The Effect of Good Corporate Governance Mechanisms, Financial Ratio, and Financial Distress: A Study on Financial Companies

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Abstract. The COVID-19 pandemic has significantly impacted the Indonesian economy, as indicated by the capital market's high volatility due to the business environment. The pandemic has caused companies to adjust their business activities which has an impact on decreasing productivity so that companies have the potential to go bankrupt. This study aims to predict the financial distress faced by mining companies by using predictors of good corporate governance mechanisms, operating cash flow, and leverage. The population of this study is mining companies listed on the Indonesia Stock Exchange in 2020 and 2021, with a purposive sampling type. The unit of analysis that we use is 91 annual reports with 140 financial companies. Analysis of the data used is multiple linear regression by testing the relationship between variables. Good corporate governance mechanisms that the company appropriately implements will prevent the company from financial difficulties because it acts as a controller. Operating cash flow and leverage can be good predictors of potential financial distress. Low operational cash flow and high leverage are early signals that the company is experiencing financial problems that will potentially go bankrupt in the long term.

Keywords: Financial distress, good corporate governance mechanism, and financial ratio

1 Introduction

Financial performance and company viability are research topics that are widely studied by academics, especially in times of crisis. Investors need information about financial stability and guarantees that the company has the risk of bankruptcy in business decisions. Therefore, investors need to calculate the prediction of the company's bankruptcy risk because investors cannot rely solely on the financial information displayed in the financial statements that the auditors have audited. The information provided by the auditor sometimes does not reveal information sufficient to describe the company's economic condition, including financial and non-financial aspects. Therefore, academics are competing to find the most precise predictive model for calculating the company's probability of going bankrupt. The prediction model serves to predict the company's financial condition in the future using current information. Prediction models are also helpful for managers in preparing business plans and company investments to avoid the risk of bankruptcy.

Prediction models are very relevant to current conditions, where a pandemic significantly impacts all human activities, one of which is the destruction of a country's economy. Economic growth in Indonesia in 2020 decreased drastically to minus 2.95% compared to 2019. There was a difference of 3.57% as measured by GDP [1]. The current economic downturn can disrupt the company's operational activities in all economic and business sectors in Indonesia, one of which is in the financial industry, which can trigger financial distress.

COVID-19, which causes many companies to experience financial distress, can be identified by its negative equity value. The specified financial sector company is PT Intan Baru Prana Tbk. (IBFN), Danasupra Erapacific Tbk (DEFI), PT Magna Investama Mandiri Tbk (MGNA), PT First Indo American Leasing (FINN), and PT Onix Capital Tbk (OCAP) (kompas.com, 2021). A negative equity value can illustrate that a company has more significant debt than its assets. Debt that is too large for the company is not considered a good thing because there is a risk of default that can trigger financial distress. In addition, financial sector companies were delisted from the capital market in Indonesia, including Bank Nusantara Parahyangan Tbk (BBNP) in the banking sub-sector in 2019 and PT Bank Mitraniaga Tbk. (DRAGON). In the leasing sub-sector, PT First Indo American Leasing Tbk. on March 2, 2021, also experienced delisting [2]. Delisting can signify that the company tends to experience financial difficulties and even bankruptcy [3].

Companies experiencing financial distress are caused by a decline in financial performance due to the pandemic. Then it is essential to find a predictive model to detect bankruptcy. Identifying companies with a tendency to financial distress can help stakeholders in decision-making and other interested parties [4]. Financial distress is a phenomenon that can be used as a signal before a company goes bankrupt [4]. There are two causes of financial distress. The first is the company's management problems from internal sources, namely financial performance and corporate governance, and external companies that the company cannot control. If the company cannot control and manage declining financial performance properly, then the company can go bankrupt [5].

Financial distress must be a severe concern for corporations not to go bankrupt and be liquidated. Companies experiencing this condition cause the company not to have the ability to maintain their business continuity and will harm its stakeholders [6]. Financial distress models need to be carried out and continue to be developed because they are a signal for the company if it leads to financial difficulties, so that management can take action to anticipate conditions that lead to bankruptcy. The company takes various actions to avoid bankruptcy, such as updating the structure of assets and liabilities, selling assets, reducing capital expenditures, layoffs, and restructuring public or bank debt. Companies that receive signals of financial difficulties will take the necessary precautions to avoid bankruptcy to improve the company's current condition. Therefore, it is essential to have a model or predictor that can be used as an early warning system that investors and companies can use to avoid huge losses.

Many financial distress studies have been conducted in various countries. Studies conducted by [7]–[15] researching financial distress with financial ratios. The study's results explain that financial ratios are essential components that can be obtained easily in financial statements, so they can be used to calculate whether a company signals financial distress or not. Financial ratios are considered the most effective because they can predict the future condition of the company with current financial data. Against fraud [16] uses another predictor that is considered the most relevant, namely corporate governance.

The study of [16]–[20] detects financial distress using corporate governance predictors. This variable was used by previous researchers to analyze the technical factors causing financial distress. Study Younas [19] explains that good governance will guarantee that the company avoids the risk of bankruptcy. Still, if the company's GCG is not good, this is an early signal that there will be many fraud-related findings. Through this study, we developed a research model by combining several variables that were previously used separately by previous researchers. We combine two predictors that can be used to detect financial distress signals.

2   Literature Review

a.   Signalling Theory

Signalling theory was put forward by [21], which explains that in this theory, there is an interaction between two interrelated parties, namely the signal sender, namely the company's internal party, who presents relevant company performance information [21]. At the same time, the signal received is an external party to the company that needs this information. Furthermore, information from the signal sending party is used by the signal receiving party for analysis and as a means for making relevant decisions for the receiving party [3].

Signal theory describes how a company gives a signal to interested parties to use financial statements from management where the signal can be in the form of bad news or good news. In this case, the recipient of the information can find out if there is a potential for bankruptcy of a company, and it can be seen from the information presented by the management. Therefore, in submitting the report, the management is expected to be able to explain it transparently regarding the condition of the company's performance [13].
Financial Distress

Financial distress, in general, is an early symptom or tendency to go bankrupt in a company, where the condition a company cannot fulfil all its obligations on time because it has failed to pay. This symptom of financial distress can endanger business continuity, and it is feared that it can harm various parties. Therefore it is crucial to know the indications of financial distress that can be used as an early warning system in preventing bankruptcy in a company [4]. According to [4] which states that several things indicate financial distress, including (a) A decrease in the volume of company sales, (b) Experiencing dependence and difficulties in collecting receivables, (c) and experiencing a decrease in profits and dividends distributed (d) Experiencing a continuous decline in share prices. The financial distress model used in this study is the O-Score model. Based on its coefficient value, this model is considered more effective than the Z-score, especially for developing countries.

b.   Good Corporate Governance Mechanism

Corporate Governance is a series of processes, customs, policies, rules, and institutions that influence a company or corporation's direction, management, and control. Corporate governance also includes the relationship between the stakeholders involved as well as the objectives of the company's management. GCG is the main factor that affects financial difficulties because financial difficulties are the impact of a control system that does not work effectively. Companies that can maximize the role of GCG properly have implemented an excellent internal control system to protect the company from potential bankruptcy. The potential for bankruptcy occurs because of differences in interests between the agent and the principal, which encourages the agent to take moral hazard actions. Many studies have found that the company's failure to manage the company was caused by the structure and mechanism of GCG that did not work well, causing many irregularities. Many studies about GCG have been studied, studies [7], [19], [20], [22] explain that companies that are effective in implementing GCG will reduce the risk of companies experiencing financial distress. GCG variables often used are institutional ownership, size of the board and audit committee.

Institutional ownership [23] is the proportion of share ownership owned by a company. These institutions can be government institutions, private institutions, domestic or foreign. Managerial ownership is share ownership by the company's management. Financial distress indicates the failure of the company's asset management related to institutional owners' management of the supervisory system. Shares owned by institutions can become an excellent internal control system because of direct supervision from shareholders [6], [13], [18], [19].

Board size [24] is measured by the number of members on the board of directors at the end of the financial year. Share ownership by directors is measured by the percentage of shares owned by directors divided by the number of ordinary shares outstanding. Companies with many boards of directors allow them to provide more effective supervision to significantly prevent companies from financial distress. Furthermore, the audit committee [25] audit committee is an independent committee formed by the board of commissioners and serves to strengthen the function of the company's board of commissioners. The purpose of the establishment of the audit committee is to assist the board of commissioners in charge of managing company policies, internal control, managing the financial reporting system and the implementation of internal and external audits within a company [24]. Research conducted by [13], [19] states that the audit committee can reduce the risk of corporate financial distress.

H1a: Institutional ownership that can carry out supervision can reduce the risk of financial distress
H1b: A large board size in a company can reduce the risk of financial distress
H1c: An audit committee that works effectively can reduce the risk of financial distress

c. Financial Ratio

Financial ratios are one of the predictors investors can use to identify the company's financial health. Companies that go bankrupt usually show abnormal financial data attributes for several years before the bankruptcy. Financial ratios have become a predictor variable widely studied in the last decade, especially during a pandemic, because many companies are experiencing financial difficulties. Explaining financial ratios can be a proactive predictor and predict the risk of bankruptcy in a company. Linear with study [9] Finding the financial data displayed by the firm in the annual report can describe the firm's overall financial condition. Investors can use financial data analyzed using financial ratios to assess whether the company has an excellent financial situation or not. The study was conducted by [9], [13], [14], [19], [26].

Financial ratios that are often used to predict financial distress are operating cash flows [3], [4], [16]. Operating cash flow displays information about cash flows in and out of the company's operations in one period.[10]. The greater the cash flow generated, the more excellent the opportunity for the company to avoid financial distress, in line with a signal theory which reveals that high operating cash flow describes the positive achievements achieved by a company showing a positive signal for investors because the company is considered productive and can manage cash flow well. Leverage [3], [11], [14].

Leverage is a ratio used to estimate the number of company assets rather than the debt owed by a company. Company [10]. The higher the leverage ratio, the higher the risk of the company experiencing financial distress; this is in line with the signal theory, which reveals that the high level of leverage owned by the company is a negative signal for stakeholders because the level of debt high, the company has an increased risk of experiencing financial distress.

Profitability [27]. Profitability describes the company's ability to earn profits from the company's activities. Low profitability indicates the company has the potential to experience higher financial distress, thus leading the company to bankruptcy. This ratio explains whether the company can pay its maturing debts that will mature so that it determines financial distress [12]. A study by [7] shows that high liquidity will reduce the risk of a company's financial distress. Similarly, [9], [10] indicate a negative relationship between liquidity and financial distress. However, [7], [8] research shows that liquidity is one of the factors that cause companies to experience financial distress..

H2a: operating cash flow with a small ratio has the potential for financial distress
H2b: a high leverage ratio indicates an increased risk of financial distress
H2c: Low profitability indicates the company has the potential to experience financial distress
H2d: High liquidity will reduce the company's financial distress risk

3 Method

The research design used in this study is causal-comparative, namely, testing the relationship between variables and hypotheses [28]. The population of this study is all manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2020-2021 period. The number of financial companies that went public listed on the IDX until 2020 amounted to 90 companies, so there are 360 research company analysis units. The sampling method was carried out by purposive sampling, namely selecting samples with specific criteria. This study uses secondary data from the IDX and the company's official websites. Data collection techniques using documentation techniques and secondary data in the form of financial statements that have been audited by independent auditors and published by the company.

a. Variable Measurement

Table 1. Variable Measurement

Variable	Measurement
Financial Distress (FD)	O-Score: $$T = -1.32 - 0.407\log(TA_t/GNP) + 6.03\frac{TL_t}{TA_t} - 1.43\frac{WC_t}{TA_t} + 0.0757\frac{CL_t}{CA_t}$$ $$- 1.72X - 2.37\frac{NI_t}{TA_t} - 1.83\frac{FFO_t}{TL_t} + 0.285Y - 0.521\frac{NI_t - NI_{t-1}}{|NI_t| + |NI_{t-1}|}$$
Institutional Ownership (IO)	Institutional shares/number of shares outstanding
Board Size (BS)	Number of independent commissioners/number of boards
Audite Commite (AC)	$\sum$ The audit committee featured in the annual report
Cash Flow	$Sales_t$ – $Sales_{t-1}$/ $Sales_{t-1}$ x 100%
Leverage (Lev)	Total debt/total equity
Profitability (ROA)	Net Income/Total Asset
Liquidity (Liq)	Current Asset/current liability

Data analysis uses panel data regression with multiple linear regression techniques to predict the factors that affect financial distress through the relationship between variables. Linear regression was chosen to find out whether a variable can be a predictor or not by looking at its significance and beta values. Following the theory, all research variables can be used to predict the potential for bankruptcy of a company, namely a negative relationship between the dependent variable and the independent. So it means that the better the predictor variable value, the less the potential for financial distress in the aggregate [28]. The research model in this study is:

FD: α + β1(IO)it + β2(BS) it + β3(AC) it + β4(Lev) it + β5(ROA) it + β6(Liq) it + ε

Where FD is the Financial Distress, IO is the institutional ownership. BS is the board size, AC is the audit committee, Lev is the leverage, ROA is the Return on Asset, Liq is the Liquidity, I am the financial Companies, t is the time, β1, β2, β3, β4, β5, and β6 are the coefficients for each independent variables in the model, ε it is the error term.

4   Research result

a. Descriptive statistics
Descriptive statistics are methods related to collecting and presenting data to provide helpful information [28]. Descriptive statistics describe or give an overview of the object under study through sample or population data.

Table 2. Descriptive Statistics

Variable	Mean	Std Dev	Minimum	Maximum
Financial Distress	2.9715	4.4583	0.4543	10.696
Institutional Ownership	62.926	75.9832	4.1800	97.280
Board Size	0.590	0.228	0.500	1.180
Audite Committee	4.281	1.339	1.200	7.820
Cash Flow	1.7587	4.2949	−0.9965	7.3087
Leverage	0.663	0.205	0.059	0.844
Profitability	1.838	17.352	1.444	8.987
Liquidity	138.977	151.626	8.61	757.80

Table 2 shows that the financial distress variable has a standard deviation of 4.4583 above the mean value of 2.9715. This indicates that the economic distress variable has a broad data distribution, as evidenced by the maximum value of 10,696 and the minimum value of 0.4543. So, through these data, companies in the financial sector in the year of observation experienced financial distress on average. The institutional ownership variable has a standard deviation of 75.9832 above the average value of 62,926. This shows that the research data has a wide distribution, with a minimum value of 4.1800 and a maximum of 97.280. Based on these data, it can be concluded that financial sector companies have a large proportion of institutional ownership so that the supervisory system will be more effective.

The bord size variable has a standard deviation of 0.228 below the average value of 0.590. This indicates that the research data has a narrow distribution, with a minimum value of 0.500 and a maximum of 1,180. The Variable Audit Committee has a standard deviation of 1.339 above the average value of 4.281. This shows that the research data has a less wide distribution, indicated by a minimum value of 1,200 and a maximum of 7,820. Based on these data, it can be concluded that financial sector companies have a large proportion of institutional ownership so that the supervisory system will be more effective. Based on these data, it can be concluded that financial sector companies have a relatively small proportion of audit committees for all companies.

Cash Flow has a standard deviation of 4.2949 above the average value of 1.7587. This shows that the research data has a narrow distribution, with a minimum value of 0.9965 and a maximum of 7.3087. Leverage has a standard deviation of 0.205 above the average value of 0.663. This indicates that the research data has a narrow distribution, characterised by a minimum value of 0.059 and a maximum value of 0.844. Based on these data, it can be concluded that financial sector companies generally have relatively low operating cash flows. Based on these data, it can be supposed that financial sector companies, in general, can manage their debts well, so they are expected to obtain significant returns.

The Profitability variable has a standard deviation of 17.352 above the average value of 1,838. This shows that the research data has a wide distribution, indicated by a minimum value of -1.444 and a maximum of 8,987. Based on these data, it can be concluded that financial sector companies have a relatively low level of profitability. Variable Liquidity has a standard deviation of 151,626 above the average value of 138.977. This shows that the research data has a wide distribution as indicated by a minimum value of 8.61 and a maximum of 757.80. Based on these data, it can be concluded that financial sector companies have a good ability to pay off their short-term debt.

b.   Correlation between Variables

Correlation is one of the statistical analytical methods that can be used to find between two variables with quantitative properties. Correlation statistics can assess whether a research model has a multicollinearity problem. In comparison, the correlation statistic is a method to determine whether there is a linear relationship between variables.

Table 3. Correlation Analysis Results

Variabel	FD	IO	BS	AC	CF	Lev	ROA	Liq
Financial Distress	1							
Institutional Ownership	0.056	1						
Board Size	0.122	0.44	1					
Audite Commitee	0.417	0.013	0.241	1				
Cash Flow	0.682	0,116	0.471	0.221	1			
Leverage	0.225	0.201	0.101	0.237	0.071	1		
Profitability	0.404	0.153	0.142	0.032	0.26	0.041	1	
Liquidity	0.062	0.103	0.51	0.014	0.052	0.021	0.331	1

A correlation coefficient is a statistical tool that shows the tendency of fluctuations between two or more variables together. Table 2 explains the correlation coefficient of financial distress and institutional ownership is "0.056", and the correlation coefficient of financial distress and board size is "0.122". The correlation coefficient for financial distress and the audit committee is "0.417", the correlation coefficient for financial distress and cash flow is "0.682", the correlation coefficient for financial distress and leverage is "0.225", the correlation coefficient for financial distress and profitability is "0.404", the correlation coefficient for financial distress is and liquidity is "0.062". The correlation between variables shows a value below 0.7, so it can be concluded that the equation model built in this study does not occur multicollinearity in the data set.

c.   Multiple Linear Regression

Multiple linear regression is a regression model that involves more than one independent variable. Multiple linear regression analysis was carried out to determine the independent variable's direction and influence on the dependent variable (Ghozali, 2018).

Table 3. Hypothesis Testing Results

Variable Name	Coefficient-Beta	P-Value	Z-value
Institutional Ownership	-0.053	0.007	2.2619
Board Size	0.200	0.029	3.6721
Audite Committe	-0.131	0.019	2.5724
Cash Flow	0.526	0.451	1.3328
Leverage	0.015	0.482	34.767
Profitability	-0.212	0.000	1.493
Liquidity	0.001	0.220	1.688

d. Analysis and Discussion

Institutional ownership has a beta coefficient of -0.053 and a p-value of 0.007, so it can be concluded that institutional ownership has a negative effect on financial distress, so hypothesis h1a is accepted. This shows that institutional ownership with a large proportion will reduce the potential for companies to experience financial distress. Institutional ownership will act as a controller whose role is to oversee the company's operational activities. Companies that have greater institutional ownership can reduce the possibility of financial distress. The greater the share ownership by institutions, the greater the supervision of management performance [18]. The greater the ownership by institutional institutions, the less likely financial distress conditions in the company [19]. Thus, a large percentage of institutional ownership is a positive signal that the company will avoid financial distress through comprehensive supervision.

Board Size has a beta coefficient of 0.053 and a p-value of 0.029, so it can be concluded that institutional ownership positively affects financial distress, so hypothesis h1b is rejected. This shows that the board size causes the company to experience financial distress. This is because the research data shown in descriptive statistics show that independent commissioners have a low proportion compared to their commissioners. The results of the study indicate that the independent board of commissioners has not been able to provide influence financial distress. This is because the CEO has greater power than the board of commissioners [24]. In addition, the independent board of commissioners that has a positive direction on financial distress indicates that the more independent commissioners in a company, the more costs the company pays to pay for the board, so it is likely to have an impact on financial distress if the company's operations do not develop.

The Audit Committee has a beta coefficient of -0.131 and a p-value of 0.019, so it can be concluded that institutional ownership has a negative effect on financial distress, so the hypothesis h1c is accepted. This shows that the audit committee can reduce the potential for companies to experience financial distress. An audit committee that works effectively with maximum supervision from financial and non-financial aspects will prevent the company from financial distress because it is risk mitigation. The variable size of the audit committee has a negative effect on financial distress. An audit committee with a large extent is considered able to improve the quality of internal control to minimize the occurrence of financial distress because, with a large number of audit committees, the knowledge and work experience of the audit committee allows the audit committee to face the problems experienced by the company, including the possibility of financial distress [17].

Cash flow has a beta coefficient of 0.526 and a p-value of 0.451, so it can be concluded that the cash flow variable has no effect on financial distress, so hypothesis h2a is rejected. This shows that operating cash flow does not affect financial distress, and this shows that the company's sales revenue has decreased. In the year of observation, financial sector companies experienced a decrease in company operational activities due to the pandemic, which had an impact on decreasing operating cash flow, thereby reducing aggregate income. That this condition will encourage companies to experience financial difficulties [16].

Leverage has a beta coefficient of 0.015 and a p-value of 0.482, so it can be concluded that leverage has a negative effect on financial distress, so hypothesis h2b is rejected. This shows that financial sector companies are not leveraged because the company has higher debt than its equity, so the more significant the financing from debt causes the company to default and go bankrupt. The results of this study are relevant to research conducted by [7] which reveals that companies that are not leveraged are a signal that the company does not have reasonable prospects and have a high potential for financial distress.

Profitability has a beta coefficient of -0.212 and a p-value of 0.000, so it can be concluded that profitability has a negative effect on financial distress, so the hypothesis h1a is accepted. Companies that earn profits will avoid the risk of financial distress. Companies that have significant ROA results are said to be appropriately managed. This situation shows the ability to do financial work well and generate total profits. Thus, the company

avoids financial difficulties. Conversely, a company with a low ROA value means that the company's financial workability is not good, so the company's profits cannot be maximized and even suffer losses [12].

Liquidity has a beta coefficient of 0.001 and a p-value of 0.220, so it can be concluded that liquidity has a negative effect on financial distress, so hypothesis h1a is rejected. This shows that a company with a high current ratio value does not guarantee that the company is free from financial distress. High liquidity value is obtained from the number of existing assets which is more significant than current liabilities. The higher the liquidity value of a company can reflect two things, namely the amount of profit and the result of not using finance effectively, which means there are idle funds in the company. According to [26] [29]regardless of the number of liquidity ratios in the company, there is no guarantee that the company can escape the threat of financial distress. This study's results align with research conducted by [12], which reveals that liquidity cannot be a predictor of financial distress.

5   Conclusion

Based on the analysis and discussion, it can be concluded that not all good corporate governance variables are predictors of financial distress in financial sector companies. Institutional ownership and the audit committee can predict the occurrence of financial distress, because, as part of the control system, whose job is to monitor the company's performance and direct it to the company's goal of maximizing profits for stakeholders. Similar to financial ratios, only profitability variables can be used to predict financial distress, especially during a pandemic, because many companies experience a decline in operations, are not leveraged, and many have failed to pay their short-term debt. The limitation of this study is that it used an observation period when all companies experienced a decline in revenue due to the pandemic so that almost all financial ratios were low or even negative. Therefore, even a few signals from all variables will impact the company's high risk of bankruptcy. Furthermore, it can use several measuring tools to assess financial distress. Recommendations for further research are to use a more extended research period to provide better results.

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