there is a negative relationship between conservatism (conditional and non-conditional) and accruals. Beaver & Ryan (2005) state that conditional conservatism is a practice of reducing net assets value if bad news but never increase net assets when the company obtains profitable information. The application of conditional conservatism refracts earnings decline, thus it can function as a mechanism to overcome earnings management in the form of profit bubbles (Dunbar et al. 2007). Companies have different levels of conservatism from each other. Beaver and Ryan (2005) and Ahmed & Duellman (2012) found cross-sectional differences in conservatism. Besides, Beaver and Ryan (2005) implicitly acknowledge the possibility that conservatism can vary with earnings management activities.

Extant research report mix results. Nahandi et al. (2012), Gao (2013), Haque et al. (2016), and Li & District (2018) report a negative association between accounting conservatism and earnings management, whereas Mashoka et al. (2018) find a positive association between conservatism and earnings management and Kermani et al. (2018) reports that conservatism affects earnings management. Finally, García Lara et al. (2012) report mix finding. He find that conservatism negatively affects accruals manipulation, and positively affects real earnings management, whereas Alarlooq et al. (2014) find that conditional accounting conservatism negatively affect real earnings management, whereas unconditional accounting conservatism positively real earnings management. Based on the description above, the hypothesis formulation is as follows:

H1: Accounting conservatism is significantly associated with earnings management.

RESEARCH METHOD

The data used in this research is Indonesian companies, which are listed on the Indonesia Stock Exchange (IDX) in the year 2016 to 2018. The data comes from the company’s annual report and the Indonesian Capital Market Directory (ICMD). Samples were selected by purposive sampling method with criteria: (1) companies are listed on the IDX for three consecutive years, which is from 2016 to 2018; (2) the companies have complete data needed in this research; (3) the companies are not the financial companies.

This study used one measure of earnings management, accrual earnings management (AEM), which is measured by the
Modified Jones Model (Dechow et al. 1995) in equation (1) as follows:

\[
TAC = \alpha_0 + \alpha_1 \frac{1}{TA_{t-1}} + \alpha_2 \frac{\Delta REV_{t-1} - \Delta AR_{t-1}}{TA_{t-1}} + \alpha_3 \frac{PPE_{t-1}}{TA_{t-1}} + \epsilon_t
\]

TAC is total accrual divided by total assets, TA is total assets, \(\Delta REV\) is the change in revenue, \(\Delta AR\) is the change in account receivables, PPE is gross property, plant, and equipment. The discretionary accrual for the year is the residual value of equation (1). The absolute value of discretionary accruals (ABSDA) is the proxy and measure of accrual earnings management (AEM). The higher the ABSDA number, the greater the AEM.

To test the hypothesis, this study uses accounting conservatism as the dependent variable. Givoly & Hayn (2000) state that conservatism is the decrease in cumulative earnings for the period. They propose cumulative sign and volume accruals in the same time frame as the conservatism measurement scale. In the absence of conservatism, the entire profit will turn into cash inflows and eventually the accrual cycle changes to zero. The spread of negative accruals remains over a long period, taking into account the consistency of other conditions, called the conservatism index. This study follows Ahmed & Duelman (2007) who measure conservatism with the accrual method and present the measurement methods as follows.

\[
\text{Con-Acc} = \frac{NI - CFO + Dep}{AVA_t}
\]

(2)

NI is net income, CFO is cash flow operation activities, Dep is depreciation expense, and AVA is an average asset. Con-Acc is calculated as a mean for 3 years, namely t-1, t1, and t+1, then multiplied by negative 1. Therefore, the calculation of the three-year mean is intended to reduce the effects of large and temporary accruals. If Con-Acc is positive, it means it is more conservative. The concept underlying this measurement is that accounting conservatism results in persistent negative accruals (Givoly & Hayn, 2000). The more negative the accrual rate for three years, the more negative the accounting. The three-year average calculation also guarantees the mitigation of large temporary accruals, because accruals tend to reverse in one or two periods (Richardson et al. 2005). This study uses three control variables, which are the business cycle (Cycle), asset turnover (ROA), and sales growth (SG). The cycle is calculated as follows

\[
\text{Cycle} = \text{AP cycle} - (\text{AR cycle} + \text{Inv. cycle})
\]

(3)

Asset turnover is a ratio that makes it easy to get data about the level of efficiency in the use of company resources and the optimal level of use of limited assets by management. As such, asset turnover is calculated by dividing earnings by the total assets at the beginning of the period (García Lara et al. 2012). Sales growth is a change in the level of annual sales and is calculated by reducing the current year's sales with last year's sales then the result is divided by last year's sales. To test the hypothesis the regression model (4) is:

\[
\text{AEM}_t = \alpha_0 + \beta_1 \text{CON}_t + \beta_2 \text{Cycle} + \beta_3 \text{ROA}_t + \beta_4 \text{SG}_t + \epsilon_t
\]

(4)

RESULT

Descriptive statistics for research variables are presented in Table 1. As presented in Table 1 that all variables have a rational variation level. The mean of AEM is 4.46 and it has a standard deviation of 0.44. This variable has a small data distribution, which is indicated by a minimum and maximum value of 2.25 and 6.06 respectively. The mean of CON is 15.09 with a maximum and minimum value of 929.43 and of -326.18 respectively. It indicates that the variation of this variable data is quite large. This can be indicated by a standard deviation of 79.95. This means that the sample companies have high variation levels of conservatism.
Table 1 Descriptive Statistic

| Variable | Minimum | Maximum | Mean  | Std. Dev. |
|----------|---------|---------|-------|-----------|
| AEM      | 2.25    | 6.06    | 4.46  | 0.44      |
| CON      | -326.18 | 929.43  | 15.09 | 79.95     |
| Cycle    | -97.848 | 715     | -1.482,49 | 8.397,5  |
| ROA      | -0.55   | 3.207   | 0.07  | 0.21      |
| SG       | 0.00    | 890.96  | 2.92  | 49.5      |

Table 2 Bivariate Correlation

| Variable | AEM | SG  | ROA | Con-Acc |
|----------|-----|-----|-----|---------|
| SG       | 0.031|     |     |         |
| ROA      | 0.004| 0.015|     |         |
| Con-Acc  | 0.178| ** | -0.003| 0.054 |
| Cycle    | -0.117| ** | -0.824| ** 0.006| -0.104 |

**; *: Correlation is significant at the 0.01 level and 0.05 level respectively (2-tailed).

The pairwise correlation between independent variables and the correlation between the independent variable and the dependent variable are presented in Table 2. The results of testing the correlation matrix for the study variables showed that there were no multicollinearity problems. The correlation between the SG variable (sales growth) and the Cycle variable is indeed quite high, namely -0.824, but this is because in the cycle variable calculation there is a component of sales revenue. This indicates that there is no multicollinearity problem in this study. The correlation between Con-Acc (conservatism) and AEM (accrual earnings management) shows a positive and significant sign. These results provide an initial indication of the effect of accounting conservatism on earnings management practices and show the direction under the hypothesis. Nevertheless, the hypothesis test will be elaborated further by conducting a multivariate regression analysis in the next session.

This study empirically tests the association between accounting conservatism and earnings management. The regression analysis for hypothesis testing is presented in Table 3. This table shows that the F value is 8.661 and significant at a level of 1% (p<0.01). This indicates that the research model can be used for analysis. Moreover, the table shows a coefficient of determination (R²) of 8%. This explains the relationship between the dependent and all independent variables. The coefficient of determination for cross-data is relatively low because of the large variations between each observation. Yet, this is simply one of the criteria for choosing a good model.

To test the hypothesis, the variable to be tested is CON, which is a proxy for accounting conservatism. Table 3 shows that CON has a coefficient value of 0.013 and this is significant at the 1% level. This result indicates that CON has a positive effect on AEM. This means that accounting conservatism positively affects for accrual earnings management. Thus, hypothesis 1, which states that there is a significant association between accounting conservatism and earnings management, is proven and supported by empirical data. Earnings management measured using ABSDA. The greater the ABSDA number, the greater the accrual earnings management. The results of this study indicate that the implementation of accounting conservatism increases the accrual earnings management practice. This contradicts the prior research conducted by Dunbar et al. (2007) who find that...
the implementation of conditional conservatism refracts earnings decline so that it can function as a mechanism that has the potential to overcome earnings management in the form of profit bubbles. This result also disputes prior research performed by Garcia Lara et al. (2012) which concluded that conservatism is a tool to monitor the choice of accounting procedures by management.

Table 3 Regression Test Result

| Variable | Coefficient | t-Statistics |
|----------|-------------|--------------|
| Intercept | 4.421       | 1411.199     |
| SG       | -0.001      | -54.193      |
| ROA      | -0.038      | -10.961      |
| CON      | 0.013       | 15.721       |
| CYCLE    | -0.001      | -21.949      |
| Adj. R²  | 0.087       |              |
| F-statistics | 8.661      | ***          |

***, **, *: the coefficient is significant at the level of 0.01, 0.05, and 0.1 respectively

Therefore, conservatism can reduce the opportunities for accrual earnings management and Pae (2007) who find that both conditional conservative and unconditional conservative have negative association with discretionary accruals. The difference results of this research to the previous study is likely due to the methodology used. In this study, accounting conservatism is not broken down into conditional and unconditional conservatism, whereas previous studies detail and examine the effect of each type of conditional conservatism and unconditional conservatism on earnings management.

CONCLUSIONS

This research investigates the association between accounting conservatism and accrual earnings management. The hypothesis testing result proves that accounting conservatism positively affects the accrual earnings management. It means that accounting conservatism significantly associated with accrual earnings management. This study has several limitations as follows. First, this study does not divide accounting conservatism into conditional conservatism and unconditional conservatism. Consequently, the results of this study are not in line with the results of previous studies. Nevertheless, this fact provides a new discourse about the measurement of accounting conservatism. This condition opens up the opportunity to conduct further research by conducting an elaboration of comparing two versions of conservatism measurement, namely accrual conservatism used in this study with conditional and unconditional used in previous studies, using the same data. The second limitation, this study does not decompose accounting conservatism data. The decomposition of conservatism data that has a large variation is likely to give more results that are complete. Therefore, further research needs to be done in the future by analyzing the conservatism data that has a large variation.
REFERENCES:

Ahmed, A. S., & Duellman, S. 2007. Accounting conservatism and board of director characteristics: An empirical analysis. Journal of Accounting and Economics, 43(2–3), 411–437. https://doi.org/10.1016/j.jacceco.2007.01.005

Ahmed, A. S., & Duellman, S. 2012. Managerial Overconfidence and Accounting Conservatism. Journal of Accounting Research, 51(1), 1–30. https://doi.org/10.1111/j.1475-679X.2012.00467.x

Alarlooq, M. N. M., Aslani, A., & Azadi, B. 2014. Accounting Conservatism Impact on Real Earnings Management. International Journal of Accounting Research, 1(12), 71–76. Retrieved from http://platform.almanhal.com/GoogleScholar/Details/?ID=2-63473

Beaver, W. H., & Ryan, S. G. 2005. Discussion of “conditional and unconditional conservatism: Concepts and modeling.” Review of Accounting Studies, 10, 269–309. https://doi.org/10.1007/s11142-005-1533-5

Chen, Q., Mittendorf, B., & Zhang, Y. 2010. Endogenous accounting bias when decision making and control interact. Contemporary Accounting Research, 27(4), 1063–1091. https://doi.org/10.1111/j.1911-3846.2010.01038.x

Duchow, P. M., Sloan, R. G., & Sweeney, A. P. 1995. Detecting Earnings Management. The Accounting Review, 70(2), 193–225. https://doi.org/10.1002/9781119204763.ch4

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. 1995. Detecting Earnings Management. The Accounting Review, 70(2), 193–225. https://doi.org/10.1002/9781119204763.ch4

Ewert, R., & Wagenhofer, A. 2011. Earnings management, conservatism, and earnings quality. In Foundations and Trends in Accounting (Vol. 6). https://doi.org/10.1561/1400000025

Francis, J., LaFond, R., Olsson, P., & Schipper, K. 2005. The market pricing of accruals quality. Journal of Accounting and Economics, 39(2), 295–327. https://doi.org/10.1016/j.jacceco.2004.06.003

Gao, P. 2013. A measurement approach to conservatism and earnings management. Journal of Accounting and Economics, 55(2–3), 251–268. https://doi.org/10.1016/j.jacceco.2012.10.001

García Lara, J. M., Garcia Osma, B., & Penalva, F. 2012. Accounting Conservatism and the Limits to Earnings Management. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.2165694

Givoly, D., & Hayn, C. 2000. The changing time-series properties of earnings, cash flows and accruals: Has financial reporting become more conservative? Journal of Accounting and Economics, 29(3), 287–320. https://doi.org/10.1016/S0165-4101(00)00024-0

Haque, A., Mughal, A., & Zahid, Z. 2016. Earning Management and the Role of Accounting Conservatism at Firm Level. International Journal of Economics and Finance, 8(2), 197. https://doi.org/10.5539/ijef.v8n2p197

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.

Karami, G., Taban, M., & Aleyasin, S. 2014. Accounting conservatism and earnings management constraints Council for Innovative Research. International Journal of Management & Information Technology, 10(2), 1828–1836.

Kermani, A. Z., Bigzade, F., & Khodamipor, A. 2018. The Level of Conservatism in Accounting Policies and Its Effect on Earnings Management. International Journal of Advanced Studies in Humanities and Social Science, 7(6), 326–340. https://doi.org/10.5539/ijef.v4n6p78

Li, H., & District, J. 2018. Unconditional Accounting Conservatism and Real Earnings Management. International Journal of Financial Research, 9(2), 203–215. https://doi.org/10.5430/ijfr.v9n2p203

Lo, K. 2008. Earnings management and earnings quality. Journal of Accounting and Economics, 45(2–3), 350–357. https://doi.org/10.1016/j.jacceco.2007.08.002

Mashoka, T., Adden, A., & Abuhommous, A. 2018. The Effect of Conservatism on Earnings Quality. (January 2017).

Nahandi, Y. B., Baghbani, S. M., & Bolouri, A. 2012. Earnings management and accounting conservatism: The case of Iran. African Journal of Business Management, 6(19), 6005–6013. https://doi.org/10.5897/ajbm11.2420
Pae, J. 2007. Unexpected accruals and conditional accounting conservatism. *Journal of Business Finance and Accounting*, 34(5–6), 681–704. https://doi.org/10.1111/j.1468-5957.2007.02018.x

Richardson, S. A., Sloan, R. G., Soliman, M. T., & Tuna, I. 2005. Accrual reliability, earnings persistence and stock prices. *Journal of Accounting and Economics*, 39(3), 437–485. https://doi.org/10.1016/j.jacceco.2005.04.005

Scott, W. R. 2015. Financial accounting theory. In *Prentice Hall Canada* (5th ed.). https://doi.org/10.1016/j.jbiomech.2013.09.028

Watts, R. L. 2003. Conservatism in Accounting Part I: Explanations and Implications. *Accounting Horizons*, 17(3), 207–221. Retrieved from https://doi.org/10.2308/acch.2003.17.3.207