THE EFFECTIVENESS OF AUDIT COMMITTEE AND AUDIT QUALITY TOWARDS EARNINGS MANAGEMENT OF ASEAN PUBLIC COMPANIES

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Abstract

The auditing profession has become so important in the general society as well as the business world because of its responsibility in providing assurance in reporting assets such as sustainability and other information, which a variety of stakeholders have their interests in (Arens et al., 2016). The goal of this study is to observe the relationship between the audit committee and audit quality towards earnings management of public companies that operate in the food, beverage, and tobacco industry in the top three GDP countries in ASEAN between 2018 and 2020. The result from various tests in this paper indicates that audit committee independence and audit quality do affect earnings management significantly. On the other hand, audit committee size did not seem to show any significance in influencing earnings management.

Keywords: Audit Committee Size, Audit Committee Independence, Audit Quality, Earnings Management

1. Introduction

Since the beginning of the 21st century, the world has recorded a huge number of well-known accounting scandals, such as seen from Enron, WorldCom, etc. All have one defining aspect in terms of their core issue, the fact that those correspond to the fundamentals of earnings management. Cases in Indonesia are no different either. For instance, scandals of PT. Hanson, PT. Asuransi Jiwasraya, and PT. Garuda, which are all connected to the manipulation of financial reports. Hence, rising concerns from accounting professionals and regulators towards earnings management.

With regards to earnings management, another indicator of satisfactory financial reporting is the effectiveness of audit committees, which has become more concerning because of accounting scandals such as those mentioned in the previous paragraph. According to Indonesian Institute of Audit Committee under the “About Audit Committee” section, it describes that the duty of an audit committee at the fundamental level is to perform supervisory function, which includes the company’s internal control. Similar statement is also evident from the Institute of Chartered Accountants in England and Wales. One of the main characteristics of an effective audit committee is professional skepticism, which expects that an audit committee is fully aware of the business situation and know appropriate information required at a given point in time.

With that background in mind, the author is intrigued to conduct a research relevant to audit committee and audit quality towards earnings management of public companies operating in the food, beverage, and tobacco industries in ASEAN within the top three GDP countries, namely Indonesia, Philippines, and Thailand. Similar studies done in Indonesia with respect to audit committee and earnings management showed that earnings management is affected by audit committee size, while auditing firm does not (Marsha & Ghozali, 2017). Such is also the case in Thailand where the types of auditor are associated with earnings management level (Piyawiboon, 2015). That is why, this paper is written to study the influence of audit committee and audit quality towards earnings management in ASEAN countries with top three GDP in year 2018-2020.

2. Literature Review and Hypothesis Development

Earnings management is important to a company's performance evaluation. It is of the most importance to supervise and study how the future performance of the management is to be, particularly about earnings, after earnings management has been carried out (Simamora, 2019). The practice of earnings management sacrifices financial report transparency that leads to unreliable earnings data. It also disrupts the degree of reliability associated with decision making by stakeholders which ultimately reduces their trust in the firm. Previous studies in various countries have shown inconsistencies with respect to the study of audit committee and audit quality towards earnings management, with some producing results of no significancy of some chosen indicators.

2.1. Audit Committee Size and Earnings Management

Good corporate governance used to control the company is with the ultimate goal to guarantee that the accuracy and relevance of financial statements made by the company's management (Marsha & Ghozali, 2017). On top of being a part of the board of directors, the audit committee also serves the function of control mechanisms, both in the form of auditing functions, to financial reporting directed at protecting shareholders. Based on the regulations in Indonesia, Thailand, and the Philippines concerning audit committee members, the audit committee of the public companies should have at least three qualified members. Hence, the audit committee size has the potential as an indication of effectiveness in order to achieve good reporting (Supriyaningsih & Fuad, 2016).

H1: Audit committee size is negatively proportional towards earnings management

2.2. Audit Committee Independence and Earnings Management

The status of audit committee independence is essential for the audit committee so that fair exercise of its verdict against financial reporting of a firm can be done. It is found that the independence of audit committee is functional to reduce earnings management (Hanefah & Alkdai, 2012). A similar conclusion is also reached that audit committee comprised of independent directors as the majority is highly significant in reducing earnings management (Kuang & Sharma, 2013). However, there has been no evidence of 100 percent independent audit

committee significance on earnings management, implying that 100 percent of audit committee independence is not necessary to be enforced.

H2: Audit committee independence is negatively proportional towards earnings management

2.3. Audit Quality and Earnings Management

Various studies have examined the relationship between audit quality and earnings management, and the general measurement used is by comparing audit results from big four audit companies and those who are not. There is a negative association between audit quality and earnings management, particularly when audited by big four auditors (Ahmad et al., 2016). A similar outcome is also evident through another research which concluded that big four audit companies have a strong negative correlation with earnings management where it is less probable to manage earnings in order to be disclosed through unexpected discretionary expenses (Rahman et al., 2020).

H3: Audit quality is negatively proportional towards earnings management

2.4. Earnings Management Differences in Indonesia, the Philippines, and Thailand

As previously elaborated, there are differences in results when it comes to studying the impact of audit committee and audit quality towards earnings management. For example, in Thailand, it is concluded that big four auditors are positively related with good earnings management (Piyawiboon, 2015) whereas in Indonesia, it is found that the same variable did not significantly alter earnings management level (Marsha & Ghozali, 2017). In terms of audit committee size, a study found that audit committee size showed a positive relationship with earnings management (Supriyaningsih & Fuad, 2016), while it is the opposite (Marsha & Ghozali, 2017). Therefore, it is expected that there are differences in earnings management in Indonesia, the Philippines, and Thailand.

H4: There are differences in earnings management in Indonesia, the Philippines, and Thailand

3. Methodology

3.1 Sample Selection

The sample in this paper is comprised of public companies across Indonesia, Philippines, and Thailand that operate in food, beverage, and tobacco industry over the year 2018 until 2020. Firms that do not satisfy qualities such as having less than three members in the audit committee, or having no audited financial reports within the required year are excluded. A total of 60 firms were selected with samples amounted 180.

3.2 Dependent Variable

In order to be consistent with previous researches, discretionary accruals with the Modified Jones model are used to indicate earnings management. Discretionary accruals are described as the difference of total accruals and non-discretionary

accruals. First, total accruals are computed by using the following formula (Soliman & Ragab, 2014):

TA = NI – CFO

Where TA is the total accrual in a year, NI is the net income in a year, and CFO is the operating cash flows in a year.

Secondly, non-discretionary accruals are calculated according to the following formula (Soliman & Ragab, 2014):

$$\mathbf{NDA} = \propto \mathbf{1}\left(\frac{\mathbf{1}}{\mathbf{A_{n-1}}}\right) + \propto \mathbf{2}\left(\frac{\mathbf{\Delta REV_n - \Delta REC_n}}{\mathbf{A_{n-1}}}\right) + \propto \mathbf{3}\left(\frac{\mathbf{PPE_n}}{\mathbf{A_{n-1}}}\right) + \in$$

Where ΔREVn is revenues in a year minus that of the previous year, ΔRECn is the net receivables in a year minus that of the previous year, ΔPPEn is the total property plant and equipment in a year, At-1 is the total assets in the previous year, α 1-3 are constants and ε is the residuals.

Lastly, discretionary accruals as an indication of earnings management level are calculated by using the following formula:

DAC = TA – NDA

Where DAC is the discretionary accruals in a year, TA is the total accrual in a year, and NDA is the non-discretionary accruals in a year.

3.3 Independent Variables

The following are the explanations for the dependent variables, independent variables, and control variables:

Dependent Variable

Discretionary Accruals (DAC): measured by the Modified Jones Model

Independent Variable

Audit Committee Size (ACSIZE): measured by the number of people in the audit committee

Audit Committee Independence (ACIND): 1 for when the majority members are independent, 0 for otherwise

Audit Quality (AUQUL): 1 for when the auditor belongs to a big four firm, 0 for otherwise

Control Variables

Leverage (LEV): Measured by debt-to-assets ratio

Cash Flow from Operating Activities (CFO): Operating cash flows divided by the beginning total assets

3.4 Control Variables

Control variables are added into this study so that data that are related to a firm's characteristics or financials that may can be controlled. Such as the research done by Zamri et al., 2013, where it was proven that leverage does affect earnings management and it has the capacity to limit earnings management, and that of Hartono et al., 2018, where earnings management is affected by cash flow to inflate profit earnings. Also, Christiawan & Rahmiati, 2014, found that earnings management was detected in companies with long-term debt as the majority of the financial structure. Nonetheless, Wuryani, 2012, emphasizes that companies of huge size commonly avoid earnings management due to their large amount of assets significant in power bargaining compared to smaller companies. They also tend to prioritize their reputation, thus avoiding earnings management practices.

3.5 Model Specification

The following regression model is made up of the dependent variable (DAC), the independent variable (ACSZE, ACIND, AUQUL), as well as the other variables or the control variables (LEV & CFO) in order for variables related to financial data that might affect the level of earnings management can be controlled:

$$\boldsymbol{DAC = \beta 0 + \beta 1\, ACSIZE + \beta 2\, ACIND + \beta 3 AUQUL + \beta 4\, LEV + \beta 5\, CFO + \varepsilon}$$

4. Results and Discussion

4.1 Descriptive Statistics

Tables 1 to 3 present the variables' range, mean, and standard deviation used in this study. In terms of the dependent variable, which is the discretionary accruals (DAC), Thailand has the highest mean value of -0.029, while the Philippines has the lowest DAC mean at a number of -0.017. This means that out of the samples from each country, the earnings management practice on average is much higher in Thailand than that of the Philippines. On the other hand, Thailand has a high indication of audit committee independence level as well as audit quality level. This can be observed from the mean values of both variables, with values of 0.95 and 0.65. In conclusion, with the same number of samples of 20 firms from each country, Thailand has a nearly perfect score of audit committee independence and high audit quality, which are indicated by firms audited by big four auditing firms, in comparison to Indonesia that has the scores the lowest for both variables, which are at 0.05 and 0.03.

Table 1. Descriptive Statistics (Indonesia)

Variables	Sign	Range	Mean	Standard Deviation
Discretionary Accruals	DAC	0.337	-0.021	0.066
Audit Committee Size	ACSIZE	2	3	0.319

Audit Committee Independence	ACIND	1	0.050	0.220
Audit Quality	AUQUL	1	0.030	0.181
Leverage	LEV	0.633	0.384	0.170
Cash Flows from Operating Activities	CFO	0.699	0.146	0.113

Table 2. Descriptive Statistics (Philippines)

Variables	Sign	Range	Mean	Standard Deviation
Discretionary Accruals	DAC	0.367	-0.018	0.069
Audit Committee Size	ACSIZE	3	4	0.957
Audit Committee Independence	ACIND	1	0.800	0.403
Audit Quality	AUQUL	1	0.250	0.437
Leverage	LEV	0.600	0.522	0.162
Cash Flows from Operating Activities	CFO	0.326	0.064	0.066

Table 3. Descriptive Statistics (Thailand)

Variables	Sign	Range	Mean	Standard Deviation
Discretionary Accruals	DAC	0.307	-0.029	0.067
Audit Committee Size	ACSIZE	2	3.350	0.577
Audit Committee Independence	ACIND	1	0.950	0.220
Audit Quality	AUQUL	1	0.650	0.481
Leverage	LEV	0.736	0.426	0.213
Cash Flows from Operating Activities	CFO	0.565	0.090	0.096

4.2 Multicollinearity Analysis

Multicollinearity in this study is measured through the number of Variance Inflation Factor (VIF), where data with VIF number of more than 10 indicates multicollinearity issue is present. As shown in tables 4 through 6, there are no multicollinearity issues throughout the data from the three countries with average VIF of 1.235, least VIF of 1.016 and maximum VIF of 1.537. Thus, it can be concluded that there are no correlations that are significant among the independent variables in the research model.

Table 4. Multicollinearity (Indonesia)

	T	Sig.	Tolerance	VIF
Audit Committee Size	0.535	0.595	0.861	1.161
Audit Committee Independence	-1.077	0286	0.981	1.020
Audit Quality	2.276	0.027	0.834	1.199
Leverage	-0.716	0.477	0.910	1.099
Cash Flows from Operating Activities	-5.878	0.000	0.723	1.383

Table 5. Multicollinearity (Philippines)

	T	Sig.	Tolerance	VIF
Audit Committee Size	1.420	0.161	0.852	1.174
Audit Committee Independence	-0.550	0.585	0.880	1.137
Audit Quality	-1.036	0.305	0.984	1.016
Leverage	-3.447	0.001	0.692	1.445
Cash Flows from Operating Activities	-7.825	0.000	0.799	1.252

Table 6. Multicollinearity (Thailand)

	T	Sig.	Tolerance	VIF
Audit Committee Size	0.883	0.381	0.900	1.111
Audit Committee Independence	-1.113	0.271	0.825	1.212
Audit Quality	0.420	0.676	0.651	1.537
Leverage	-0.969	0.337	0.735	1.360
Cash Flows from Operating Activities	-3.698	0.001	0.702	1.424

4.3 Autocorrelation Analysis

Autocorrelation test is done with the goal of detecting any special pattern of the data compared to its lagged version. In this paper, the Durbin-Watson approach is used, where the possible range of value starts from 0 up to 4. As presented in tables 7 to 10, the Durbin-Watson values are 1.872, 1.353, and 2.247 for Indonesia, Philippines, and Thailand consecutively. Since the value from Indonesia is much closer to 2, this indicates that the data from Indonesia shows the least indication of autocorrelation problem. Meanwhile, the data from the Philippines indicates a negative autocorrelation with a Durbin-Watson value closer to 4, and Thailand's value stands closer to 1, implying that there is positive autocorrelation issue where an increase at one point would likely lead to another increase in the next time period.

Table 7. Autocorrelation (Indonesia)

R	R Square	Adjusted R Square	Durbin-Watson
0.664	0.441	0.389	1.872

Table 8. Autocorrelation (Philippines)

R	R Square	Adjusted R Square	Durbin-Watson
0.745	0.555	0.514	1.353

Table 9. Autocorrelation (Thailand)

R	R Square	Adjusted R Square	Durbin-Watson
0.518	0.268	0.201	2.247

4.4 Multiple Regression Results

Tables 10 until 12 show the results of running the multiple regression analysis. F-test is done on a model with the purpose of identifying if a linear regression model fits the data compared to the same model without the independent variables being included. When the F significance value is less than 0.05, the model is acceptable and valid to be used for research. The outcomes of the F-test reveal that all data from the observed countries do not stand above 0.05 and hence valid for research purposes. Goodness of fit test also has a similar purpose to the F-test, which is to validate the model with respect to the data. The R^2 values show that the Philippines produces the highest level of 55.5% and next to it is Indonesia with a number of 44.1%, while Thailand stands further at 26.8%. The conclusion is, the data with the best fitness degree towards the model is of the Philippines and Indonesia, while Thailand has lesser capacity to explain the data variability. The values outside of the mentioned proportion are of the other variables which contribute to explaining the data variation, and those are not identified in this research.

The t-test is performed to measure the significance of each independent variables towards the dependent variable. The methodology in evaluating the t-test product is by comparing the t significance level shown on the coefficient table against 0.05, which is the general limit used in various studies. When the significance level passes that point, the observed independent variable indicates a high degree of influence against the dependent variable. The result from Indonesia specifies that both the operating cash flows and the audit quality have high influence towards discretionary accrual with a value of 0.000 and 0.027, while the rest of the independent variables state otherwise. The data from the Philippines shows that the operating cash flows and the DTA ratio highly affect the dependent variable. Lastly, the outcome from Thailand stands out the most, with the operating cash flows being the only significant independent variable where the t significance stands at 0.001.

Table 10. Multiple Regression (Indonesia)

F	Sig.	R	R Square
8.058	0.000	0.664	0.441

	T	Sig.
Audit Committee Size	0.535	0.595
Audit Committee Independence	-1.077	0.286
Audit Quality	2.276	0.027
Leverage	-0.716	0.477
Cash Flows from Operating Activities	-5.878	0.000

Table 11. Multiple Regression (Philippines)

F	Sig.	R	R Square
13.458	0.000	0.745	0.555

	T	Sig.
Audit Committee Size	1.420	0.161
Audit Committee Independence	-0.550	0.585
Audit Quality	-1.036	0.305
Leverage	-3.447	0.001
Cash Flows from Operating Activities	-7.825	0.000

Table 12. Multiple Regression (Thailand)

F	Sig.	R	R Square
3.960	0.004	0.518	0.268

	T	Sig.
Audit Committee Size	0.883	0.381
Audit Committee Independence	-1.113	0.271
Audit Quality	0.420	0.676
Leverage	-0.969	0.337
Cash Flows from Operating Activities	-3.698	0.001

5. Conclusions and Research Limitations

Based on the total samples of 180 financial statements, which are comprised of 60 companies operating in food, beverage, and tobacco industry from 2018 to 2020, there are signs that the audit quality does affect earnings management. The results of the multiple regression analysis, after considering cash flow from operating activities and leverage, showed that the most significant variable is the audit quality and is negatively associated with evidence from Indonesia, while in Thailand and the Philippines such significance is nowhere to be found. However, the audit committee independence along with the audit committee size do not seem to be significant in any of the countries observed. In terms of audit committee independence, the findings from this study are consistent with that of Soliman & Ragab (2014). The same study also affirms that audit quality, which depends on the audit firm carrying out the audit responsibility, is able to curb earnings management.

However, it is important to note that this research is far from perfect and it has various shortcomings. For instance, this study only observes 20 randomly selected companies from each country in the consumer discretionary industry, which include food, beverage, and tobacco companies. As such, it is very possible that the representation from each specific industry may not be equal, hence does not accurately project the same view towards one particular industry classification. Additionally, there is a classical assumption issue which pertains to autocorrelation and the lack of other factors involved in affecting earnings management rate, as explained in the goodness of fit test. Therefore, it is suggested that other factors that make up the characteristics of a company should be considered to observe additional factors that may influence earnings management. The total number of samples should also be increased in order to come up with conclusions that is much better generalized.

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