The Effect of Financial Ratios and Good Corporate Governance on Financial Distress: Independent Commissioners as a Moderating Variable

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Abstract. The business world has increasingly fast and competitive business development to compete with each other to maintain or increase the industry’s value. One of the challenges for every industry in competing is always to have ideas that innovate and keep up with the times so that the industry can compete in the sales market to attract consumers. In addition, the industry must also be the capability of expanding its business by having good corporate management in running the business. However, if the sector has lousy control, it will result from the industry’s finances. The result that the sector will receive is experiencing financial difficulties or financial distress. The aim to be achieved from the results of this study is to determine the financial ratios and good corporate governance (audit committee) affect financial distress with the Independent commissioner as a moderating variable. This study uses a quantitative method with a sample of the mining industry in 2018–2021. The analysis used is descriptive statistical analysis and multiple regression analysis. From the results of the tests that have been carried out, it can be concluded that return on assets negatively affects financial distress. Return on equity ratio, current ratio, debt to equity ratio, and audit committee have no results on financial. Net profit margin has a positive effect on financial distress. Debt to asset ratio has no impact on finances. The independent commissioner cannot moderate by weakening the correlation between the net profit margin and financial distress. While the independent commissioner is the capability of moderating by weakening the correlation between the audit committee’s and financial distress.

Keywords: Financial ratio · GCG and Financial Distress

1 Introduction

The business world has increasingly fast, and competitive developments to compete to maintain or increase the industry’s value. The industry is starting to explore innovative ideas to introduce their products or services to the broader community so that sales
increase and the industry get much profit. One of the challenges of every industry in competing is always to have ideas that innovate and keep up with the times so that the industry can compete in the sales market to attract consumer interest. In addition, the industry must also be capable of expanding the business by having good industry management in running the business. However, if the sector has inadequate control, it will have a result on the entity’s finances, and the effect that will be received is experiencing financial distress [1].

Financial distress is an industry experiencing losses and even financial difficulties so that it cannot pay the obligations of the industry as a first step indicating the industry will go bankrupt. As the first step shows, the industry will go bankrupt, reflecting the incapability of paying off its obligations and failing to pay debts to debtors because the industry’s funds are used to carry out its operational activities. Knowing the existence of financial distress in advance by the industry is hoped that the industry’s management will make the best decisions for the sustainability of the sector in the future [2]. However, other factors result from financial distress, namely external factors that can be caused by market competition, new regulations that can hinder the growth and operational activities of the industry, market conditions that are no longer attractive, or something that cannot be avoided.

Ninety-three industries registered in the mining sector on October 12, 2022. The mining sector is divided into two boards: the main board with 46 drive and the development board with 47 on the IDX, viewed through www.idx.co.id. The main board is intended for an industry with a good financial track record and is significant. In contrast, the development board is designed for the industry that still needs to meet the main listing requirements and has yet to record financial statements. The entire mining industry used as samples in this study was 58 industries with four years of observation [3].

A mining industry is an industry that produces, constructs, explores, conducts feasibility studies, manages and refines natural resources in the form of coal, gold, tin, and also sells them. In 2019, some industries experienced a decline in corporate profits, such as PT Bumi Resource Tbk (BUMI) and PT Bukit Asam Tbk. Some ambitions are threatened with being delisted on the Indonesia Stock Exchange due to indications of financial health, one of which is PT Borneo Lumbung Energi & Metal Tbk (BORN), suspended since 2016. Then continued, in 2020, the spread of Covid-19 throughout the world caused many industries to temporarily or permanently stop their business operations. This caused many industries to experience financial difficulties until bankruptcy and were delisted from the Indonesia Stock Exchange for the 2018–2021 period in the mining sector.

One of the causes of an industry delisting from the IDX, which will experience financial difficulties, is that the industry’s poor performance can be identified through insufficient capital for the industry’s operations, large debts, inflated interest and incapability to maximize profits derived from the operational sector [4]. This will result in the industry experiencing a deficit. If the industry immediately pays off debts that cause a deficiency, then the industry will experience financial difficulties. Therefore, the industry needs to have a model to detect the occurrence of financial distress problems in the mining industry so that it can re-evaluate its financial performance through financial reports before it experiences financial difficulties and goes bankrupt [5].
Many studies on financial distress have been carried out by the previous research that has characteristic variables, such as [1, 2, 6] which examines the current ratio as a calculation formula that stated that they were incapability to predict the existence of financial distress. However, the study [6]–[8] statement that the current ratio affects financial distress. The current ratio is one of the variables often used in this study. This study [9, 10] stated that the debt-to-asset ratio as a calculation does not affect financial distress. Compared to studies [11, 12], it is stated that the debt-to-asset ratio affects financial distress.

Based on a study [13, 14] stated that asset returns do not affect financial difficulties. The study [15] has a statement of asset returns that affect economic challenges. The relationship between return on equity and financial distress can be seen from the existing empirical evidence based on a study [4] reporting that return on equity negatively affects financial distress. In contrast to the survey [16], which states that income on equity does not involve financial difficulties.

The relationship between debt to equity ratio and financial distress can be seen from existing empirical evidence based on study [17]. As proxied by the debt-to-equity ratio, the solvency ratio does not affect financial distress. Meanwhile, a study [18] reports a debt-to-equity ratio negatively affects predicting financial distress conditions. The relationship between the audit committee and financial distress can be seen [19], stating that the audit committee partially does not affect financial distress. While in the study [20], the audit committee partly involves financial distress.

The previous study has yet to explain it comprehensively, so studies offer a variable that distinguishes this study from previous studies: net profit margin, return on equity, debt-to-equity ratio and good corporate governance (audit commission). In addition, this study has the novelty of using the independent commissioner’s moderating variable.

Many previous studies have investigated financial distress, but many results show differences from one survey to another. To get better results, the study adds a variable net profit margin, the audit committee, which is one of the variables of good corporate governance in this study. In addition, this study will be more interesting because of the independent commissioner used as a moderating variable. The existence of an independent commissioner will maximize the supervision of the industry’s management. This study empirically proves the ratio mechanism’s results on good corporate governance on financial difficulties. As well as proving whether independent commissioners can moderate the relationship between net profit margins, and the audit committee with financial difficulties.

2 Literature Review

2.1 Signalling Theory

Spence first proposed signal theory in a 1973 study entitled job market signaling. Signal theory has information asymmetry or signals from the industry’s internal parties with external parties such as shareholders, stakeholders, the community, and the government [21]. This theory assumes that the sector gets different information from other parties interested in the industry. This theory can also describe an industry’s report through the industry sending signals or signals to interested parties. An industry experiencing good
news means the industry supplies information that investors have an excellent signal to invest in the industry [22]. Conversely, if you share bad news, the sector supplies information that investors have a terrible signal to invest their capital.

2.2 Agency Theory

According to Jensen and Meckling (1976), agency theory is a theory that correlates with the principle as the owner of the business and the agent as the party carrying out service activities. Within the industry, The agent is responsible for managing the owner’s business and optimizing the profits that can be obtained [23]. Within the industry, the agent must manage the owner’s business and maximise the profits that can be obtained. Agents also get rewards according to the contract agreed upon by both parties. If the agreement between the principal and the agent has been approved and the transaction has been completed, the agent will receive agent fees and incentives from the principal. The agent (manager) must be honest and open with the owner. If the manager knows more about the industry, the manager may be the capability to hide the truth from the industry owner. Information imbalance is known as information asymmetry [24].

2.3 Financial Distress

Financial distress is an industry experiencing losses and even financial difficulties so that it cannot pay the obligations of the industry as a first step indicating the industry will go bankrupt. It usually occurs because there are aspects that result from financial distress, namely internal factors consisting of losing customers, poor cooperation with suppliers, having new competitors attracting customers, and interest on loans that have increased. Meanwhile, the internal factors consist of inappropriate decision-making so that the result for the industry is that there will be difficulties in the future, and the industry will be in debt. The industry’s operations will suffer losses.

According to [25], the factors that affect financial distress are:

a) Cash Flow Difficulties

When the industry generates income that cannot cover the debt burden of the industry for the entity’s operational activities, errors made by management when coordinating the industry’s cash flow in operating payments can complicate the industry’s financial situation.

b) Amount of Debt

The industry that takes a policy for debt in the industry’s operational activities will result in payment of obligations in the future. If the entity cannot pay the liability until the due date, the industry can also not pay off its debts because it does not have sufficient funds. Then the creditor will seize the entity to pay off the entire debt not paid by the entity.

c) The industry’s operational Activities have suffered losses for several years.
Industry losses are also the cause of the financial difficulties experienced by the industry due to negative cash flow in an industry. This is because operational activities have higher costs and lower income than funds for industry operations. Although the industry can overcome these three problems, the industry may be experiencing financial distress due to external factors or external factors.

Information about financial distress is essential for the industry to detect early potential financial difficulties that can cause bankruptcy in the industry. When an industry experiences financial distress, its management is more careful in acting or making decisions because if it makes a mistake in making a decision, bankruptcy can occur in the industry. Shareholders also need to obtain information about financial distress to be the capability to decide whether to invest in an industry or not. This financial distress can be detected through financial ratios and corporate governance.

2.4 Return on Assets

Return on Assets is an industry that earns profits by investing in industrial assets and expects returns in the future. A high return on assets means that the sector manages the industry. The industry has driven the assets as much as possible and made a profit from the assets used, enterprises need to maintain the value of return on investments by generating profits to show a positive return on assets value. The study [26] argues that profitability using return on assets as a measurement tool does affect financial distress. The higher the return on assets, the smaller the occurrence of financial distress.

H1: Return on assets does not result in financial distress.

2.5 Return on Equity

Return on equity is the return on profits or profits obtained from using the industry’s capital by investing. The higher the value of the return on equity ratio, it can be clarified that the better the industry is at managing capital for the use of industry activities. Conversely, the lower the value, the sector operates capital with a poor ability to generate returns that the industry has invested so that the industry will get a low return. The study [27] states that return on equity partially influences financial distress.

H2: Return on equity has partially resulted in financial distress.

2.6 Net Profit Margin

Net Profit Margin is an industrial industry that earns profits from each of its sales activities. Shareholders or capital owners can find out how efficiently the management manages the industry through net profit margin, which compares net profit with sales. The greater the value of this ratio, it can clarify that the better the management in managing the industry. Therefore, if the value of the net profit margin ratio is high, it is assumed that the sector has good financial performance and can earn high profits. Hence, the industry has the potential for financial difficulties, or financial distress will be more minor. Based on a study [28, 29], has an opinion regarding the net profit margin has a positive and does not result in financial distress conditions.
H3 = Net profit margin has a positive and resulted on financial distress.

2.7 Current Ratio

The current ratio is the ratio that is usually used to pay current liabilities that must be met with the current assets that the industry has. A high current ratio value means that the industry is in a healthy condition, such as an industry that uses its current assets to pay its current liabilities, which are used for industry needs. An industry with a current ratio value above one means that the industry can be said to be able to pay its current liabilities with the current assets that the industry has, and vice versa. But not necessarily a high current ratio value is a good industry because, in certain circumstances, it has a lot of capital debt and needs to use it optimally. Therefore, an industry with a high current ratio value can reduce the potential for financial distress. In the end, it can result in decreased profits for the industry. Based on a study [6, 30] argues that liquidity that uses the current ratio as a calculation method has an adverse result on the occurrence of financial distress.

H4: Current ratio has a negative result on financial distress.

2.8 Debt to Equity Ratio

The debt to equity ratio is a ratio that can be used and shows the ability of the industry’s amount of debt to the industry’s capital. If the industry has a higher debt-to-equity value, the total debt is more outstanding than the capital of an industry, and vice versa. If the value is low, the total debt is more minor than the capital. High debt will increase the debt and interest payments burden so that capital does not cover the industry’s debt. The industry’s profits are decreasing for this and can cause financial distress. Based on a study [17, 31] states that the solvency ratio substituted by the Debt to Equity Ratio has not resulted in financial distress.

H5 = Debt to equity ratio does not result in financial distress.

2.9 Debt to Asset Ratio

Debt to asset ratio is a ratio that can be used and shows the ability to measure the number of industry assets obtained from debt which helps generate profits for the industry. The debt to asset ratio explains that the industry’s management performance needs to be reviewed in the industry’s management when making decisions. The higher the value of the debt to asset ratio ratio, it can clarify that the more outstanding the debt used to finance asset investment in the industry. Conversely, the lower the debt to asset ratio, the smaller the debt used to finance asset investment in the industry. This triggers financial difficulties or distress if you have a very high debt to asset ratio. Based on the study [9, 32, 33] state that debt to assets has a positive result on the occurrence of financial distress.

H6: Debt to asset ratio has a positive result on financial distress.
2.10 Committee Audit

Bapepam has changed its name to the Financial Services Authority through circular letter No.SE03/PM/2000 recommends that every public industry form an audit committee. The Audit committee is part of corporate governance, which was created to assist the commissioners in overseeing the performance of financial reporting and the implementation of internal and external audits of the industry. The correlation between the audit committee and financial distress can be seen [13], stating that the audit committee partially has no result on financial distress.

H7: Audit committee has no results on financial distress.

2.11 Resulted of Financial Ratios on Financial Distress with Independent Board of Commissioners as Moderating Variacpability

An independent commissioner is one of the industry’s boards that can rationally control and supply advice to the board of directors. With the existence of an independent commissioner, it is hoped that it will affect the industry’s management control with no financial distress.

H8 = The independent board of commissioners can moderate by strengthening the results of net profit margin on financial distress.
H9 = The independent board of commissioners can moderate by weakening the results of the audit committee on financial distress.

3 Research Methods

The unit of analysis for this research is mining sector companies from 2018 to 2021, with 232 observations. The reason for choosing a mining sector company is because this sector is the sector most vulnerable to the Covid-19 pandemic. The selected sampling technique is purposive sampling, namely with specific prerequisites. The population of this study is all mining sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2018 to 2021. The number of financial sector companies listed on the IDX until 2021 is 58, which meets the prerequisites, so there are 232 research company analysis units. The sample selection method is purposive sampling, namely the selection of samples with specific criteria (Table 1).

Data Analysis Technique

Descriptive statistics are used to analyze the data in this study. The measurements used in this study are the minimum value, maximum value, average value, and standard deviation of each variable. Multiple linear regression analysis was tested using the SPSS version 26 application used to compile data such as making table, graphs and images. The following is the equation of multiple regression analysis in this study as follows:

\[
Y = \beta_0 + \beta_1(ROA) + \beta_2(ROE) + \beta_3(NPM) + \beta_4(CR) + \beta_5(DER) \\
+ \beta_6(DAR) + \beta_7(KA) + \beta_8(NPM \times KI) + \beta_9(KA \times KI) + e_i
\] (1)
Table 1. Variable Measurement

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variable Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Distress</td>
<td>( Z'' = 3.25 + 6.56 \times X1 + 3.26 \times X2 + 6.72 \times X3 + 1.05 \times X4 )</td>
</tr>
<tr>
<td>Notes:</td>
<td>( Z'' = ) Index Financial distress ( X_1 = ) Working Capital / Asset Capital ( X_2 = ) Retained Earnings to Total Asset ( X_3 = ) Earnings Before Interest and Taxes to Total Asset ( X_4 = ) Book Value of Equity / Book Value of Liabilities</td>
</tr>
</tbody>
</table>

Financial Ratio

<table>
<thead>
<tr>
<th>Return on asset</th>
<th>( \frac{\text{Netprofitaftertax}}{\text{TotalEquity}} \times 100% )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on equity</td>
<td>( \frac{\text{Netprofitaftertax}}{\text{TotalEquity}} \times 100% )</td>
</tr>
<tr>
<td>Net profit margin</td>
<td>( \frac{\text{Netprofitaftertax}}{\text{Totalrevenue}} )</td>
</tr>
<tr>
<td>Current ratio</td>
<td>( \frac{\text{Currentasset}}{\text{currentliabilities}} \times 100% )</td>
</tr>
<tr>
<td>Debt to equity ratio</td>
<td>( \frac{\text{Totalliabilities}}{\text{TotalEquity}} )</td>
</tr>
<tr>
<td>Debt to asset ratio</td>
<td>( \frac{\text{Totalliabilities}}{\text{Totalasset}} )</td>
</tr>
<tr>
<td>Audit committee</td>
<td>( \sum \frac{\text{totalauditcommitee}}{\text{totalboardofcommissioners}} \times 100% )</td>
</tr>
<tr>
<td>Independent commissioners</td>
<td>( \frac{\text{totalindependentcommissioners}}{\text{totalboardofcommissioners}} \times 100% )</td>
</tr>
</tbody>
</table>

4 Result and Discussion

The average value of financial distress using a modified Altman Z-score as a measurement of changes in the mining sub-sector during the 2018–2021 period is 5.6984. From this value, it can be concluded that the mining sub-sector industry listed on the IDX in 2018–2021 has no indications of financial distress because the Z-score value is more significant than 1.81. This shows that the industry can regulate and maintain the balance of the industry’s financial performance. This variable has a minimum value of -19.16, which PT owns. Capitalising Investment Tbk (MTFN) in 2021. While the maximum value of 141.38 is owned by PT Optima Prima Metal Sinergi Tbk (OPMS) in 2021.

The return on asset variable has a large distribution of data, as evidenced by the standard deviation value of 0.68012 above the average value of 0.0413, with the middle mining sector industry having a meagre return on assets compared to other financial ratios. The return on equity variable has a high data distribution, which can be seen from the standard deviation value of 3.55083, above the average value of 0.5909. Net profit margin with a standard deviation value of 0.53256, which is higher than the average value of 0.0745, causes a high dispersion of data because the mining industry at that time experienced many losses due to Covid-19. The current ratio variable with a narrow data distribution can be seen from the standard deviation value, which is 1.50393 lower than the average value of 1.7343 and the average mining sector industry has inferior corporate liquidity as evidenced by the mean value being close to the minimum value.
Debt to equity ratio has a high distribution with a standard deviation of 2.85693 with an average of 1.5037. They are using industry capital that could be more optimal results in industry losses. The debt-to-equity ratio has a low data distribution with a minor standard deviation of 0.34246 and an average value of 0.3426 in the mining industry. Finally, the audit commission’s variable has a low data distribution, as evidenced by the standard deviation value of 0.06549 and the average value of 0.4916. Because many industries in the mining sector are still few who use an audit committee of 3 people.

4.1 Return on Asset

The return on assets ratio measures an industry’s rate of return on assets through investment. So the rate of return on assets can be used to prevent financial distress if it looks high. The rate of return on assets that is less than optimal reduces industry profits so that it can reduce industry performance. Low industry performance will impact the high possibility of financial distress occurring. The return on assets differs from the determining variable that will avoid financial difficulties [26, 34]. A study, which states that the asset return ratio has a negative effect on financial distress, was carried out [13]. The results of this study indicate that the variable income on assets has a negative effect on financial distress because it has a coefficient of -0.065 with a calculated value of -0.063 and a significant value of 0.050 sig. Conversely, if the ROA value is high, it is not sure that the industry is in a state of financial distress, so this study has not been the capability to prove the effect of ROA on financial distress.

4.2 Return on Equity

Return on equity is a financial ratio instrument that is used as a measuring tool to predict financial distress by measuring the profit earned by the industry through the capital used by the industry. Testing the hypothesis of the return-on-equity ratio shows a significant value of 0.002. The rate of return on equity negatively affects financial distress. This indicates that return on equity is not the determining variable to avoid financial distress, and this study is inversely proportional to the hypothesis. Thus H2 is rejected. The study’s results which stated that return on equity had a negative relationship with financial distress, were carried out [27, 29]. A high return on equity reflects that the industry has optimally managed equity to generate profits. A low return on equity reflects that the industry could be more optimal in managing equity to generate profits. It can make it difficult for the industry’s finances in the investments made by the industry so that it can cause financial distress and even bankruptcy [35].

4.3 Net Profit Margin

A net profit margin is a measurement tool for financial ratios used to indicate whether the industry is experiencing financial distress by measuring the net profit after a tax deduction of the total income derived from each of its sales activities. The results of this study explain that the net profit margin has no impact on financial difficulties within the industry. Net profit margin is one of the determining variables that will predict financial
Table 2. Descriptive Statistical Analysis

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>ROE</th>
<th>NPM</th>
<th>CR</th>
<th>DER</th>
<th>DAR</th>
<th>KA</th>
<th>KI</th>
<th>FD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.0413</td>
<td>0.5909</td>
<td>0.0745</td>
<td>1.7343</td>
<td>1.5037</td>
<td>0.5187</td>
<td>0.4916</td>
<td>0.3895</td>
<td>5.6984</td>
</tr>
<tr>
<td>Max</td>
<td>3.60</td>
<td>32.61</td>
<td>6.60</td>
<td>10</td>
<td>34.06</td>
<td>3.32</td>
<td>0.70</td>
<td>0.75</td>
<td>141.38</td>
</tr>
<tr>
<td>Min</td>
<td>-5.78</td>
<td>-5.37</td>
<td>-3.13</td>
<td>0.13</td>
<td>-4.31</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>-19.16</td>
</tr>
<tr>
<td>Std. Dev</td>
<td>0.68012</td>
<td>3.55083</td>
<td>0.53256</td>
<td>1.50393</td>
<td>2.85693</td>
<td>0.34246</td>
<td>1.23536</td>
<td>0.09772</td>
<td>10.55476</td>
</tr>
</tbody>
</table>

distress, so this study is in line with the accepted hypothesis H3 and has similarities in the results of the analysis with [26] net profit margin reflects that managing an industry is better if it has a high value and can attract investors’ trust because it has a high value. Meanwhile, the sector can deteriorate due to a low value, so shareholders will think again about investing their capital or releasing the holders’ shares. From this explanation, it is said that a high net profit margin value can make an industry avoid financial distress [29, 36].

4.4 Current Ratio

The current ratio is one of the financial ratio instruments used as a measuring tool to predict the existence of financial distress with the ability to measure whether an industry can pay its current liabilities with its current assets. A liquid industry is an industry that can use its obligations to make high profits for the industry’s sustainability. An industry that can fulfil its financial commitments following the specified time is the industry that has current assets more significant than short-term debt. If the value of the current ratio is higher, then the industry has a very good condition because the industry is in a liquid state. However, suppose the current ratio is too high. In that case, it can indicate that the industry needs to use its capital fully, or it could be more productive in using working capital, resulting in increased costs. This will reduce the industry’s profits and may cause financial distress. The results of this study indicate that the current ratio has a negative effect on financial distress (Table 2).

Testing the current ratio hypothesis shows that the significant value is 0.049, which is smaller than the average significance level of 0.05, with a negative beta value of -0.019 and a calculated value of -0.038. This shows that the current ratio is not the determining variable that will avoid financial distress in the mining sub-sector. From this statement, the hypothesis is in line with the hypothesis proposed in this study. Therefore H4 is accepted and supported by the survey [1, 37]–[39] explains that the industry’s risk will be lower if the value of the current ratio is high. In addition, an industry with a high current ratio can be interpreted as an industry with assets ready to be paid and even pay off its short-term debt (Table 3).
The Effect of Financial Ratios and Good Corporate Governance

Table 3. Hypothesis Test Results

<table>
<thead>
<tr>
<th>Table</th>
<th>Beta</th>
<th>Standard. Error</th>
<th>T-statistic</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>28,503</td>
<td>6,109</td>
<td>4,666</td>
<td>0.000</td>
</tr>
<tr>
<td>Return on asset</td>
<td>-0.065</td>
<td>1,039</td>
<td>-0.063</td>
<td>0.050</td>
</tr>
<tr>
<td>Return on equity</td>
<td>-0.171</td>
<td>0,204</td>
<td>0.840</td>
<td>0.002</td>
</tr>
<tr>
<td>Net profit margin</td>
<td>1,239</td>
<td>1,326</td>
<td>0.934</td>
<td>0.351</td>
</tr>
<tr>
<td>Current ratio</td>
<td>-0.019</td>
<td>0.488</td>
<td>-0.038</td>
<td>0.049</td>
</tr>
<tr>
<td>Debt to equity ratio</td>
<td>0.089</td>
<td>0,251</td>
<td>0.355</td>
<td>0.023</td>
</tr>
<tr>
<td>Debt to asset ratio</td>
<td>-6.423</td>
<td>2,215</td>
<td>-2.900</td>
<td>0.004</td>
</tr>
<tr>
<td>Komite audit</td>
<td>-42,860</td>
<td>10,599</td>
<td>-4.044</td>
<td>0.000</td>
</tr>
<tr>
<td>Komisaris independen</td>
<td>3,317</td>
<td>7,083</td>
<td>0.468</td>
<td>0.040</td>
</tr>
<tr>
<td>Net profit margin x Independent commisioners</td>
<td>-3,140</td>
<td>24,194</td>
<td>-0.130</td>
<td>0.897</td>
</tr>
<tr>
<td>Audit commitee x Independent commisioners</td>
<td>-256,379</td>
<td>85,250</td>
<td>-1.280</td>
<td>-3.007</td>
</tr>
<tr>
<td>Nilai R-square</td>
<td>= 0,277</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.5 Debt to Equity Ratio

The debt-to-equity ratio is a financial ratio used to predict the existence of financial distress in an entity by showing the ability of the industry to have debt owned by the entity against the industry’s capital used by the entity. Testing the debt-to-equity ratio hypothesis indicates that the significant value is 0.023, smaller than the average significance level of 0.05, with a positive beta value of 0.089 and a calculated value of 0.355. The results of this study indicate that the debt-to-equity ratio has a positive effect on financial distress. The higher the DER value, the greater the capital owned by the industry, which is smaller than the total debt held by the industry [18, 19].

An industry with too high debt can experience difficulties in paying off debt, which can cause financial problems or financial distress. This shows that the debt-to-equity ratio is not the determining variable that will avoid financial distress in the mining sub-sector and is contrary to the H5 hypothesis. The H5 hypothesis is rejected. This study’s results align with the survey [17], which states that a low debt-to-equity value means the industry can manage debt obtained from the capital to be in a capability condition. Meanwhile, if the value is high, the industry needs to properly work the debt acquired from the capital so that it can worsen the industry’s financial statements. This is one of the results of financial distress that cannot be avoided [1].

4.6 Debt to Asset Ratio

Debt to asset ratio is one of the financial ratio instruments that is used as a measuring tool to predict financial distress by measuring the extent to which the industry has total assets obtained through debt from creditors and used to manage the industry’s business to make a profit. Hypothesis testing in this study, the debt to asset ratio has a significant value
of 0.004 which explains that the value is significantly less than the significance value of 0.05 with a negative beta value of -3.140 and a t-value of -0.130. The results showed that the debt-to-asset ratio has a negative effect on financial distress, which means that the debt-to-asset ratio in every debt used by the industry as capital does not always earn a profit. Therefore it only sometimes helps in predicting financial distress. This is contrary to hypothesis H6, so hypothesis H6 is rejected. These results are in line with a study [8, 10]–[41]. Profitability proxied by the debt-to-asset ratio obtained by the industry is not one of the factors that affect financial distress conditions. Suppose the value of the debt-to-asset ratio is high. In that case, it can be interpreted that the sector has significant obligations, which can cause the industry to have difficulty paying debts when they are due and make the sector experience financial problems.

On the other hand, if the value of this variable is low, the entity has small obligations so that the industry can pay the debt at maturity in the agreement. It can be said that the industry is in good health. A low debt-to-asset ratio is not a guarantee that the entity to avoid financial distress.

4.7 The Audit Committee

It is hoped that an audit committee can prevent financial distress. The audit committee is a part of corporate governance and was formed to assist the board of commissioners in overseeing the performance of financial reporting and the implementation of internal audits and external audits of the industry. The audit committee hypothesis testing has a significant value of 0.000 with a negative beta value of -42.860 and a t-count value of -4.044. The results showed that the audit committee had a negative effect on financial distress. This is in line with hypothesis H7, and hypothesis H7 is accepted and supported by the study [42] states that the audit committee in the industry has at least three members who are owned by the industry and led by an independent board of commissioners and two members who are not from a public sector. However, this study also explains that the audit committee cannot influence financial distress.

4.8 Effect of Net Profit Margin on Financial Distress with Independent Commissioner as Moderating Variable

The results of the moderation of the variables from the variable Net profit margin and independent commissioners can be seen from the negative beta of -3.140 with a significant value of 0.897 where the value is greater than the average considered capability level of 0.05 and the calculated value is -0.130. The results showed that the independent commissioner was incapable of moderating by weakening the relationship between net profit margin and financial distress, which means that the independent commissioner did not provide a moderating effect on the relationship between net profit margin and financial distress. The net profit margin is high, it cannot be avoided financial distress, which has been influenced by the effectiveness of the supervision of the independent board of commissioners. This is contrary to the H8 hypothesis, and the hypothesis is rejected.
4.9 The Effect of the Audit Committee on Financial Distress with Independent Commissioner as Moderating Variable

The moderation of the audit committee and independent commissioner variable results can be seen from the negative beta of -256.379 with a significant value of -3.007, where the value is smaller than the average considerable level of 0.05, and the calculated value is -0.130. The results show that the independent commissioner is the capability of moderating by weakening the relationship between the audit committee variable and financial distress, which means that the independent commissioner has a moderating effect on the relationship between audit commitment and financial distress. This is in line with the H9 hypothesis. The hypothesis is accepted.

5 Conclusion

From the results of the analysis above, it can be concluded that the return on assets has been negative and resulted in financial distress. Income on equity ratio, current ratio, debt to equity ratio and audit committee have negative results in financial distress. The net profit margin ratio has a positive impact on financial distress conditions. The debt ratio to assets negatively affects financial distress in the mining sub-sector industry listed on the IDX for the 2018–2021 period. The independent commissioner variable is to moderate by weakening the correlation between the net profit margin (x3) and financial distress. at the same time, the independent commissioner can moderate by weakening the correlation between the audit committee and financial distress. It is hoped that it can add others that may affect this study—suggestions for future studies to use a calculation model other than the Altman Z-score. Further studies are advised to take more samples so that the data will be processed more accurately in further study.

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