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Abstract
Profit can show the information to the public in making investment decisions. The motivation of management to practice earnings management is to attract external parties, one of which is investors by increasing profits (income creating) and tax motivation by decreasing profits (income decreasing). This study aims to determine the effect of financial distress, tax planning, audit quality, and public accountant firm size on earnings management in mining sector companies listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 period simultaneously or partially. The sample used was purposive sampling from 29 samples with 145 observational data. The method used panel data regression analysis. The results showed that financial distress positively affects earnings management, meaning that when a company is in a financial distress condition, it tends to practice earnings management to make better financial statements. While tax planning and audit quality do not affect earnings management, the size of public accountant firms has a negative effect on earnings management.

Keywords: audit quality, earnings management, financial distress, public accountant firm size, tax planning.

How to cite (APA 7th style)

INTRODUCTION
The Indonesia Stock Exchange (IDX) is where buying and selling or trading securities from go-public companies to investors. This research focuses on mining sector company objects. Some of the earnings management phenomena in mining sector companies include PT Bayan Resources Tbk (BYAN) in 2019, where the company’s net profit and revenue decreased, but total assets increased. Apart from PT Bayan Resources Tbk (BYAN), PT Timah Tbk (TINS) was also entangled in an earnings management case where, in 2016, the company experienced an increase in net profit and revenue, but production and sales decreased (Endarwati, 2020). According to
PSAK No.1 (2018), to achieve its objectives, financial reports present information on an entity, which consists of information on assets (assets), liabilities (liabilities), equity, income, and expenses that generate profits and losses for an entity. The benefits of presenting a financial statement are that it is a tool for parties who use financial reports, such as stakeholders, managers, creditors, and investors, and it is useful as a consideration tool in making a decision. Good and quality, namely fluctuating profits, can be called persistent profits (Annisa & Kurniasih, 2017).

Earnings management can be interpreted as full interference with internal financial reporting procedures carried out by managers to obtain individual profits (Schipper, 1989). Earnings information is the responsibility of management (Sulistiyanto, 2018). There are several perspectives in the implementation of earnings management, namely the financial reporting perspective, which is carried out to meet expectations to avoid negative stock prices and damage to the company's reputation. Because earnings management is a medium used to attract the attention of investors. The contract perspective on earnings management will be used when no guesswork exists in an incomplete and rigid contract. Financial distress, tax planning, audit quality, and the size of public accountant firms (KAP) are factors that may influence earnings management.

Jensen & Meckling (1976), a contract between management and shareholders means agency theory. From this theory, the purpose of holding a separation of ownership management is so that the company owner or principal can get the maximum benefit with efficient management carried out by professionals. Agency problems can arise because of differences in interests between the two parties due to differences in achieving their respective goals. Sometimes, a policy is made by the company's management, which is not known by a shareholder, causing information asymmetry (Jensen & Meckling, 1976).

Earnings management can be interpreted as full interference with external financial reporting procedures carried out by managers to obtain individual profits. (Schipper, 1989). According to Scott & William (2015), earnings management activities are divided into three application models. First, income minimization/decreasing is a pattern of reporting profit for the current period that is lower than the actual profit. Second, income maximization/increasing is a pattern of reporting profit for the current period, which is higher than the actual profit. Third, income smoothing is a pattern of reporting current period profits by averaging reported profits with the aim of external reports, especially for investors.

There are several perspectives in the implementation of earnings management, namely the financial reporting perspective, which is carried out to meet expectations to avoid negative stock prices and damage to the company's reputation. Because earnings management is a medium used to attract the attention of investors. The contract perspective on earnings management will be used when no guesswork exists in an incomplete and rigid contract.

Financial distress is when the company decreases every year before bankruptcy occurs. Conditions that describe the occurrence of financial distress in the company, such as delays in paying company bills that are due (Rohiman & Damayanti, 2019). Financial distress is the possibility of earnings management in a company. According to research evidence, Heriyanto et

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al., n.d. (2018); Nazalia & Triyanto (2019); Agustin & Pratomo (2022); Ariesanti (2015); Ghazai et al. (2015); Sari et al. (2017); Kurniawan et al. (2022), financial distress has a significant impact on the company's economy and can be detrimental to investors. Given this, it encourages managers to anticipate and hide losses experienced by increasing income. The existence contrary to stakeholders causes information asymmetry so that agency problems arise (Aziatul et al., 2015).

According to research evidence by Nazalia & Triyanto (2019) and Sari & Mairanto (2017), when a company experiences a declining financial condition, managers are more likely to cover the financial difficulties (financial distress) experienced by the company. The first hypothesis is:

**H1: Financial distress affects earnings management.**

For the government, tax is one of the country's largest sources of income and is useful as a revenue enhancer, while for taxpayers, taxes are a revenue deduction expense. With that indication of earnings management, changes can be made to financial statements so that the tax paid is smaller than it should be (Januari & Suardika, 2019). Tax planning is a choice of systematic analysis of deferring taxes aimed at minimizing tax obligations in the present and the future. (Crumbley et al., 1994) Tax planning aims to engineer the tax burden (tax burden) to have the lowest possible value, aiming to maximize income after tax (after tax return), where tax is a deduction from existing profits that can be distributed to shareholders or reinvested.

Statements by understating the company's profits to avoid the amount. Net profit after tax and cash flow (cash flow) has decreased due to the high tax burden (Syanthi Trisna et al., 2017). Negara & Saputra (2017) stated that planning can detect earnings management. It can be concluded that the higher the planning tax, the greater the company's opportunity to carry out earnings management. The second hypothesis is:

**H2: Tax planning affects earnings management.**

Independent auditors are auditors who have a good reputation. The company conducts audit statements using a reputable auditor's services, aiming for stakeholders to trust the truth of the information presented (Mutamainah, 2011). Good auditor quality will prevent earnings management activities in a company from occurring. Audit quality results can be assessed through a reputation proxy for the KAP because the reputation issued by the KAP will affect the results of the audit conducted by the auditor (Annisa & Kurniasih, 2017).

Previous research by Khaerunisa & Hapsari (2019) and Nazarudin & Suseno (2017) researched the detection of earnings management, explaining that the effect of audit quality on earnings management has a positive effect. Companies use KAP Big Four or high-quality KAP only to increase the credibility of financial reports to increase investor confidence but not detect earnings management by company management. Because an auditor with much experience and understanding of his client's company does not affect the professionalism of an auditor because KAP has the same procedure in auditing. Because of that, high audit quality can produce good financial reports so that the resulting financial reports can be trusted as a basis for making a decision (Akram, P, 2017). The third hypothesis is:

**H3: Audit quality affects earnings management.**
Each company's financial statements need to be audited before being published and used by users of these financial statements. An audit of the company's financial statements can be carried out by a Public Accountant or a Public Accounting Firm (KAP). In Indonesia, the size of the KAP is seen from two groups, namely the Big-4 KAP group and the non-big-4 KAP group. KAP Non-Big-4. Research by Lisic, Pevzner, & Chi (2011) shows that when the KAP's audit quality is higher, KAP can detect accrual earnings management better, and then company management prefers to do real earnings management. With more competence possessed by the Big-4 KAP auditors in the company, who have been in the company from the previous period, it will make it easier for the auditor to find out the earnings management that the company's management has carried out. The fourth hypothesis is:

**H4: The size of public accountant firms affects earnings management.**

**RESEARCH METHOD**

The approach to developing theory is the deduction method. A quantitative analysis and a case study were used in this study. Based on the research object, the organizational unit of analysis is mining companies listed on IDX for 2016-2020. The research time in this research is time series and cross-section. There are three independent variables, namely financial distress (X1), tax planning (X2), and audit quality (X3), KAP size (X4), and the dependent variable in this study is earnings management (Y). This study uses observation as a data collection method by seeking information related to the title used in the study. Articles, books, and previous research. In this study, data analysis techniques used Eviews 10 for Windows 64-bit.

Financial distress uses the Z-Score model developed using five financial ratios to predict corporate failure (Kristanti et al., 2020). The following is a financial distress calculation using the Z-score model (Altman, 1968):

\[
Z = 1.2A + 1.4B + 3.3C + 0.6D + 0.999E
\]

Tax Retention Rate (TRR) measures the effectiveness of tax management in the company's annual financial reports. A high TRR value indicates that the company is carrying out effective tax planning. Conversely, if the TRR value is low, then the tax planning in the company is less effective (Gulo & Mappadang, 2022). This study uses the tax retention rate formula because it can
determine the effectiveness of tax management over an ongoing period. The following is the tax retention rate formula (tax retention rate) (Wild et al., 2011).

\[
TRR = \frac{\text{Net Income it}}{\text{Pretax Income (EBIT)it}}
\]

RESULTS AND DISCUSSION

Results

Ratio Scale Descriptive Statistics

For the 2016-2020 period, mining sector companies have an average tax planning independent variable value of 1.091774 < 2.151774 (Table 1). The maximum value of tax planning is 22.575401 owned by PT Perdana Karya Perkasa Tbk (PKPK) in 2018, PT Medco Energi Internasional Tbk (MEDC) minimum value of -0.140328 in 2018, and the company has low earnings management opportunities due to low tax planning.

<table>
<thead>
<tr>
<th>Year</th>
<th>EM</th>
<th>FD</th>
<th>TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td>-0.031872</td>
<td>2.307684</td>
<td>1.091774</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.337993</td>
<td>8.197394</td>
<td>22.575401</td>
</tr>
<tr>
<td>Minimum</td>
<td>-0.519048</td>
<td>-8.070514</td>
<td>-0.140328</td>
</tr>
<tr>
<td>std. Dev.</td>
<td>0.112040</td>
<td>2.256487</td>
<td>2.151774</td>
</tr>
<tr>
<td>Observations</td>
<td>145</td>
<td>145</td>
<td>145</td>
</tr>
</tbody>
</table>

Source: Eviews10 Output (2022)

Nominal Scale Descriptive Statistics

Table 2 shows that in the mining sector companies, more companies use Big-Four KAPs than Non-Big Four KAPs each year. Companies use high-quality KAP Big Four or KAP not only to increase the credibility of financial reports but also to increase investor confidence.
The multicollinearity test is a statistical test used to determine whether there is a multicollinearity problem in the regression model. Multicollinearity occurs when two or more independent variables in a regression model are highly correlated (Table 3).

**Table 2 Descriptive Statistics of Audit Quality**

<table>
<thead>
<tr>
<th>Information</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of companies audited by KAP Big Four = 1</td>
<td>17</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Number of companies audited by Non-Big Four KAPs = 0</td>
<td>12</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Total data</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Big Four KAP Audit Percentage</td>
<td>59%</td>
<td>55%</td>
<td>55%</td>
<td>55%</td>
<td>55%</td>
</tr>
<tr>
<td>Percentage of Non-Big Four KAP Audits</td>
<td>41%</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
</tr>
<tr>
<td>Total percentage of data</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Data processed by the author (2022)

**Table 3 Multicollinearity Test**

<table>
<thead>
<tr>
<th></th>
<th>FD</th>
<th></th>
<th>TP</th>
<th></th>
<th>I</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FD</td>
<td>1</td>
<td></td>
<td>-0.1291865063912116</td>
<td>0.1676673414497157</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TP</td>
<td>-0.1291865063912116</td>
<td>1</td>
<td></td>
<td>-0.1602113591584864</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>0.1676673414497157</td>
<td>-0.1602113591584864</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data Processing Results E-Views 10 (2022)

The multicollinearity test is a statistical test used to determine whether there is a multicollinearity problem in the regression model. Multicollinearity occurs when two or more independent variables in a regression model are highly correlated (Table 3).

**Table 4 Heteroscedasticity Test Results**

Heteroskedasticity Test: Glejser

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistics</td>
<td>2.293197 Prob. F(3,141) 0.0806</td>
</tr>
<tr>
<td>Obs*R-squared</td>
<td>6.745628 Prob. Chi-Square(3) 0.0805</td>
</tr>
<tr>
<td>Scaled explained SS</td>
<td>9.357684 Prob. Chi-Square(3) 0.0249</td>
</tr>
</tbody>
</table>

Source: Data Processing Results E-Views 10 (2022)
The heteroscedasticity test is a statistical test used to identify whether there is a heteroscedasticity problem in the regression model. Heteroscedasticity occurs when the regression model's error variance (residuals) is not constant along the values of the independent variables (Table 4).

**Panel Data Model Selection**

Common Effect and Fixed Effect Significance Test (Chow Test)

Chow test results show $F_{0.0000}$ or $<0.05$ (Table 5). It can be concluded that $H_0$ was rejected in this study because it was seen from the results of the cross-section $F$-value that was smaller than 0.05, then the Hausman test was used as a significance test as a comparison model in the panel data regression test.

<table>
<thead>
<tr>
<th>Effect Test</th>
<th>Statistics</th>
<th>df</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section $F$</td>
<td>3.692868</td>
<td>(28,113)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Chi-square cross-sections</td>
<td>94.212608</td>
<td>28</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

*Source: Data Processing Results E-Views 10 (2022)*

Fixed Effect Significance Test and Random Effect (Hausman Test)

In Table 6, the Hausman test shows $0.0131 <0.05$ because seen from the prob value (random cross-section), which is smaller than 0.05, so by selecting the Fixed effect, the model selection is complete, and the research can proceed to the next stage, namely the panel data regression test.

Panel Data Regression Model Selection Results

The panel data model was conducted using the Chow test and Hausman test, and the fixed effect model will be used in this study's panel data regression. The results are shown in Table 7. Based on Table 7, the panel data regression model equation formulation explains the effects of financial distress, tax planning, and audit quality on earnings management. The regression equation is as follows:

$$Y_{it} = -0.078586 + 0.028212 (FD) + 0.000307 (TP) - 0.033522 (AQ) + 0.00040$$
The value of $R^2$ is between 0 and 1. If $R^2 = 0$, then the ability of the independent variable is very limited in explaining the variation of the dependent variable. If the $R^2$ value is high, then the ability of the dependent variable is very good because it can provide all the information to describe the dependent variable (Basuki, 2017).

Based on Table 7, the R-square is 0.344956 or 34.49%. It can be concluded that financial distress, tax planning, audit quality, and KAP size influence earnings management by 34.49%. While the rest (100% - 34.49%) = 65.51% is influenced by other independent variables that affect earnings management.
**T Test**

T-test is used to test whether the regression coefficient is significant or not significant in predicting the dependent variable. The goal is to determine whether the relationship between the independent and dependent variables in the regression model is statistically significant. Based on Table 8, financial distress affects earnings management with a p-value of 0.0002 < 0.05 (H1 is accepted). Meanwhile, tax planning and audit quality do not affect earnings management, with a p-value of 0.9382 and 0.7427, respectively (H2 and H3 are rejected). KAP size influences earnings management negatively (p-value of 0.0177 < 0.05, and the t-statistics has a negative sign of -2.390289).

**Table 8. Hypotheses Test Results (t-test)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>coefficient</th>
<th>std. Error</th>
<th>t-Statistics</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-0.078586</td>
<td>0.058402</td>
<td>-1.345590</td>
<td>0.1811</td>
</tr>
<tr>
<td>FD</td>
<td>0.028212</td>
<td>0.007307</td>
<td>3.861209</td>
<td>0.0002</td>
</tr>
<tr>
<td>TP</td>
<td>0.000307</td>
<td>0.003945</td>
<td>0.077735</td>
<td>0.9382</td>
</tr>
<tr>
<td>I</td>
<td>-0.033522</td>
<td>0.101849</td>
<td>-0.329139</td>
<td>0.7427</td>
</tr>
<tr>
<td>KAP</td>
<td>0.00040</td>
<td>0.065607</td>
<td>-2.390289</td>
<td>0.0177</td>
</tr>
</tbody>
</table>

Source: Data Processing Results E-Views 10 (2022)

**Discussion**

*Relevance of Financial Distress (X1) on Earnings Management (Y)*

The regression coefficient of the independent variable, financial distress, has a value of 0.028212 with a probability level of 0.0002. This study’s results align with the hypothesis that financial distress positively affects earnings management. Financial distress is proxied using the Z-Score model, which affects earnings management. The lower the value of earnings management, the more the company is distressed, thus motivating management to practice earnings management.

In this study, 65 data, or 45% of companies, entered bankruptcy or distress; 28 data, or 19%, were in a gray area; 52 data, or 36%, were in a healthy condition.
This study supports the study of Heriyanto et al., n.d. dan Nazalia & Triyanto (2019) that financial distress can be detected in earnings management when a company experiences financial distress, causing the sustainability of the company's business to be disrupted. Research by Agustin & Pratomo (2022), Ariesanti (2015), Ghazai et al. (2015a), and Li et al. (2020) found that when a company experiences a declining financial condition, it is more likely for managers to carry out earnings management to cover companies experiencing financial distress have a significant impact on the company's economy and can be detrimental to investors. Given this, it encourages managers to anticipate and hide losses experienced by increasing income.

Companies experiencing financial difficulties often feel pressure to ensure their financial statements look better than they are. In this situation, earnings management can be used to "hide" losses or embellish financial performance. Earnings management can include recognizing higher income than expected, delaying expenses, or using profitable accounting methods. Earnings management can be used to achieve this goal when a company has financial requirements that must be met, such as loan agreements or contractual terms. Companies may manage earnings to ensure they comply with certain requirements, although this can lead to distortions in financial statements.

Relevance of Tax Planning (X2) on Earnings Management (Y)
The regression coefficient of the independent variable of tax planning has a coefficient value of 0.000307 with a probability value of 0.9382. Tax planning proxied using the tax retention rate (TRR) does not affect earnings management practices. Because tax planning is the desire of company owners who want high dividends by spending as little as possible because taxes are a profit deduction element, the presence or absence of tax planning does not affect the company's earnings management. Therefore, the results of this study explain that tax planning can not detect earnings management.

This study results support the results of research by Gulo & Mappadang (2022), Ulfa et al. (2020); Wardani et al., and Kurnia, (2018), explaining that tax planning does not affect earnings management. This happens because, in the company, there are several departments with their respective management, which causes management to prioritize their respective interests in obtaining rewards or bonuses by showing good performance. The reason for earnings management is self-interest, not tax planning, which is in the interest of the company’s owner.

Relevance of Audit Quality (X3) on Earnings Management (Y)
The regression coefficient of the independent variable audit quality or audit is -0.033522 with a probability value of 0.7427. Audit quality is proxied using KAP size, divided into Big KAP Four and Non-Big Four KAP. This study shows that the results of audit quality do not affect earnings management because audit quality depends on independence and how auditors comply with the code of ethics in auditing financial statements, so audit quality can not detect earnings management.
The results of this study support research by Felicya & Sutrisno (2020), Hasanudin & Khairunnisa (2021), and Marsha et al. (2017), which explains that the service quality of the Big Four and Non-Big Four KAP does not influence earnings management. Earnings management is not the auditor's focus because earnings management carried out by company management does not violate applicable regulations. Earnings management also occurs due to the company's mistake of being unable to monitor management who is carrying out earnings management. This allows earnings management practices to occur because companies desire credibility from financial reports and want the company's financial performance to look good in the eyes of potential investors but ignore the existence of auditors who join the Big Four KAP (Christiani & Nugrahanti, 2014).

Relevance of KAP Size on Earnings Management
Based on the statistical test (t), KAP size has a negative relationship to earnings management with a profitability value of 0.0177 <0.05, so KAP size has a negative effect on earnings management. This study's results contrast the hypothesis, which states that audit opinion positively affects audit report lag in mining sector companies listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 period.

KAP size is differentiated by whether Big Four KAPs audit the company or not. The audit process will be faster by the Big Four KAPs because the Big Four KAPs employ many employees to carry out audit work and use technology. This study proves that KAP size has a negative effect on audit report lag. This means that the Big Four KAPs can conduct the audit process faster than the Big Four KAPs.

CONCLUSIONS
Based on the research results, the mining sector companies for the 2016-2020 period listed on The Indonesia Stock Exchange (IDX) are dominated by companies experiencing financial difficulties, and they usually carry out tax planning. Earnings management is not affected by the service quality of the Big Four and Non-Big Four KAPs since earnings management is not the auditor's focus. The financial distress variable affects earnings management. The tax planning and audit quality do not affect earnings management. While KAP size has a negative effect on earning management.

The limitation of this study is that it does not fully explain the variable indicators of financial distress (such as internal and external factors) in mining sector companies. This study cannot rule out various sources of endogeneity, such as the possibility of eliminating correlated variables and reverse causality. Future research should add a longer year to the most recent year, tax planning, audit quality on research objects, and different observation periods. In addition, survival analysis proxies can be used for financial distress.

Author’s Contribution
ALF conceptualized and drafted the manuscript. PFS data curation analyzed.
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Conflicts of Interest
The authors declare no competing interest.

Availability of Data and Materials
Research data are collected from the company website and IDX.

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