The effect of financial distress and earnings management on tax aggressiveness with corporate governance as the moderating variable

Ratih Pujirahayu Nugroho\(^{(a)}\), Sutrisno T\(^{(b)}\)
Endang Mardiati\(^{(c)}\)

\(^{(a,b,c)}\) Accounting Department, Faculty of Economics and Business, Universitas of Brawijaya, Indonesia

**ABSTRACT**

This study aims to verify the correlation between financial distress and earnings management of tax aggressiveness moderated by corporate governance. This study uses a population of manufacturing companies that publish their financial statement on the Indonesia Stock Exchange from 2017 until 2018. Sample collection was performed using a purposive sampling method, resulting in a total of 212 populations that published complete financial reports. This study was tested by using the Multiple Regression Analysis test. This research gave empirical proofs that financial distress and real earnings management positively influenced the tax aggressiveness was supported, the proportion of independent commissioners weakened the financial distress and negatively impacted the tax aggressiveness was supported, the total audit committees weakened the financial distress and negatively influenced the tax aggressiveness was not supported, the proportion of independent commissioners and total audit committees weakened the real earnings management and negatively affected the tax aggressiveness was not supported.

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**Introduction**

Financial distress is an early symptom of bankruptcy due to a decline in financial conditions experienced by a company (Sulasatri and Yane, 2018). When a company experiences financial distress, management will try to maintain its business sustainability by increasing profits, assuming that investors will remain interested so the company’s operational activities can continue. For this reason, the company will try to manipulate the income so that the tax paid is smaller, if this is done continuously, the company will be considered as tax aggressiveness. The effect of financial distress on tax aggressiveness is still a matter of debate among researchers. Putra and Amis (2017) found that financial distress have a positive effect on tax avoidance. If the risk of bankruptcy is high enough, the company will aggressively practice tax avoidance and ignore the risk of audits conducted by the tax authorities.

Apart from financial difficulties, earnings management is also a measure that can be used to manipulate corporate taxes. Earnings management is a choice of accounting policies or concrete actions taken by managers to achieve company goals (Scott, 2015: 445). Researchers took the other way by measuring earnings management using accrual earnings management. Based on the research of Geraldina (2013), Silvia (2017), Nugroho and Amrie (2017), and Surahman and Amrie (2017), managers prefer to use real earnings management rather than accrual earnings management. Real earnings management is a priority by management because real earnings management is less attractive to auditors and regulators than accrual earnings management, and besides, accrual earnings management is riskier (Nugroho and Amrie, 2017). Researchers also found inconsistencies in the results of previous studies. Based on research by Karinda (2018), Nugroho and Amrie (2017), Lolana and Susi (2019), Arief, et al. (2016), Geraldina (2013), there was a positive relationship between earnings management and tax aggressiveness. Companies are more likely to use accounting choices that reduce reported income (income decreasing) to reduce taxable income so that companies can make savings on tax burdens (Putra and Elly, 2018). The more aggressive earnings management performed by a company means a high level of corporate tax aggressiveness because the tax burden is getting smaller. Meanwhile, based on the research of Henny (2019), Ginting and Elly (2018),...
earnings management did not affect tax avoidance. Earnings management, statistically, does not have a significant effect on tax avoidance, where the greater income decreasing performed by the company does not indicate tax avoidance. In line with the positive accounting theory put forward by Watts and Zimmerman (1990) which states that positive accounting theory explains and predicts accounting practices based on the assumption that managers, shareholders, and regulators (politics) seek to maximize utility which is directly related to with their compensation and prosperity. Companies or management tend to report profits carefully to avoid stricter scrutiny so governments will try to exploit tax errors to reduce taxes based on their future sustainability.

Tax avoidance that is carried out by companies is an act of irregularities that can be prevented by monitoring and good corporate governance based on regulations, laws, and business ethics (Karinda, 2018). This study included corporate governance as the moderating variable, which could weaken the influence of financial distress and earnings management on tax aggressiveness. Corporate governance in this study used a proxy for independent commissioners and audit committees. Independent commissioner is one of the needed corporate governance mechanisms to reduce agency problems between owners and managers (Hanifah and Agus, 2013). The greater the proportion of independent commissioners in a company equals to a greater company's supervision, so management will be careful in making decisions and be more transparent in running the company to minimize tax aggressiveness (Rosidy and Rahadi, 2019). The audit committees is a corporate governance mechanism which is assumed to reduce the agency problems by which if the agency problems are ignored, it will cause financial distress for the company (Hanifah and Agus, 2013). Companies with audit committee will inhibit earnings management behaviour and are expected to observe practices that are contrary to the principle of information disclosure (Murhadi, 2009).

**Literature Review**

**Theoretical Background**

Agency theory explains the contractual relationship that occurs between the company owner (principal) and the company manager (agent). When the principal and agent wish to maximize their respective interests (there is no alignment yet), then there is a possibility that the agent acts not in the interests of the principal. The principal tries to maximize profits (risk takers), while the agent as an activity operator tends to dislike risk that is too large (risk adverse). To reduce conflict, the principal needs to monitor the agent's performance.

Positive accounting theory is the selection of accountant policies made by companies that aim to maximize company profits. Positive accounting theory assumes that managers will rationally choose good accounting policies according to them. Company managers who are actively exploring will choose to change the reported profit from the current period in order to increase the present value of the bonus flow, so that even though high profits will not have an impact on high taxes.

Trade-off theory is a capital structure model based on the trade-off between debt advantages and disadvantages. This theory assumes that the company's capital structure is balanced between the benefits of using debt with the cost of financial distress and agency cost. The debt incurs an interest expense that can save taxes. Interest expense can be deducted from income so that the profit before tax becomes smaller, and thus, the tax is also smaller. The use of increased debt will lead to financial distress or bankruptcy. Bankruptcy-related problems will most likely arise when the company includes more debt in its capital structure. A bankrupt company will have very high accounting and legal burdens and also have difficulty retaining its customers, suppliers, and employees (Wikartika and Zumrotul, 2018). Trade-off theory explains the relationship between sacrifices and benefits from debt usage (Mutamimah and Rita, 2009).

**Empirical Studies and Hypothesis Development**

**Financial distress and Tax Aggressiveness**

Financial distress is a decline in a company's financial condition before bankruptcy. Financial distress causes operational activities to not running smoothly. To run its business a company needs working capital to finance its activities, management will try to find a way to run the operational by acquiring debt. Debt is one of external funding to finance the company's activities. A reason to choose debt as the funding source is the tax benefit. Financing through debt incurs interest expense, thus reduce the taxable income, however higher debt increases the company's burden.

The effect of financial distress on tax aggressiveness is still debated among researchers. Putri and Anis (2017) found that financial distress has a positive impact on tax avoidance. If the risk of bankruptcy is high enough, the company will aggressively practice tax avoidance and ignore the risk of an audit by the tax authorities. Saputra et al. (2017) found that financial distress affect tax avoidance. Financial pressure intensification in a company will lead to an increase in corporate tax avoidance. Richardson et al. (2015) studied the impact of financial distress on corporate tax avoidance, including the global financial crisis in Australia. They concluded that financial distress had a positive relationship with tax avoidance and the relationship between financial distress and tax avoidance had increased due to the global financial crisis. Warsini et al. (2018) found that financial distress had a positive effect on tax aggressiveness. Based on the explanation above, the researchers predicted a positive influence between companies with financial distress and tax aggressiveness. Thus, the first hypothesis of this study is:

\textbf{H}_1: \text{Financial distress positively influence the tax aggressiveness}
Earnings Management and Tax Aggressiveness

Earnings management by the management improves the possibility of a company to take tax aggressiveness action. Graham et al. (2005) concluded that the managers tended to conduct real earnings management instead of accrual earnings management. Real earnings management is a priority by management because real earnings management is less attractive to auditors and regulators than accrual earnings management, as stated by the research of Ratmono (2010) that proved that the manipulation of real activities from companies in Indonesia did not gain attention from auditors. Accrual earnings management carries the risks because earnings management by relying on discretionary accruals can only be done at the end of the year, so the manager's ability to manipulate earnings is limited, and as a result, the profit target cannot be achieved (Ningsih, 2015). Managers could reduce the risks by manipulating real activities during the current year (Ningsih, 2015).

There are several studies on earnings management and tax aggressiveness, such as Geraldina (2013), Nugroho and Amrie (2017) who found that real earnings management through operational discretionary cash flow and production costs increased the likelihood of companies engaging in tax aggressiveness. Arief et al. (2016), Putra and Elly (2018), Novitasari (2017) found that earnings management affected tax aggressiveness. In contrast, the research of Ginting and Elly (2018), and Henny (2019) found that earnings management did not affect tax aggressiveness. Based on theoretical considerations and previous researches, the researcher predicted a positive influence between companies that carry out earnings management and tax aggressiveness. Based on this explanation, a hypothesis can be proposed:

\[ H_1: \text{real earnings management positively influences the tax aggressiveness actions} \]

The Moderation Role of Corporate Governance on the Financial Distress Influence on Tax Aggressiveness

Companies that experience financial distress tend to perform tax avoidance to reduce cash outflows and company expenses (Rani, 2017). Richardson et al. (2015), Putri and Anis (2017), Meilia and Adnan (2017), and Saputra et al. (2017) successfully proved the positive influence between financial distress and tax avoidance, which means, companies with high financial distress would perform aggressively on the taxes to keep the excellent image of said companies. To lessen the tax aggressiveness, corporate governance must be conducted.

This study used the numbers of the independent board of commissioners and the audit committee as the proxies for corporate governance. The existence of independent commissioners could prevent information asymmetry between agent and principal, which could cause financial distress for the company (Hanifah and Agus, 2013). The larger proportion of independent commissioners in a company means greater company's supervision, so management will be careful in making decisions and be more transparent in running the company to minimize tax aggressiveness (Rosidy and Rahadi, 2019). The audit committee is a corporate governance mechanism which is assumed to be able to reduce agency problems, which, if the agency problems are allowed, it will cause financial distress for the company (Hanifah and Agus, 2013). The right number of audit committee members can make them use their experience and expertise to protect the interests of shareholders, thus reducing the possibility of the company experiencing financial distress (Radfan and Ettna, 2015). The existence of an audit committee in the company can minimize tax avoidance practices (Diantari and Ulupui, 2016). Based on the research of Rani (2017), Octaviani and Sofie (2018), Putri and Anis (2017), larger number of independent commissioners in a company can prevent managers from taking tax aggressiveness. Based on the research of Rani (2017), Novitasari (2017), Putri and Anis (2017), with intensive supervision from the audit committee, the information provided by the company will be more accurate and have quality so that the possibility of companies making arrangements for their tax burden tends to be small. This shows that the independent commissioners and audit committees negatively affect the tax aggressiveness. Based on theoretical considerations and previous researches, the following hypotheses could be proposed:

\[ H_2: \text{corporate governance (independent commissioners proportion) weakens the influence of financial distress on tax aggressiveness} \]

\[ H_3: \text{corporate governance (total audit committees) weakens the influence of financial distress on tax aggressiveness} \]

Role of Corporate Governance Moderation of the Influence of Real Earnings Management on Tax Aggressiveness

Earnings management is the effort from managers to deliberately manipulate financial reports within limits permitted by accounting principles to give suitable information for financial report users. The more aggressive the companies in their earnings management means higher tax aggressiveness due to the smaller tax burden. The research by Geraldina (2013), Nugroho and Amrie (2017) found that that real earnings management through operational discretionary cash flow and production costs increase the likelihood of companies engaging in tax aggressiveness. Meanwhile, based on the research of Ginting and Elly (2018) and Henny (2019) stated that earnings management does not affect tax avoidance. Solving this agency problem requires corporate governance. To achieve good corporate governance, companies must create corporate governance mechanisms that be achieved through independent commissioners and audit committees.

Based on research by Suyanto and Supramono (2012), Independent Commissioners variable had a negative effect on tax aggressiveness. On the contrary, the study of Tiaras and Henryanto (2015) showed that Independent Commissioners variable did not affect tax aggressiveness. Another factor that is predicted to influence corporate tax aggressiveness is the supervision of the Audit Committee. Companies that have audit committees will inhibit earnings management behaviour and are expected to see practices that are contrary to the principle of information disclosure (Murhadi, 2009). Ariyani (2014) tested that the frequency of audit
committees meetings did not affect tax aggressiveness. In contrast to the research that was conducted by Seprini (2016), which found that the intensity of the audit committees meeting affected the company's tax aggressive actions.

Based on the research of Hapsoro and Adrianus (2016), Wardani and Wening (2017), Kusumawati (2015), Rani (2017), Octaviani and Sofie (2018), and Putri and Anis (2017), greater numbers of independent commissioners in a company could prevent managers to perform tax aggressiveness. Based on the research of Kusumawati (2015), Rani (2017), Novitasari (2017), Putri and Anis (2017), intensive control from audit committees create more accurate and quality information and the smaller possibility of said company to adjust their tax burden. Based on the above explanation, the next hypothesis can be stated as below:

\[ H_5: \text{corporate governance (independent commissioners proportion) weakens the influence of real earnings management on tax aggressiveness} \]

\[ H_6: \text{corporate governance (total audit committees) weakens the influence of real earnings management on tax aggressiveness} \]

![Research Model](image)

**Figure 1: Research Model**

**Research and Methodology**

This study examined the effect of financial distress and earnings management on tax aggressiveness with corporate governance as the moderating variable. This research used quantitative analysis. The population in this study were all manufacturing companies listed on the Indonesian Stock Exchange (IDX) for the period of 2017 to 2018. The sample in this study was the purposive sampling technique based on judgment. The criteria for the companies that were sampled in this study are as follows:

1. The manufacturing companies that were listed in the Indonesian Stock Exchange that provided complete data in their Financial Reports from 2017 to 2018.
2. The companies recorded positive value on their profit before tax.

There were 288 companies in this research as the population with 212 sample companies.

**Operational Definition and Variable Measurement**

The variables in this study included two independent variables: financial distress and earnings management. This study also had a dependent variable, namely tax aggressiveness, and a moderating variable, namely corporate governance, which in this study was represented by the proportion of independent commissioners and the number of audit committees.

**Dependent Variable**

**Tax Aggressiveness**

The dependent variable in this research was tax aggressiveness. Tax aggressiveness is an action to reduce taxable income, legally or illegally, to reduce the tax burden. The effective tax rate (ETR) proxy is used to measure companies which performed tax aggressiveness.

\[
ETR = \frac{\text{Total Tax Expenses it}}{\text{Pre Tax Income it}}
\]
Independent Variable

Financial Distress

Financial distress is a stage of decrease in a company’s financial condition before bankruptcy or liquidation. This research used the Altman Z-Score model. Higher Z-Score shows a healthier financial situation. Z-Score has a negative correlation to tax aggressiveness. To adjust the measurement with variables, the produced Z-Score is multiplied by -1; thus, higher values reflect the financial condition that is getting worse. A prediction of financial distress that is carried by the company is calculated as below:

\[
Z = 1.2 \frac{\text{working capital}}{\text{total asset}} + 1.4 \frac{\text{retained earnings}}{\text{total asset}} + 3.3 \frac{\text{profit before tax}}{\text{total asset}} + 0.6 \frac{\text{cost of good sold}}{\text{book value of total liabilities}} + 0.999 \frac{\text{sales}}{\text{total asset}}
\]

Real Earnings Management

Real earnings management is an opportunistic action by management to manipulate profit numbers in financial reports through company real operational that could directly affect the cash flow. Roychowdhury (2016) stated three real earnings management calculation as below:

a. Abnormal Operating Cash Flow (Abnormal CFO)

\[
\frac{\text{CFO}_{it}}{\text{Assets}_{it-1}} = \alpha_0 + \alpha_1 \frac{1}{\text{Assets}_{it-1}} + \beta_1 \frac{\text{S}_{it}}{\text{Assets}_{it-1}} + \beta_2 \frac{\Delta S_{it}}{\text{Asset}_{it-1}} + \varepsilon_{it}
\]

Abnormal CFO is the actual CFO reduced by normal CFO that is resulted from the calculation. The abnormal CFO interpretation is lower abnormal operating cash flow means higher real earnings management actions from managers.

b. Abnormal Production Cost (Abnormal PROD)

\[
\frac{\text{COGS}_{it}}{\text{Assets}_{it-1}} = \alpha_0 + \alpha_1 \frac{1}{\text{Assets}_{it-1}} + \beta \frac{\text{S}_{it}}{\text{Assets}_{it-1}} + \varepsilon_{it}
\]

\[
\frac{\Delta \text{INV}_{it}}{\text{Assets}_{it-1}} = \alpha_0 + \alpha_1 \frac{1}{\text{Assets}_{it-1}} + \beta_1 \frac{\Delta S_{it}}{\text{Assets}_{it-1}} + \beta_2 \frac{\Delta S_{it-1}}{\text{Assets}_{it-1}} + \varepsilon_{it}
\]

Rowchowdhury (2006) formulated \( \text{Prod}_{it} = \text{COGS}_{it} + \Delta \text{INV}_{it} \). Using two equations above. Calculating the coefficient of normal production cost estimation uses the regression equation below:

\[
\frac{\text{Prod}_{it}}{\text{Assets}_{it-1}} = \alpha_0 + \alpha_1 \frac{1}{\text{Assets}_{it-1}} + \beta_1 \frac{\text{S}_{it}}{\text{Assets}_{it-1}} + \beta_2 \frac{\Delta S_{it}}{\text{Assets}_{it-1}} + \beta_3 \frac{\Delta S_{it-1}}{\text{Assets}_{it-1}} + \varepsilon_{it}
\]

Calculating the abnormal production cost (APROD) is by reducing the actual production cost with normal production cost estimation. The interpretation from abnormal production cost is higher abnormal production cost means higher real earnings management.

c. Abnormal Discretionary Expense (Abnormal DISC)

\[
\frac{\text{DiscExp}_{it}}{\text{Assets}_{it-1}} = k_1 \frac{1}{\text{Assets}_{it-1}} + k_2 \frac{\text{S}_{it-1}}{\text{Assets}_{it-1}} + \varepsilon_{it}
\]

The interpretation from the abnormal discretionary expense is lower abnormal discretionary expense means higher real earnings management behaviour.

d. Real Earnings Management Combination
As an overall measure of real earnings management, abnormal operating cash flows (Abnormal CFO), abnormal production costs (Abnormal PROD), abnormal discretionary costs (Abnormal DISC) are summed. Following Cohen et al. (2008) real earnings management is calculated as follows. Abnormal CFO and Abnormal DISC are multiplied by -1 to equalize the direction of real earnings management.

\[ \text{REM} = (\text{Abnormal CFO} \times -1) + \text{Abnormal PROD} + (\text{Abnormal DISC} \times -1) \]

**Moderation Variables**

Corporate governance is one of the concepts in increasing economic efficiency between company management, the board of directors, shareholders, and stakeholders. Corporate governance is measured using two proxies: the independent commissioners and the audit committees.

**Independent Commissioners**

Independent commissioners are members of the board of commissioners from outside the issuer or public company that are not affiliated with the board of directors, other members of the board of commissioners and controlling shareholders. They are free from business or other relationships that may affect their ability to act independently or act solely for the sake of interests of the company.

\[ \text{Independent Commissioner} = \frac{\text{Number of Commissioners from Outside the Company}}{\text{All members of the Board of Commissioners in the Company}} \times 100\% \]

**Audit Committees**

The intensive supervision from audit committee gives more accurate and quality information and lessens the possibility for the company to control its tax burden. Audit committee acts to offer a viewpoint on problems related to financial, accounting, and internal control policies. The audit committee consists of what companies listed on the stock exchange, at minimum three people from inside the company or from the independent commissioner. The audit committee is responsible to the board of commissioners. The variable measurement is the total number of the audit committee, considering that audit committees, independent and internal, is not separated from its origin.

**Data Analysis Model**

This model used the Moderated Regression Analysis (MRA); thus, three regression models in this research are below:

Model 1:

\[ \text{AP} = \alpha_0 + \beta_1 FD + \beta_2 REM + \epsilon_t \]

Model 2:

\[ \text{AP} = \alpha_0 + \beta_1 FD + \beta_2 REM + \beta_3 KI + \beta_4 KI*FD + \beta_5 KI*REM + \epsilon_t \]

Model 3:

\[ \text{AP} = \alpha_0 + \beta_1 FD + \beta_2 REM + \beta_3 KA + \beta_4 KA*FD + \beta_5 KA*REM + \epsilon_t \]

Note: AP = Tax Aggressiveness, FD = Financial Distress, REM = Real Earnings Management Combination, KI = Independent Commissioners, KA = Total Audit Committees.

**Research Results and Discussion**

Table 1 shows the results of the descriptive statistics analysis.

|       | N  | Minimal | Maksimum | Rata-rata | Std. Dev. |
|-------|----|---------|----------|-----------|-----------|
| AP    | 213| 0,001   | 0,971    | 0,27240   | 0,154     |
| FD    | 213| -14,770 | -0,348   | -3,12881  | 2,024     |
| REM   | 213| -37,207 | 0,772    | -2,88504  | 3,152     |
| KI    | 213| -1,000  | 0,000    | -0,38522  | 0,146     |
| KA    | 213| -5,000  | -2,000   | -3,05400  | 0,253     |

Based on the above table, the ETR value ranges around 0.001 to 0.971 with an average of 0.272 and standard deviation of 0.154. The financial distress value ranges from -14.770 to -0.348 with an average of 3.129 and standard deviation of 2.024. The real earnings management residual as the abnormal proxy ranges from 37.207 to 0.772 with the average of 2.885 and standard deviation of 3.152. The observation data of real earnings management is also quite distributed as seen from the standard deviation values that are higher...
from the average value. The proportion of independent commissioner in the sample companies at the observed years ranges from 0.000 to 1 (negative proxy). The zero value shows that there was no independent commissioner during observation. The average is -0.38522 with a standard deviation of 0.145. Another moderator variable was the audit committee. Based on the companies financial report, it was unknown how many audit committees were from external or internal, thus, this research the total audit committees. The total numbers of audit committees ranged from 3 to 5 (negative proxy) with the average was 3.05 and a standard deviation of 0.253.

Table 2: Multicollinearity Test Results

|       | Model 1 |          | Model 2 |          | Model 3 |          |
|-------|---------|----------|---------|----------|---------|----------|
|       | Tolerance | VIF | Tolerance | VIF | Tolerance | VIF |
| FD    | .877 | 1.140 | .017 | 58.825 | .006 | 176.697 |
| REM   | .877 | 1.140 | .067 | 14.874 | .002 | 592.218 |
| KI    | .009 | 108.16 |        |        |        |         |
| KI_FD | .005 | 192.61 |        |        |        |         |
| KI_REM| .036 | 27.783 |        |        |        |         |
| KA    |        |        | .245 | 4.079 |        |         |
| KA_FD |        |        | .006 | 173.516 |        |         |
| KA_REM|        |        | .002 | 578.942 |        |         |

Table 3: Multiple Linear Regression Results

|       | Model 1 |          | Model 2 |          | Model 3 |          |
|-------|---------|----------|---------|----------|---------|----------|
|       | Coef.  | Sig | Coef.  | Sig | Coef.  | Sig | Coef.  | Sig |
| Konstanta | .310 | .222 | .224 | 41.211 | .000 | .086 | .877 | .381 |
| FD    | .009 | .225 | .111 | 12.595 | .000 | -.367 | -9.952 | .000 |
| REM   | .003 | .125 | .003 | 8.746 | .000 | .221 | 4.278 | .000 |
| KI    | -.218 | .158 | -.218 | .000 |        |         |         |         |
| KI_FD | -.048 | .207 | -.048 | .000 |        |         |         |         |
| KI_REM| .007 | .094 | .007 | 3.094 | .000 |        |         |         |
| KA    | -.074 | .272 | -.074 | .007 |        |         |         |         |
| KA_FD | -.125 | .107 | -.125 | .000 |        |         |         |         |
| KA_REM| .073 | 4.238 | .073 | 4.238 | .000 |        |         |         |
| F-Value | 485.378 | .000 | 1265.7 | .000 | 64.378 | .000 |        |         |
| Adj. R2 | .820 | .967 | .967 |        | .599 |        |         |         |

Table 3 shows that the test result of Hypothesis 1 Model 1, which obtained a positive financial distress variable coefficient of 0.009 with the probability of 0.000<0.05. It means that financial distress variable positively influences the tax aggressiveness. Higher financial distress equals to higher tax aggressiveness. Thus, H1 was accepted. Model 2 used moderation variables of independent commissioners and interaction of financial distress on tax aggressiveness. The financial distress variable in Model 2 shows a negative coefficient value of -0.011 with a significant number of 0.00 < 0.05, meaning that financial distress had a significant negative influence on tax aggressiveness. This result did not follow the theory. Based on the VIF tolerance value, the model is not free from multicollinearity. In Model 3, financial distress variable had a negative relation on tax aggressiveness with the negative coefficient value of -0.367 and a significant number of 0.00 < 0.05, which means financial distress significantly influence tax aggressiveness. However, the tolerance and VIF values showed that this variable was not free from multicollinearity.

The test results of Hypothesis 2 Model 1 showed a positive coefficient value of real earnings management variable of 0.003 with a probability of 0.00<0.05. It means that real earnings management variable positively influences tax aggressiveness. Higher total earnings management means higher tax aggressiveness. Thus, H2 was accepted. The real earnings management in model 2 showed the positive coefficient value of 0.007 with a significant number of 0.00<0.05 (confidence level 95%), meaning real earnings management had a positive correlation with tax aggressiveness. In model 3, real earnings management variable obtained a positive coefficient of 0.221 with a significant number of 0.00 < 0.05 (confidence level 95%), meaning real earnings management had a positive correlation with tax aggressiveness.

Test results of the hypothesis (H3, H4, H5 dan H6) in Model 2 and Model 3, due to interaction between moderation variable and independent variable in the equation as stated by statistic experts, experienced serious multicollinearity between independent variables. Thus, to ensure the results, the residual analysis was performed by regressing independent variables on moderating variable for interaction with significant influences and show negative direction: KI_FD and KA_FD. Next, the dependent variable was regressed on residual absolute value. If t-test shows negative (-) and significant, then it means the moderating variable has a role. The results are shown in Table 4.
In Model 2, the moderation variable of the proportion of independent commissioners on financial distress had a significant influence on tax aggressiveness. However, because the model did not free of multicollinearity, there needed a residual analysis, as shown in Table 4. It was known that t-count was negative (-) and significant; thus, it could be concluded that the proportion moderation of total independent commissioners on financial distress negatively influenced the tax aggressiveness and followed the hypothesis. Therefore, $H_3$ was accepted.

In Model 3, based on Table 3, it was known that the total audit committee as the moderation variable on financial distress did not influence the tax aggressiveness.

Furthermore, the moderation of the proportion of independent commissioners on real earnings management also had a significant effect on tax aggressiveness, but the positive coefficient (+) did not follow the theory even though the significance level is 0.000<0.05. Thus $H_4$ was rejected.

Next, the moderation of the total audit committees on real earnings management had a significant effect on tax aggressiveness; however, the coefficient is positive and did not follow theory. So it could be concluded that the audit committee did not moderate real earnings management. Thus, $H_5$ was rejected.

As a note, based on Model 2 and Model 3, the independent commissioners variable and the audit committee, separately (not as a moderating variable) turned out to have a significant negative effect on tax aggressiveness.

Conclusions

The results showed that when the company experienced financial distress, management usually looked for a quick fund source with unforeseen risks. The easiest fund to obtain was the tax payment fund. Meanwhile, using fund from debt would add interest expense and a rejection possibility from creditors. Another cause was that audit from tax apparatus was conducted after the end of the tax year, thus, impossible to detect early, unless it led to tax evasion or tax penalties. Real earnings management that was performed through abnormal operating cash flow, operating production cost, and abnormal discretionary expense, influenced tax aggressiveness behaviour empirically. Next, based on the results, it was known that the regulations made by regulators in good corporate governance related to the existence of independent commissioners and audit committees (which one of its members must come from independent commissioners) independently and not as moderation variable in a go public company affected tax aggressiveness in the company. A useful corporate governance application that was proxied by the board of independent commissioners and audit committees could be an adequate supervision and controlling mechanism to prevent managers' opportunistic actions in managing companies to not to break the established rules and provisions and to avoid, even reduce, tax aggressiveness actions by the companies. This research is not free from limitations or shortcomings that need to be refined and followed up by further studies. Researchers still difficult to find the component of Research and Development (R&D) costs to measure abnormal discretionary costs in real earnings management. Discretionary costs in the financial statements of the companies that are the sample of observations, there are no specific details in the financial statements, so the researcher only includes total sales costs and total administrative and general costs as a measure of discretionary costs. Comprehensive research is needed, to assess the reasonableness of the proportion of discretionary costs to total sales costs plus general and administrative costs.

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Table 4: Residual Analysis of Moderation Variables

| Independent Commissioner Moderation (KI) | Audit Committee Moderation (KA) |
|---------------------------------------|---------------------------------|
| **KI_FD**                             | **KA_FD**                       |
| t-count                               | 0.635                           |
| Sig.                                  | 0.070                           |

(*) significant confidence level 90%
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