THE ROLE OF THE AUDIT COMMITTEE
IN ACCOUNTING AND FINANCE
EXPERTISE ON EARNINGS QUALITY

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Abstract

This study aims at examining the effect of the audit committee with accounting and finance expertise on the earnings quality of manufacturing companies in Indonesia. The earnings quality measurement uses the absolute value of discretionary accrual. This study uses three measurements of discretionary accruals, the Jones model (Jones, 1991), the modified Jones (Dechow, Sloan, & Sweeney, 1995), and the Kasznik models (Kasznik, 1999). Further, the current study refers to Badolato, Donelson, and Ege (2014) to identify the audit committee expertise. The data were collected from the Indonesia Stock Exchange (IDX) between 2015 and 2017 with 331 observations. The results showed that audit committees’ characteristics with both accounting and finance expertise have a negative effect on discretionary accrual. Thus, audit committees’ members with both accounting and finance expertise have reduced the level of discretionary accruals. The result is consistent using three measurements of discretionary accruals. Therefore, the audit committee members with both accounting and finance expertise have a positive effect on improving the quality of firms’ earnings. Our result is robust to different methods of discretionary accrual measurement. This study may be very helpful for those audit committees seeking to improve their composition and way of working. In other words, the findings of this study are potentially relevant to both audit committees and policy-makers.

Keywords: Audit Committee, Discretionary Accruals, Financial Expertise, Earnings Quality

1. INTRODUCTION

The role of audit committees in ensuring the quality of corporate financial reporting has come under considerable scrutiny due to recent high-profile accounting scandals or “earnings management” cases (e.g., waste management and WorldCom) and the collapse of Enron. Several fraud cases have brought attention, such as scandals in Garuda Indonesia, Jiwasraya, etc. One of the important aspects for shareholders in making investment decisions is the quality of the information in the capital market. Capital Market Supervisory Agency has the interest to encourage listed companies to provide better information to the shareholder. Investors are likely to give attention to earnings information to make investment decisions (Lee, 2013), so earnings quality will play a very important
role in the reliability of the information received by investors. One major determinant of improving earnings quality is the quality of corporate governance. Previous studies showed that companies with good corporate governance have better earnings quality (Jiang, Lee, & Anandarajan, 2008; El-Sayed & Elbad, 2013).

One of the important mechanisms in corporate governance is the audit committee. Effective audit committees have a positive effect on achieving better firm performance (Al Farooghe, Buachoorn, & Sun, 2020; ELBahar, El-Bannany, & El Baradie, 2021) and provide more disclosure to the stakeholder (Agyei-Mensah, 2019; Raimo, Vitalla, Marrone, & Rubino, 2021). Pathak, Samba, and Li (2021) also provide evidence that diversity in audit committees helps to reduce the likelihood of financial restatement. The audit committee helps the board of commissioners to provide a supervisory function in preparing and reporting financial statements (Nelson & Devi, 2013). This means that the committee is relevant in improving the earnings quality (Baxter & Cotter, 2009; Bilal, Chen, & Konal, 2018). Moreover, it helps to enhance the effectiveness and efficiency of the internal and external audit processes (Siagian & Tresnaningsih, 2011).

The characteristics and the qualifications of audit committee members determine their effectiveness in fulfilling the supervisory function of the company. For instance, their expertise plays an important role in providing quality advice and detecting errors in the financial statements to improve earnings quality (Nelson & Devi, 2013). Bilal et al. (2018) and Kusnadi, Leong, Suwardy, and Wang (2016) reported that audit committees with financial-related expertise improve the financial reporting quality. Additionally, other studies established that it could reduce earnings management activities in the company (Mohd Saleh, Mohd Iskandar, & Mohd Rahmat, 2007; García, Barbadillo, & Pérez, 2012; Badolato, Donelson, & Ege, 2014; Sharma & Kuang, 2014).

The Sarbanes-Oxley Act (SOX), Section 407, also highlights the significant financial expertise. It requires the company's committee to have one member with financial expertise in accounting and finance. In Indonesia, this aspect is also got attention from the regulator. First, the Chairman of Capital Market and Financial Services Supervisory Agency issues Decree No. Kep-29/PM/2004,ices an audit committee should have one member with an educational background and expertise in accounting or finance. However, this provision was updated by the Capital Market and Financial Services Supervisory Agency’s Chairman Decree No. KEP-643/BL/2012 shows that at least one audit committee member should have an educational background in accounting and finance. Furthermore, Financial Authority Service issues Regulation No. 55/P0JK.04/2015 that stress the importance of accounting and finance expertise in the audit committee.

The SOX Section 407 categorizes audit committee expertise into accounting financial and non-accounting financial. The accounting financial aspect focuses on reporting and preparing financial statements, whereas non-accounting involves management processes and the company's operational activities (Dwiharyadi, 2017). The question is whether a combination of these two simultaneously can improve the effectiveness of the audit committee. Previous studies did not fully examine the differences between accounting and non-accounting financial expertise in an audit committee.

Nevertheless, most empirical studies perceive these two aspects as the same thing (Prasetyo, 2014; Amin, Lukviarman, Suhardjanto, & Setiany, 2018; Siagian & Siregar, 2018).

Previous studies reported inconsistent results that examined the effectiveness of an audit committee in conducting supervisory functions in examining the accuracy of financial reporting. Dwiharyadi (2017) and Siagian and Siregar (2018) showed that audit committees with financial expertise are not fully efficient in reducing earnings management. This result is in line with the study of Hermawan (2011), which showed that audit committees were not effective in improving the quality of earnings. Furthermore, Hermawan and Adinda (2012) did not show the role of the committee in improving earnings quality in state-owned companies. Conflicting results come from Prasetyo (2014) that audit committees with financial expertise reduced the possibility of fraud engineered in the financial reporting and improved the earnings quality. Similarly, Amin et al. (2018) showed that the expertise of the audit committee enhances earnings quality.

This study aims at examining the effect of accounting and finance expertise at audit committee on earnings quality. First, the current study investigates the effect of accounting expertise on earnings quality. Second, investigates the effect of finance expertise at audit committee on earnings quality. Third, the current study investigates the effect of both accounting and finance expertise simultaneously at the audit committee on earnings quality.

The remainder of the paper proceeds as follows. Section 2 provides a discussion on the literature review and hypothesis development. Section 3 provides a discussion on the research methodology aspect. Section 4 provides the result of the hypothesis testing and discussion. Finally, the last section is a conclusion.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This study uses agency theory (Jensen & Meckling, 1976) to explain the relationship between audit committee expertise and earnings quality. Agency theory argues that there is a conflict between agent and principal. Each party assumes others make a decision based on their interest. There is an information asymmetry between agent and principal. The principal (shareholders) gives discretion to the agent (management) to manage a company. Managers have more information regarding the firm condition and prospects compared to the shareholders. Therefore, it needs monitoring activity regarding the management work and performance. Indonesia uses two-tier board systems, which are comprised of a board of
commissioners and a board of directors. The board of commissioners has a supervisory function to the board of directors, while the board of directors manages firms’ operation and management. Both board of commissioners and board of directors appointed by the Annual General Meeting of Shareholders. Further, the board of commissioners forms an audit committee to help them to supervise and monitor the financial statement. In this case, the audit committee, as part of the board of commissioners, monitors the management work, especially at the financial aspect. Financial Authority Service issued Regulation No. 55/POJK.04/2015 that states one of the roles of this committee is to supervise financial statements, projections, and other reports related to the company’s financial information. Thus, the audit committee’s supervision greatly affects the quality and credibility of financial statements (Nelson & Devi, 2013).

The audit committee ensures that the management does not take actions or practices detrimental to the company through earnings management. Supervision helps to limit earnings management with personal interests that conflict with the company (Setiawan, Phua, Chee, & Trinugroho, 2020). Earnings management decreases the quality of its earnings (Bilal et al., 2018). Earnings are one of the important indicators for companies’ performance and achievement that investors are concerned by in making investment decisions. Hence, maintaining the earnings quality level helps to protect investors’ or shareholders’ interest and relates to the company's financial reporting (Dwiharyadi, 2017; Wu, Hsu, & Haslam, 2016). This motivates the study in examining the characteristics of the audit committee's expertise, specifically accounting and finance expertise and its impact on earnings quality.

**Audit committee expertise and earnings quality**

The audit committee expertise determines the quality of the company’s earnings due to its financial reporting supervisory function. Their understanding of financial statements and information enhances effectiveness in detecting any potential fraud. The previous studies provide evidence that financial expertise provides a positive effect on the cash holding, leverage, and dividend payment to the shareholder (Al Lawati & Hussaineey, 2021). Thus, financial expertise has a positive effect on the firm outcome. Nelson and Devi (2013) and Amin et al. (2018) established that financial expertise positively affects a company’s earnings quality. This is in line with Mohd Saleh et al. (2007) and Badolato et al. (2014), which found that this aspect reduced the potential of earnings management practices. Agyei-Mensah and Yeboah (2019) also find that the financial expertise in the audit committee has negatively affected discretionary accrual. Thus, financial expertise has a positive effect on earnings quality. On the other hand, Siagian and Siregar (2018) do not find a significant relationship between financial expertise and earnings management. However, accounting expertise in audit committees has reduced the level of earnings management in family firms in Indonesia (Suprianto, Rahmawati, Setiawan, & Aryani, 2019).

There is still debate in the academic literature regarding the type of audit committee financial expertise that is more effective between accounting and finance. Thus, the following hypotheses are formulated:

**H1:** The existence of audit committee members with accounting expertise positively affects earnings quality.

**H2:** Audit committee members with finance expertise positively affect earnings quality.

**H3:** Audit committee members with accounting expertise and finance expertise positively affect earning quality.

### 3. METHODOLOGY

#### 3.1. Population and data sample

The population includes companies listed on the IDX, specifically, listed companies from the manufacturing sector during the 2015-2017 period. The total observations collected 331 year-company. Secondary data were obtained from the annual reports of listed companies, on the IDX website and the companies’ websites.

#### 3.2. Variables and measurements

The dependent variable is earnings quality, with discretionary accruals is used as a proxy. This study uses three measurements of discretionary accruals, the Jones, the modified Jones, and the Kasznik models. These three measurements were used in the analysis to ensure the consistency of the results.

The Jones (1991) discretionary accruals with equality model are as follows in equation (1).

The modified Jones (Dechow, Sloan, & Sweeney, 1995) discretionary accruals with equality model are as follows in equation (2).

The Kasznik (1999) discretionary accruals with equality model are as follows in equation (3).

\[
TA_{it} = \frac{\Delta REV_{it}}{A_{it-1}} + \beta_1 \frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}} + \beta_2 \frac{PPE_{it}}{A_{it-1}} + \epsilon_{it}
\]

\[
TA_{it} = \frac{\Delta REV_{it}}{A_{it-1}} + \beta_1 \frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}} + \beta_2 \frac{PPE_{it}}{A_{it-1}} + \epsilon_{it}
\]

\[
TA_{it} = \frac{\Delta REV_{it}}{A_{it-1}} + \beta_1 \frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}} + \beta_2 \frac{PPE_{it}}{A_{it-1}} + \beta_3 \frac{\Delta CFO_{it}}{A_{it-1}} + \epsilon_{it}
\]
where, TA_{it} is total accruals; A_{it-1} is total asset at the beginning of the year; ΔREV_{it} is the change in revenues; ΔREC_{it} is the change in receivable; PPE_{it} is gross property, plant, and equipment; ΔCFO_{it} is the change in cash from operations.

The independent variable is the expertise of the audit committee, grouped into accounting and finance expertise. The ACCT_FINN_DUMMY variable was applied because it accommodates these two aspects. It is required by the regulator that listed companies have at least one committee member with both expertise, represented in ACCT_FINN_DUMMY variable.

This study uses Badolato et al. (2014) as a reference to categorize audit committee expertise on the basis of their work experience. The annual report provided the work experience of the committee. SOX Section 407 requires listed companies to submit information and details of audit committee members with financial expertise, a position adopted in Regulation No. 55/POJK.04/2015. These regulations require companies to prepare an audit committee charter that contains the composition, structure, and membership requirements.

The study includes several control variables, including audit committee meeting (MEET), audit committee size (MEMB), profitability (ROA), leverage (DAR), company size (SIZE), profit/loss (LOSS), company growth (GROWTH), and audit quality (BIG4), as shown in Table 1.

Table 1. Variable description

| Variable | Description | Source |
|----------|-------------|--------|
| JONES    | The absolute value of the Jones model discretionary accruals. | Jones (1991) |
| MOD_JONES| The absolute value of the Jones model discretionary accruals. | Dechow et al. (1995) |
| KASZNIK  | The absolute value of the Kasznik model discretionary accruals. | Kasznik (1999) |
| ACCT_DUMMY| Value 1 if the audit committee has at least one member having only financial expertise and 0 if otherwise. | Dhaliwal et al. (2010) |
| FINN_DUMMY| Value 1 if the audit committee has at least one member with both accounting and finance expertise and finance expertise and 0 if otherwise. | Dhaliwal et al. (2010) |
| MEET     | Total of meetings held by the audit committee in 1 year. | Setiawan et al. (2020), Xie, Davidson, and DaDalt (2003) |
| MEMB     | Total of audit committee members. | Mohd Saleh et al. (2007), Setiawan et al. (2020) |
| ROA      | Profitability ratios measured using return on assets (ROA). | Be’dard, Chiouron, and Courteau (2004), Habbash, Sindezingue, and Salama (2013) |
| DAR      | Leverage ratio measured using the debt-to-asset ratio (DAR). | Krishnan, Wen, and Zhao (2011), Yang and Krishnan (2005) |
| SIZE     | Firm size from the natural logarithm of total assets. | Be’dard et al. (2004), Habbash et al. (2013), Xie et al. (2003) |
| LOSS     | Value 1 if the company records a loss at the end of the period and a value of 0 if otherwise. | Mishra and Malhotra (2016) |
| GROWTH   | Company growth on company profit. | Bryce, Ali, and Mather (2015) |
| BIG4     | Value 1 if the public accounting firm that audits the company is included in Big 4 and 0 if otherwise. | De Vlamincz and Sarens (2015) |

The panel data regression analysis method was used to test the hypotheses of this study. There are three main regression equation models used in this study as follows:

Model 1

\[ JONES = \alpha + \beta_1ACCT_DUMMY + \beta_2FINN_DUMMY + \beta_3ACCT_FINN_DUMMY + \beta_4MEET + \beta_5MEMB + \beta_6ROA + \beta_7DAR + \beta_8SIZE + \beta_9LOSS + \beta_{10}GROWTH + \beta_{11}BIG4 + \epsilon \]  (4)

Model 2

\[ MOD_JONES = \alpha + \beta_1ACCT_DUMMY + \beta_2FINN_DUMMY + \beta_3ACCT_FINN_DUMMY + \beta_4MEET + \beta_5MEMB + \beta_6ROA + \beta_7DAR + \beta_8SIZE + \beta_9LOSS + \beta_{10}GROWTH + \beta_{11}BIG4 + \epsilon \]  (5)

Model 3

\[ KASZNIK = \alpha + \beta_1ACCT_DUMMY + \beta_2FINN_DUMMY + \beta_3ACCT_FINN_DUMMY + \beta_4MEET + \beta_5MEMB + \beta_6ROA + \beta_7DAR + \beta_8SIZE + \beta_9LOSS + \beta_{10}GROWTH + \beta_{11}BIG4 + \epsilon \]  (6)
4. ANALYSIS

Table 2 shows the results of the descriptive statistical test of the 331 observations sample.

Table 2 shows that the discretionary accrual Jones model has a minimum value of 0.001, a maximum value of 0.585, a mean value of 0.061, and a standard deviation of 0.073. The modified Jones model has a minimum value of 0.000, a maximum value of 0.590, a mean value of 0.061, and a standard deviation of 0.073. The results from the descriptive statistics for the three models are absolute values, which are used on the basis of Sánchez-Ballesta and García-Meca (2007).

Table 2. Descriptive statistics

| Variable   | Mean  | Median | Maximum | Minimum | Std. dev. | Observations |
|------------|-------|--------|---------|---------|-----------|--------------|
| JONES      | 0.061 | 0.038  | 0.585   | 0.001   | 0.073     | 331          |
| MOD_JONES  | 0.049 | 0.033  | 0.516   | 0.000   | 0.054     | 331          |
| KASZNIK    | 0.061 | 0.040  | 0.590   | 0.000   | 0.073     | 331          |
| ACCT_PROP  | 0.327 | 0.333  | 1.000   | 0.000   | 0.265     | 331          |
| FINN_PROP  | 0.194 | 0.000  | 1.000   | 0.000   | 0.252     | 331          |
| ACCT_FINN_PROP | 0.208 | 0.000  | 1.000   | 0.000   | 0.248     | 331          |
| MEET       | 6.589 | 4.000  | 46.000  | 2.000   | 5.013     | 331          |
| MEMB       | 3.054 | 3.000  | 5.000   | 2.000   | 0.361     | 331          |
| ROA        | 0.042 | 0.028  | 0.716   | -0.276  | 0.095     | 331          |
| DAR        | 0.454 | 0.461  | 0.989   | 0.000   | 0.207     | 331          |
| SIZE       | 14.736| 14.558 | 19.505  | 8.942   | 1.064     | 331          |
| GROWTH     | 0.110 | 0.037  | 18.182  | -0.061  | 1.066     | 331          |

Table 3. Descriptive statistics for dummy variables

| Variable    | Frequency | Observations |
|-------------|-----------|--------------|
| ACCT_DUMMY  | 0.704     | 331          |
| FINN_DUMMY  | 0.435     | 331          |
| ACCT_FINN_DUMMY | 0.480   | 331          |
| LOSS        | 0.239     | 331          |
| BIG4        | 0.290     | 331          |

Notes: JONES = discretionary accrual Jones model; MOD_JONES = discretionary accrual Jones model; KASZNIK = Kasznik model discretionary accruals; ACCT_PROP = proportion of member's audit committee with accounting expertise background; FINN_PROP = proportion of member's audit committee with finance expertise background; ACCT_FINN_PROP = proportion of member's audit committee meetings in one year; MEMB = number of audit committee members; ROA = company's profitability; DAR = company's leverage; SIZE = company's size; LOSS = dummy variable if company's loss; GROWTH = company's growth.

Table 3 shows that from 2015 to 2017, manufacturing companies had 70.4% of their audit committee members with accounting expertise, 43.5% of the audit committee members had financial expertise, and 48% had financial expertise in both aspects. The correlation matrix is presented in Table A.1 (see Appendix).

5. DISCUSSION

Table 4 shows the accounting expertise in the audit committee has no significant effect on discretionary accrual. This result shows the accounting expertise might not have minimized the level of earnings management. This result does not confirm the expectation that accounting experts will have a positive effect on earnings quality. However, the current result is in line with Siagian and Siregar (2018) who find no significant effect of expertise in finance on earnings management.
Further, Table 4 also shows that finance expertise has no significant effect on discretionary accruals. There is no difference between an audit committee with finance expertise and an audit committee without finance expertise. The result does not confirm the expectation that predicts the significant effect of finance expertise on discretionary accrual. This result is not in line with the hypotheses. This result does not confirm the previous studies, such as Nelson and Devi (2013), Amin et al. (2018), Mohd Saleh et al. (2007), Badolato et al. (2014), and Agyei-Mensah and Yeboah (2019) find the positive effect of expertise in finance on the earnings quality. Based on the result in Table 4, hypotheses H1 and H2 were rejected. On the other hand, Table 4 shows the result of both accounting and finance expertise simultaneously to the discretionary accruals. The result is negatively significant. There is a significant difference regarding the level of discretionary accrual between audit committees with both finance and accounting expertise and audit committees without both finance and accounting expertise.

This result can be interpreted to mean that audit committee members with both finance and accounting expertise help to improve a company’s earnings quality. The existence of both finance and accounting expertise provides positive value to the company. These both expertise complement each other to provide better supervisory function regarding the quality of financial statements. There is better earnings quality with audit committees that have both accounting and finance expertise compared to without both finance and accounting expertise. Therefore, the current study confirms the expectation that both accounting and finance expertise have a positive effect on earnings quality. The third hypothesis (H3) is accepted. Table 4 also showed the result of statistical testing for three measurements of discretionary accruals: Jones (1991) model, modified Jones model (Dechow et al., 1995), and Kasznik (1999) model. The result of statistical testing provides a consistent result. Nevertheless, the test results also showed that ACCT_DUMMY and FINN_DUMMY variables do not affect discretionary accruals with the same results for each model.

These results are in line with those of Dhalilwal et al. (2010), who showed that companies with audit committee members that have both expertise at once have lower discretionary accruals and better earnings quality. Thus, the application of Financial Authority Service Regulation No. 55/POJK.04/2015 enhances the effectiveness of the audit committee’s supervisory function.

Robustness test

A robustness test was conducted to determine whether a higher proportion of committee members with accounting and finance expertise affects their supervisory function and earnings quality. The first test involved replacing the measurement of the audit committee’s expertise variable with the proportions suggested by Badolato et al. (2014) and Dwiharyadi (2017) to determine the consistency of the results listed in Table 4. The results are shown in Table 5.

Table 4. Regression results

| Variable          | Jones        | Modified Jones | Kasznik     |
|-------------------|--------------|----------------|-------------|
|                   | Coef.        | Prob.          | Coef.       | Prob.        | Coef.       | Prob.        | Coef.       | Prob.        |
| Constant          | 0.161        | 0.002***       | 0.148       | 0.004***     | 0.108       | 0.005***     |             |              |
| ACCT_DUMMY        | 0.004        | 0.697          | 0.006       | 0.514        | 0.001       | 0.856        |             |              |
| FINN_DUMMY        | 0.000        | 0.977          | 0.004       | 0.649        | 0.002       | 0.722        |             |              |
| ACCT_FINN_DUMMY   | -0.024       | 0.006***       | -0.024      | 0.002***     | -0.017      | 0.008***     |             |              |
| MEET              | 0.000        | 0.957          | 0.000       | 0.866        | 0.000       | 0.510        |             |              |
| MEMB              | 0.004        | 0.720          | 0.005       | 0.686        | 0.012       | 0.185        |             |              |
| ROA               | 0.217        | 0.000***       | 0.224       | 0.000***     | 0.202       | 0.000***     |             |              |
| DAR               | 0.002        | 0.941          | 0.000       | 0.993        | 0.011       | 0.502        |             |              |
| SIZE              | -0.008       | 0.011**        | -0.007      | 0.018**      | -0.007      | 0.003***     |             |              |
| LOSS              | 0.022        | 0.052*         | 0.021       | 0.058*       | 0.030       | 0.000***     |             |              |
| GROWTH            | -0.001       | 0.863          | -0.001      | 0.730        | -0.002      | 0.390        |             |              |
| BIG4              | -0.023       | 0.033**        | -0.024      | 0.024**      | -0.020      | 0.012***     |             |              |
| W                 | 0.008        | 0.104          | 0.014       | 0.073        | 0.108       |             |             |              |
| Adjusted R²       | 0.067        | 0.073          | 0.073       | 0.073        |             |             |             |              |
| F-statistic       | 3.146        | 3.351          | 4.649       |             |             |             |             |              |
| Prob. (F-statistic)| 0.000        | 0.000          | 0.000       |             |             |             |             |              |
| Obs.              | 331          | 331            | 331         |             |             |             |             |              |

Notes: *, **, and *** indicate significance at 1%, 5%, and 10%, respectively; ACCT_DUMMY = dummy variable if 1 member of the audit committee has accounting financial expertise background; FINN_DUMMY = dummy variable if 1 member of the audit committee has non-accounting financial expertise background; ACCT_FINN_DUMMY = dummy variable if 1 member of the audit committee has both accounting and non-accounting financial expertise background; MEET = audit committee meetings in one year; MEMB = number of audit committee members; ROA = company’s profitability; DAR = company’s leverage; SIZE = company’s size; LOSS = dummy variable if company’s loss; GROWTH = company’s growth; BIG4 = audit firm.
Table 5. Robustness test dummy

| Variable          | Jones | Coef. | Prob. | Modified Jones | Coef. | Prob. | Kasznik | Coef. | Prob. |
|-------------------|-------|-------|-------|---------------|-------|-------|---------|-------|-------|
| Constant          |       | 0.159 | 0.003*** | 0.148 | 0.005*** | 0.110 | 0.005*** |       |       |
| ACCT_PROP         | −0.003| 0.890 | −0.002 | 0.902 | −0.006 | 0.681 |         |       |       |
| FINN_PROP         | −0.014| 0.490 | −0.008 | 0.578 | −0.004 | 0.800 |         |       |       |
| ACCT_FINN_PROP    | −0.047| 0.018** | 0.052 | 0.007*** | −0.036 | 0.013** |       |       |       |
| MEET              | 0.000 | 0.880 | 0.000  | 0.762 | 0.000  | 0.462 |         |       |       |
| MEMB              | 0.003 | 0.817 | 0.004  | 0.750 | 0.011  | 0.242 |         |       |       |
| ROA               | 0.226 | 0.000*** | 0.235 | 0.000*** | 0.208 | 0.000*** |       |       |       |
| DAR               | 0.005 | 0.811 | 0.004  | 0.846 | 0.014  | 0.380 |         |       |       |
| SIZE              | −0.007| 0.022** | −0.006 | 0.035** | −0.006 | 0.005*** |       |       |       |
| LOSS              | 0.022 | 0.054*  | 0.022  | 0.055*  | 0.030  | 0.000*** |       |       |       |
| GROWTH            | 0.000 | 0.329 | −0.001 | 0.838 | −0.002 | 0.454 |         |       |       |
| BIG4              | −0.023| 0.035** | −0.024 | 0.023** | −0.020 | 0.012** |       |       |       |
| R                 | 0.093 | 0.102  | 0.137  |       |       |       |         |       |       |
| Adjusted R²       | 0.062 | 0.071  | 0.107  |       |       |       |         |       |       |
| F-statistic       | 2.976 | 3.276  | 4.593  |       |       |       |         |       |       |
| Prob. (F-statistic)| 0.001| 0.000  | 0.000  |       |       |       |         |       |       |
| Obs.              | 331   | 331    | 331    |       |       |       |         |       |       |

Notes: *, **, and *** indicate significance at 1%, 5%, and 10%, respectively; ACCT_PROP = proportion of member's audit committee with accounting financial expertise background; FINN_PROP = proportion of member's audit committee with non-accounting financial expertise background; ACCT_FINN_PROP = proportion of member's audit committee with both accounting and non-accounting financial expertise background; MEET = audit committee meetings in one year; MEMB = number of audit committee members; ROA = company's profitability; DAR = company's leverage; SIZE = company's size; LOSS = dummy variable if company's loss; GROWTH = company's growth; BIG4 = audit firm.

Table 5 shows the results are consistent with those in Table 4. The ACCT_FINN_PROP variable negatively affects the discretionary accrual variable, whereas the ACCT_PROP and FINN_PROP have no impact. This is in line with each discretionary accrual measurement model, including the Jones, modified Jones, and Kasznik models. The proportion of audit committees with two expertise negatively affects discretionary accruals. This means that a higher proportion of audit committees with both accounting and finance expertise positively affects earnings quality (Dwiharyadi, 2017).

This study used discretionary accruals to proxy earnings quality. The smaller discretionary accruals value signified better earnings quality. Discretionary accruals often have a positive and negative value to increase profits and minimize losses, respectively. A second robust test was conducted to increase confidence from the results by dividing the sample into positive and negative discretionary accruals. This test was in accordance with He and Yang (2014), and Tables 6 and 7 list the results.

Table 6 shows that having at least one member with accounting and non-accounting expertise reduces the chances of discretionary accruals, as shown in the Jones and modified Jones models with positive and negative values. In the Kasznik model, only negative discretionary accruals are affected by the presence of an audit committee with accounting and non-accounting expertise.

Table 7 shows the proportion of the audit committee members with accounting and non-accounting backgrounds affects discretionary accrual values on the Jones, modified Jones, and Kasznik models. The results showed that the proportion of audit committees only affects Jones's discretionary accruals. Moreover, it positively and negatively affects the Jones model's discretionary accruals but negatively affects the Kasznik model's discretionary accruals.

In other studies, the audit committees with accounting and non-accounting expertise do not affect the discretionary accruals for the Jones, modified Jones, and Kasznik models. The robust tests established that the audit committee with two expertise in accounting and finance have an increased influence in minimizing discretionary accruals for better earnings quality.
### Table 6. Robustness test using a dummy variable for audit committee expertise

| Variable               | Jones (-) | Jones (+) | Modified Jones (-) | Modified Jones (+) | Kasznik (-) | Kasznik (+) |
|------------------------|-----------|-----------|--------------------|--------------------|-------------|-------------|
| **Constant**           | 0.154     | 0.005**   | 0.111              | 0.123              | 0.183       | 0.005**     |
| **ACCT_DUMMY**         | -0.010    | 0.432     | 0.016              | -0.249             | 0.106       | 0.131       |
| **FINN_DUMMY**         | -0.017    | 0.158     | 0.011              | 0.396              | -0.016      | 0.204       |
| **ACCT_FINN_DUMMY**    | -0.024    | 0.041**   | -0.023             | 0.058**            | -0.025      | 0.033**     |
| **MEET**               | -0.001    | 0.384     | 0.000              | 0.742              | -0.001      | 0.294       |
| **MEMB**               | 0.007     | 0.708     | -0.003             | 0.881              | 0.008       | 0.666       |
| **ROA**                | 0.030     | 0.735     | 0.334              | 0.000***           | 0.033       | 0.711       |
| **SIZE**               | 0.009     | 0.024**   | -0.004             | 0.364              | -0.009      | 0.023**     |
| **LOSS**               | 0.026     | 0.113     | -0.005             | 0.742              | 0.026       | 0.099**     |
| **GROWTH**             | -0.036    | 0.649     | 0.001              | -0.771             | 0.013       | 0.597       |
| **BIG4**               | -0.013    | 0.398     | -0.028             | 0.051*             | -0.016      | 0.272       |
| **R**                  | 0.126     | 0.206     | 0.129              | 0.230              | 0.208       | 0.261       |
| **Adjusted R²**        | 0.060     | 0.130     | 0.066              | 0.173              | 0.133       | 0.206       |
| **F-statistic**        | 1.999     | 3.660     | 2.049              | 4.202              | 3.790       | 4.749       |
| **Prob. (F-statistic)**| 0.012     | 0.000     | 0.027              | 0.000              | 0.000       | 0.000       |
| **Obs.**               | 163       | 164       | 160                | 171                | 164         | 167         |

Notes: *, **, and *** indicate significance at 1%, 5%, and 10%, respectively; **ACCT_DUMMY** = dummy variable if 1 member of audit committee has accounting financial expertise background; **FINN_DUMMY** = dummy variable if company's size; **MEET** = audit committee meetings in one year; **MEMB** = number of audit committee members; **ROA** = company's profitability; **DAR** = company's leverage; **SIZE** = company's size; **LOSS** = dummy variable if company's loss; **GROWTH** = company's growth; **BIG4** = audit firm.

### Table 7. Robustness test using the proportion of audit committee members

| Variable               | Jones (-) | Jones (+) | Modified Jones (-) | Modified Jones (+) | Kasznik (-) | Kasznik (+) |
|------------------------|-----------|-----------|--------------------|--------------------|-------------|-------------|
| **Constant**           | 0.200     | 0.005**   | 0.110              | 0.119              | 0.194       | 0.005***    |
| **ACCT_PROP**          | 0.007     | 0.793     | -0.014             | 0.069              | -0.007      | 0.797       |
| **FINN_PROP**          | -0.014    | 0.607     | -0.021             | 0.457              | -0.023      | 0.406       |
| **ACCT_FINN_PROP**     | -0.033    | 0.230     | -0.065             | 0.017**            | -0.054      | 0.058*      |
| **MEET**               | -0.029    | 0.527     | -0.016             | 0.951              | -0.025      | 0.958*      |
| **MEMB**               | 0.001     | 0.933     | -0.003             | 0.874              | 0.002       | 0.926       |
| **ROA**                | 0.056     | 0.528     | 0.342              | 0.000***           | 0.063       | 0.480       |
| **SIZE**               | 0.007     | 0.807     | 0.001              | 0.569              | 0.016       | 0.607       |
| **LOSS**               | 0.010     | 0.014**   | -0.002             | 0.610              | -0.009      | 0.021**     |
| **GROWTH**             | 0.015     | 0.602     | 0.000              | 0.591              | 0.017       | 0.553       |
| **BIG4**               | -0.012    | 0.425     | -0.026             | 0.069*             | -0.016      | 0.289       |
| **R**                  | 0.108     | 0.207     | 0.123              | 0.235              | 0.195       | 0.252       |
| **Adjusted R²**        | 0.044     | 0.135     | 0.059              | 0.188              | 0.139       | 0.298       |
| **F-statistic**        | 1.676     | 3.678     | 1.936              | 4.046              | 3.492       | 4.529       |
| **Prob. (F-statistic)**| 0.084     | 0.000     | 0.039              | 0.000              | 0.000       | 0.000       |
| **Obs.**               | 164       | 167       | 164               | 167                | 171        | 160         |

Notes: *, **, and *** indicate significance at 1%, 5%, and 10%, respectively; **ACCT_PROP** = proportion of member's audit committee with accounting financial expertise background; **FINN_PROP** = proportion of member's audit committee with financial expertise background; **MEET** = audit committee meetings in one year; **MEMB** = number of audit committee members; **ROA** = company's profitability; **DAR** = company's leverage; **SIZE** = company's size; **LOSS** = dummy variable if company's loss; **GROWTH** = company's growth; **BIG4** = audit firm.
6. CONCLUSION

This paper contributes to the literature by providing insights into the specific aspects of the effectiveness of the audit committees by focusing on the audit committee’s oversight of financial earnings quality. This study is aimed to investigate audit committees with accounting expertise, financial expertise, or a combination of both affect a company’s earnings quality, proxied by discretionary accruals. The results showed that audit committees with accounting and financial expertise had a better impact on the company’s earnings quality. According to Nelson and Devi (2013), an audit committee with this expertise would promote better financial reporting quality and an efficient supervisory system, which resulted in improved earnings quality. For the audit committees to efficiently perform their responsibilities, they must have the capability that would provide them with a greater degree of expertise in performing the functions entrusted to them. Those who are exercising control over the auditor should have adequate knowledge, experience, and skills in the fields of accounting, financial auditing, and finance. It is also important that the auditor respects the expertise of the audit committee members.

This study focused on the manufacturing companies, therefore, the results cannot be generalized to other sectors, such as mining, property, and non-financial sectors. This can be taken as a future research opportunity to provide a detailed perspective of the audit committee’s effect on the quality of corporate earnings. Data from other countries that may have different audit committee regulations can be compared. Moreover, to determine how these samples affect the quality of earnings in Indonesian companies, they can be taken before and after implementing regulations that are related to audit committees. Results of this research provide useful information for the accounting profession, the regulators, and corporations on the effective practice of audit committees.

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## APPENDIX

### Table A.1. Correlation matrix

| Correlation (t-statistic) | (1)   | (2)     | (3)     | (4)     | (5)     | (6)     | (7)     | (8)     | (9)     | (10)    | (11)    | (12)    | (13)    | (14)    |
|---------------------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| (1) JONES                 | 1     |         |         |         |         |         |         |         |         |         |         |         |         |         |
| (2) MOD_JONES             | -0.983*** | 1     |         |         |         |         |         |         |         |         |         |         |         |         |
| (3) KAZNIK                | -0.690*** | -0.697*** | 1     |         |         |         |         |         |         |         |         |         |         |         |
| (4) ACCT_DUMMY            | -0.013 | -0.010  | -0.026  | 1       |         |         |         |         |         |         |         |         |         |         |
| (5) FINN_DUMMY            | -0.015 | -0.014  | -0.018  | -0.384*** | 1       |         |         |         |         |         |         |         |         |         |
| (6) ACCT_FINN_DUMMY       | -0.129** | -0.155*** | -0.114** | -0.309*** | -0.202*** | 1     |         |         |         |         |         |         |         |         |
| (7) MEET                  | -0.043 | -0.052  | -0.089  | -0.145** | -0.171*** | -0.105* | 1       |         |         |         |         |         |         |         |
| (8) MEMB                  | -0.037 | -0.029  | -0.013  | -0.064  | -0.121** | -0.037  | -0.203*** | 1     |         |         |         |         |         |         |
| (9) ROA                   | -0.1334** | -0.151** | -0.127** | -0.044  | -0.072  | -0.005  | -0.050  | -0.125** | 1     |         |         |         |         |         |
| (10) DAR                  | -0.023 | -0.031  | -0.011  | -0.125** | -0.080  | -0.013  | -0.088  | -0.051  | -0.277*** | 1     |         |         |         |         |
| (11) SIZE                 | -0.167*** | -0.154*** | -0.197*** | -0.083  | -0.123** | -0.024  | -0.188*** | -0.247*** | -0.174*** | -0.095* | 1     |         |         |         |
| (12) LOSS                 | -0.006 | -0.006  | -0.091* | -0.067  | -0.028  | -0.108* | -0.012  | -0.202*** | -0.529*** | -0.196*** | -0.109* | 1     |         |         |
| (13) GROWTH               | -0.004 | -0.009  | -0.028  | -0.068  | -0.024  | -0.031  | -0.024  | -0.003  | -0.016  | -0.012  | -0.029  | -0.041  | 1       |         |
| (14) BIG4                 | -0.115** | -0.114** | -0.153** | -0.080  | -0.001  | -0.021  | -0.140** | -0.217*** | -0.366*** | -0.165*** | -0.383*** | -0.170*** | -0.042  | 1       |

Note: *, **, and *** indicate significance at 1%, 5%, and 10%, respectively.