



## Corporate Governance for Mitigating Financial Distress during COVID-19 in Non-Financial Firms on Indonesia Stock Exchange

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### ABSTRACT

**Purpose :** The study aims to examine the effect of corporate governance mechanisms on financial distress using the proxies of institutional ownership and independent commissioners during the COVID-19 pandemic from 2020 to 2022.

**Method :** The research involves a robust sample of 886 companies listed on the Indonesia Stock Exchange, excluding the financial industry. Through the application of logistic regression analysis using SPSS 29, a thorough examination of the data is conducted to unravel the intricate relationship between corporate governance mechanisms and the probability of financial distress.

**Findings :** The results showed that the corporate governance mechanism proxied by institutional ownership and independent commissioners was proven to reduce the probability of financial distress during the COVID-19 pandemic from 2020 to 2022.

**Novelty :** The study successfully presents empirical evidence that supports the need for companies to implement good corporate governance to prevent potential business risks such as financial distress both under normal conditions and during unpredictable crises such as the COVID-19 pandemic.

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### INTRODUCTION

The world was shaken by the emergence of a mysterious pneumonia-like illness that began spreading in the People's Republic of China in late 2019. By early 2020, the World Health Organization officially declared the spread of the COVID-19 virus a global pandemic, posing a universal threat and challenge to both developed and developing nations (Park et al., 2020). COVID-19 has affected over ten million people, resulting in 580,000 fatalities globally, with an estimated economic loss of up to \$8.8 trillion (Baig et al., 2021). This study evaluates the impact of the global health emergency on the performance of publicly listed companies during challenging economic times, emphasizing their contributions to the national economy.

Governments worldwide, including Indonesia, implemented robust measures by closing borders and minimizing social interactions to combat the spread of COVID-19 and mitigate resulting public health emergencies (Wenzel et al., 2020). In Indonesia, Large-Scale Social Restrictions were enforced by Government Regulation No. 21 of 2020, effective from March 31, 2020. Large-Scale Social Restrictions (Pembatasan Sosial Berskala Besar or "PSBB") created high uncertainty for companies, significantly disrupting their operations (Sharma et al., 2020). These restrictions affected companies' business activities, exemplified by PT HM Sampoerna Tbk temporarily closing its Surabaya plant due to COVID-19 cases among employees (Hasani, 2020).

During the COVID-19 pandemic, PT Pertamina and PT Garuda Indonesia both experienced significant financial distress due to drastic declines in revenue. PT Pertamina reported a net loss of USD 767.92 million (approximately Rp.11.28 trillion) in the first half of 2020, a sharp contrast to the net profit of USD 659.96 million in the same period of 2019. This substantial loss was primarily due to a 24.7 percent plunge in total sales and other operating revenues, dropping from USD 25.54 billion to USD 20.48 billion. Similarly, PT Garuda Indonesia faced a severe financial crisis as the pandemic led to global travel restrictions, causing its monthly revenue to plummet from around \$235 million in late 2019 to just \$27 million the following year. Both companies exemplify the severe impact of the pandemic on corporate financial health, highlighting the widespread economic challenges faced during this period (Herman, 2021; mimbarmaritim.com, 2020).

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The prolonged impact of COVID-19 has dealt a severe blow to corporate performance, increasing the likelihood of financial distress. Financial distress occurs when current obligations, such as trade credit or interest expenses, surpass a company's operational cash flow (Ross et al., 2002), potentially leading to bankruptcy (Agostini, 2018; Sun et al., 2014). This study analyzes the role of corporate governance, particularly during the COVID-19 pandemic, focusing on the internal mechanisms of institutional ownership and the presence of independent commissioners.

Corporate governance focuses on incentive and control systems where owners (shareholders) seek to ensure that the board of directors makes necessary efforts to maximize shareholder value through effective corporate governance. The control components of governance encompass internal monitoring (board members) and external monitoring (shareholders) (Dowell et al., 2011). The literature generally acknowledges that an effective governance system is crucial for the performance, growth, and long-term sustainability of an organization (Gartenberg & Pierce, 2017; Maere et al., 2014; McGuire, 2000; Renders et al., 2010). Therefore, effective governance mechanisms are highly necessary amid financial crises. Due to the new crisis triggered by COVID-19, there is a need to adopt best governance practices to ensure the survival of companies as an effort to minimize the impact of risks posed to the company. Although COVID-19 has currently triggered a new form of crisis stemming from a health crisis, past experiences can at least help companies adopt effective governance practices that potentially assist companies in mitigating crises (Jebran & Chen, 2023). There are two types of corporate governance mechanisms. Corporate governance mechanisms that involve aligning managerial interests with shareholders, such as the board structure (independent board of commissioners and board size), institutional ownership, and managerial ownership, are referred to as internal mechanisms. Meanwhile, external mechanisms refer to the forms of corporate control by the market (e.g., takeover threats) (Barnhart & Rosenstein, 1998; Weir et al., 2002).

Several previous studies have explored the impact of corporate governance on the likelihood of companies experiencing financial distress, yet inconsistencies in research results have revealed gaps or discrepancies. Gerged et al. (2022) suggest that institutional ownership can prevent financial distress by enabling effective monitoring of company performance. In contrast, Nugrahanti et al. (2020) argue that institutional ownership negatively influences financial distress, intensifying managerial oversight. However, (Utami & Dirman, 2022) find no significant impact, attributing it to concentrated ownership. This study aims to reevaluate the impact of institutional ownership on financial distress during the COVID-19 pandemic.

Additionally, the presence of independent commissioners is explored. Research findings regarding independent commissioners show inconsistency in their role and effectiveness in addressing financial distress. Yuliani & Rahmatiasari (2021) state that the limitations of independent commissioners in effectively monitoring management can increase the risk of financial distress for companies. In contrast, Ashraf et al. (2022) and Permana & Serly (2021) argue that independent commissioners play a crucial preventive role, demonstrating that they can reduce the likelihood of financial distress through better monitoring. This study aims to reassess the influence of independent commissioners on financial distress during the COVID-19 pandemic to clarify and resolve these inconsistencies.

Previous research on the impact of corporate governance, specifically institutional ownership and the presence of independent commissioners, on financial distress has yielded inconsistent results (Ashraf et al., 2022; Gerged et al., 2022; Nugrahanti et al., 2020; Permana & Serly, 2021; Utami & Dirman, 2022; Yuliani & Rahmatiasari, 2021). This study aims to provide clearer insights into these relationships during the COVID-19 pandemic, using agency theory to frame corporate governance as a mechanism for supervision and control (Harahap, 2017). By reexamining these factors during the COVID-19 pandemic, we aim to clarify these inconsistencies and provide a clearer understanding of how institutional ownership and independent commissioners affect financial distress.

The novelty of this study lies in its unique context of analyzing the impact of corporate governance on financial distress during the unprecedented COVID-19 pandemic. While previous research has explored corporate governance's role in financial distress, this study specifically investigates how institutional ownership and independent commissioners function as governance mechanisms amid the heightened uncertainty and economic turmoil induced by the pandemic. This approach not only provides a robust empirical examination within an extraordinary global crisis but also contributes to the existing literature by addressing the discrepancies observed in prior studies. Theoretically, the study extends agency theory by demonstrating how different governance structures can mitigate or exacerbate financial distress in times of crisis, thus enriching our understanding of corporate governance's efficacy in volatile environments (Jebran & Chen, 2023). Practically, the findings offer valuable insights for policymakers and corporate managers to refine governance practices, ensuring enhanced resilience and stability of companies during future economic disruptions (Sharma et al., 2020; Wenzel et al., 2020). These contributions underscore the critical need for adaptive and effective governance strategies to navigate through financial adversities (Gartenberg & Pierce, 2017).

Agency theory serves as a foundation for companies to comprehend the concept of effective corporate governance. Jensen & Meckling (1976) explain the contractual relationship between principals and agents, emphasizing that the delegation of responsibilities and authority aims to ensure optimal decision-making. Investors, as principals, delegate responsibilities to management, viewed as agents. The separation of ownership and managerial responsibility gives rise to agency problems, conflicts between shareholders and management.

The essence of agency problems lies in the potential conflicts arising from this separation, leading to be-

haviors that may adversely affect the company's financial situation. Agency theory posits that, despite a duty to prioritize shareholders' interests, management may focus on maximizing its utility. Effective agency systems, such as good corporate governance, help mitigate such conflicts and associated costs. In addressing agency problems, Jensen & Meckling (1976) assert that good corporate governance should act as a supervisory function. Monitoring, facilitated by mechanisms like independent boards and institutional investor participation, enhances managerial performance, preventing risky decisions and minimizing the risk of financial distress.

Institutional investors possess a better understanding of investments and can monitor management activities at a lower cost compared to individual investors (Pound, 1988). Moreover, institutional investors prefer long-term performance over short-term gains (Donker et al., 2009), intensifying the monitoring process of managers. This monitoring process prevents managers from making decisions that could lead to financial distress. When a company is indicated to be experiencing financial distress, institutional investors can swiftly provide assistance through their networks, thereby preventing the company from bankruptcy (Udin et al., 2017).

According to Widhiadnyana (2020) and Chrissentia & Syarief (2018), the decrease in the level of financial distress experienced by a company is associated with an increase in the percentage of company shares owned by institutional investors such as insurance companies, investment firms, and banks. This occurs due to the fact that a high proportion of institutional ownership signifies a high level of external oversight of corporate management. With this oversight, management can focus on achieving the company's objectives, not for their personal interests but for the overall interests of the company.

### **H<sub>1</sub>: Institutional ownership decreases the probability of financial distress**

According to agency theory, there is an increased tendency for moral hazard on the part of agents when monitoring from the principal and the independence of the board of commissioners are not robust. Therefore, independent commissioners are necessary to monitor and control opportunistic behavior by agents in managing the company, serving as an implementation of good corporate governance (Jensen & Meckling, 1976). Independent commissioners monitor management performance and act independently without pressure from other parties. They can control opportunistic behavior by managers, ensuring that managers act in the best interests of shareholders (Fama & Jensen, 1983; Jensen & Meckling, 1976). The presence of independent commissioners reduces information asymmetry that may pose a risk of financial distress and agency costs between shareholders and management (Fich & Slezak, 2008).

Ali (2018) found that the independence of independent commissioners can enhance the performance of the board of directors as agents in decision-making, aiming to minimize agency conflicts and prevent financial distress. Additionally, Goh et al. (2016) state that the presence of independent commissioners impacts corporate transparency and control over company management, ultimately reducing the risk of the company experiencing financial distress. This aligns with agency theory, which suggests that the risk of financial distress can be mitigated by regulating and controlling management actions.

### **H<sub>2</sub>: Independent commissioners decrease the probability of financial distress**

The study contributes theoretically by offering empirical evidence on the impact of institutional ownership and independent commissioners on financial distress during the COVID-19 pandemic. It provides additional support for agency theory, recommending intensive monitoring to prevent opportunistic actions and financial distress. Empirically confirming the roles of institutional investors and independent commissioners in corporate governance enhances understanding. Moreover, it demonstrates that businesses can maximize their performance and mitigate financial distress risks by actively involving institutional investors and independent commissioners. The findings also suggest that the implementation of good corporate governance should go beyond regulatory compliance, serving as a tool to ensure optimal decision-making aligned with company objectives. This research provides valuable insights for regulators, such as the Financial Services Authority, in formulating corporate governance regulations, ensuring listed companies follow guidelines more seriously.

## **RESEARCH METHODS**

This study employs a quantitative approach, a structured method involving data quantification to generate generalizations (Anshori & Iswati, 2017). The study processes ratio and secondary data. Secondary data refers to information obtained from existing sources, such as financial reports and annual reports of companies that meet the sample criteria. Data are sourced from the official website of the Indonesia Stock Exchange for the years 2020 to 2022, supported by the OSIRIS database.

The purposive sampling method is employed to determine the sample for this study. This method refers to the technique of selecting samples from the population based on specific considerations (Sugiyono, 2012). The study population consists of all non-financial companies. Financial sector companies are excluded due to the differing financial characteristics compared to general companies, which is considered to potentially influence the research significance. As a result, a total of 886 observation samples are obtained, with the following criteria: (1) All non-financial companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2022. Therefore, this re-

search excludes companies in industry sector with SIC code 6. Financial sector companies have different financial statement structures from non-financial companies. For example, the financial statements of Bank Central Asia (BCA) in 2021 do not present assets based on current or non-current criteria, making it unsuitable for calculating the current ratio needed for this research. (2) Companies with financial statements in Indonesian Rupiah (IDR). The conversion process from other currencies to Rupiah requires the use of exchange rates, which can bias the final calculation results. (3) Companies that have all the necessary data for this research.

The logistic regression equation used in this study involves independent variables, control variables, and the dependent variable. The adapted model originates from Manzanegue et al. (2016) The logistic regression equation, shown in Equation (1), is:

$$\text{Prob}[\text{DISTRESS}_{i,t}] = \alpha + \beta_1 \text{INSOWN}_{i,t} + \beta_2 \text{INDMET}_{i,t} + \beta_3 \text{FIRMSIZE}_{i,t} + \beta_4 \text{LEV}_{i,t} + \beta_5 \text{BIG4}_{i,t} + e_{i,t} \dots\dots\dots 1$$

Information:  $\alpha$  = Constant;  $\beta$  = Regression Coefficient;  $\text{Prob}[\text{DISTRESS}_{i,t}]$  = Probability of Financial Distress for Company  $i$  in year  $t$ ;  $\text{INSOWN}_{i,t}$  = Institutional Ownership for Company  $i$  in year  $t$ ;  $\text{INDMET}_{i,t}$  = Independent Commissioner for Company  $i$  in year  $t$ ;  $\text{FIRMSIZE}_{i,t}$  = Company Size for Company  $i$  in year  $t$ ;  $\text{LEV}_{i,t}$  = Leverage for Company  $i$  in year  $t$ ;  $\text{BIG4}_{i,t}$  = BIG 4 Auditor Affiliation for Company  $i$  in year  $t$ ;  $e$  = Error for Company  $i$  in year  $t$ .

The dependent variable in this study is Financial Distress, indicating a company’s challenging financial condition. A company is considered to be in a state of financial distress when its current financial condition poses a threat to its ability to continue operations. According to Brealey et al. (2017), financial distress is a sign that a business’s finances are in danger and frequently serves as a prelude to bankruptcy. It is measured using a dummy variable with ‘1’ for potential financial distress and ‘0’ otherwise. The potential financial distress is assessed using the Zmijewski X-Score model, chosen for its relatively high accuracy compared to other measurement methods. The model, introduced in 1983 by Zmijewski, encompasses a two-decade summary of studies utilizing liquidity ratio analysis, leverage, and performance measurement.

The Zmijewski method is considered superior for predicting financial distress due to several key reasons. Firstly, it demonstrates high prediction accuracy, which makes it reliable for identifying companies at risk of financial distress (Grice Jr & Dugan, 2003). Secondly, the Zmijewski model is robust against accounting manipulations, providing a more accurate financial analysis (Zmijewski, 1984). Additionally, recent studies have shown that it outperforms other models like the Altman Z-Score and Springate S-Score in various contexts, further enhancing its credibility and applicability (Putri et al., 2023). The financial distress measurement model using the Zmijewski method, as also applied by Fadrul & Ridawati (2020) and Salim (2017), is expressed as follows:

$$X_{i,t} = -4.3 - 4.5X_{1i,t} + 5.7X_{2i,t} - 0.004X_{3i,t} \dots\dots\dots 2$$

Description:

- $X$  = Overall index
- $X_{1i,t}$  = Net income/total assets (ROA)
- $X_{2i,t}$  = Total debt/total assets (Debt ratio)
- $X_{3i,t}$  = Current assets/current liabilities (Current ratio)

Based on the results of the X-Score from the above functional equations, the model classifies companies into distressed or healthy based on a cutoff point: X-Score > 0 suggests impending financial distress (DISTRESS = 1), while X-Score < 0 indicates the absence of financial distress (DISTRESS = 0). The independent variables include Institutional Ownership (INSOWN). Institutional ownership refers to the ownership of company shares by organizations such as insurance companies, investment firms, and other institutional entities (Brown et al., 2006a). Institutional investors in a company typically control the majority percentage of shares, facilitating stricter oversight processes. This oversight can reduce opportunistic managerial behavior, mitigating agency problems (Nugrahanti et al., 2020). In this study, institutional ownership is calculated through the proportion of shares held by institutional investors (Brown et al., 2006b; Gerged et al., 2022; Widagdo et al., 2021). Institutional ownership (INSOWN) is formulated as follows:

$$\text{INSOWN}_{i,t} = \frac{\text{Number of shares held by institutional investors}_{i,t}}{\text{Number of outstanding shares}_{i,t}} \dots\dots\dots 3$$

Independent commissioners (INDMET) are members of the board of commissioners who do not have financial, managerial, share ownership, or family relationships with members of the board of directors, other members of the board of commissioners, controlling shareholders, or any relationships with the company that could affect their ability to act independently. Independent commissioners within the board play a significant role in overseeing the company effectively to minimize management errors (Setiawan, 2018). Following the Financial Services Authority (OJK) Regulation No. 33/PJOK.04/2014 Article 31, the board of commissioners is obliged to hold meetings at least once every two months. Therefore, the higher the intensity of independent commissioners’ attendance at meetings, the better the policies determined. The proxy measurement for independent commissioners, following Ormin et al. (2015), is the natural logarithm of the average attendance of independent commissioners at meetings:

**Table 1.** Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
INSOWN	886	0.000	1.000	0.632	0.240
INDMET	886	0.693	3.135	1.847	0.358
FIRMSIZE	886	24.428	32.576	28.209	1.799
LEV	886	0.000	22.321	1.186	2.180
Valid N (listwise)	886				

Source: Processed SPSS Data Results (2023)

$$INDMET_{i,t} = \text{Ln}(\text{Average attendance of independent commissioners at meetings}_{i,t}) \dots\dots\dots 4$$

Control variables comprise Firm Size (FIRMSIZE), determined by the natural logarithm of total assets (Cruz-Cázares et al., 2013), Leverage (LEV), computed as Total Liabilities/Total Equity (Masdupi et al., 2018), and the BIG 4 Auditor (BIG4) variable, measured using a dummy variable, “1” if the company is audited by a BIG 4 audit firm (Deloitte, EY, KPMG, PwC) (Lin et al., 2022). The data analysis technique employed in this research is logistic regression analysis. Data were collected from 2020 to 2022, and the study utilized SPSS 29 software. The implemented tests in this research include descriptive statistics, the Hosmer and Lemeshow’s Goodness of Fit Test, Overall Model Fit Test, classification table, logistic regression, and coefficient of determination (R2).

Descriptive statistical analysis is used to elucidate data through the description and depiction of the collected data as it is, without aiming to draw general conclusions or generalizations (Anshori & Iswati, 2017). Descriptive statistical analysis utilized in this research includes mean, maximum value, minimum value, and standard deviation to describe the available variables. The results of descriptive statistics will be used for further tests. Logistic regression analysis is used to understand individual independent variables in predicting non-metric dependent variables (Sekaran & Bougie, 2013). The logistic regression analysis in this study employs equation 1, with financial distress as the dependent variable, institutional ownership and independent commissioners as independent variables, and firm size, leverage, and BIG4 auditors as control variables.

The feasibility of the regression model is determined through the Hosmer and Lemeshow’s Goodness of Fit Test. If the statistical value is greater than 0.05, the model is considered feasible because it fits based on observational data. However, if the value is below 0.05, the model is considered infeasible as it does not fit based on observational data (Ghozali, 2016). Overall model assessment is conducted through the comparison of the values between the -2 Log likelihood at the initial condition with the -2 Log likelihood at the final condition. If the final -2 Log likelihood is smaller than the initial -2 Log likelihood, it indicates a decrease in value, suggesting that the model used is appropriate and acceptable (Santoso, 2012).

The classification table test can be used to calculate the estimation values between true and false. The classification table will produce two prediction values of the dependent variable, and rows indicating the actual research value of the dependent variable (Ghozali, 2016). The coefficient of determination (R2) test in this study is used to predict the magnitude of the contribution between variables. The results of the coefficient of determination range between 0 and 1. If the coefficient of determination is close to 1, the independent variable provides almost all the information needed to predict the variation of the dependent variable, and vice versa (Ghozali, 2018).

In hypothesis testing, it is used to analyze the influence of independent variables on the dependent variable and to determine whether the hypotheses proposed in the study can be accepted or not. In this study, the Wald test is used to determine the influence of several independent variables on the dependent variable individually (partial). The Wald test is carried out by comparing the significance level value with the confidence level value ( $\alpha$ ), and the significance level value is set at 0.05 ( $\alpha = 5\%$ ). Therefore, when the significance level value < 0.05, the independent variable is considered to have a significant effect on the dependent variable, and if the significance level value > 0.05, the independent variable is considered to have no effect on the dependent variable.

**RESULTS AND DISCUSSIONS**

Table 1 presents the results of descriptive statistical analysis related to the data used in this research, including independent variables and control variables. The institutional ownership variable (INSOWN) ranges from 0.000 to

**Table 2.** Results of Dependent Variable Data Distribution

	2020	2021	2022
Distress	17	14	14
Non-Distress	277	295	269
Total	294	309	283

Source: Processed SPSS Data Results (2023)

**Table 3.** Results of BIG4 Variable Data Distribution

	2020	2021	2022
BIG4	72	83	74
Non-BIG4	222	226	209
Total	294	309	283

Source: Processed SPSS Data Results (2023)

**Table 4.** Results of Hosmer and Lemeshow's Test

Step	Chi-square	df	Sig
1	2.857	8	0.943

Source: Processed SPSS Data Results (2023)

1.000, with a mean value of 0.632 and a standard deviation of 0.240. This indicates a significant variation in the percentage of shares held by institutional investors across the sampled firms. A mean of 0.632 suggests that, on average, institutional investors hold approximately 63.2% of a firm's shares, highlighting their substantial influence in corporate governance. The high standard deviation reflects the diverse ownership structures within the sample. Notably, the maximum value of 1.000 signifies that in some cases, institutional investors own 100% of a company's shares. This complete ownership grants institutional investors total control over the company's governance and strategic decisions, ensuring rigorous oversight and reducing the likelihood of managerial opportunism. When institutional ownership reaches 100%, it often results in enhanced financial stability, as institutional investors are likely to prioritize long-term value creation and implement stringent monitoring practices. This level of ownership can lead to improved operational efficiency, better asset utilization, and a reduction in agency conflicts, thereby significantly lowering the risk of financial distress. According to prior research, higher institutional ownership often correlates with improved oversight and reduced agency conflicts (Chrissentia & Syarief, 2018; Gerged et al., 2022).

Independent commissioners' attendance (INDMET) shows a minimum value of 0.693 and a maximum value of 3.135, with a mean of 1.847 and a standard deviation of 0.358. The mean value indicates that, on average, independent commissioners attend a significant number of meetings, which is essential for effective monitoring and governance. The variation in attendance, as indicated by the standard deviation, suggests differing levels of engagement among firms. Studies have shown that active participation by independent commissioners enhances corporate transparency and mitigates financial distress (Ashraf et al., 2022; Goh et al., 2016).

The firm size, measured through the natural logarithm of total assets, ranges from 24.428 to 32.576, with a mean of 28.209 and a standard deviation of 1.799. This substantial range signifies that the sample includes both relatively small and large firms. The mean value reflects the overall moderate size of firms within the dataset. Larger firms often have more resources and better access to capital, which can influence their ability to withstand financial distress (Cruz-Cázares et al., 2013). Leverage (LEV), calculated as the debt-to-equity ratio, varies widely from 0.000 to 22.321, with a mean of 1.186 and a standard deviation of 2.180. The wide range indicates significant differences in the capital structures of the sampled firms. A mean value of 1.186 suggests that, on average, these firms have slightly more debt than equity. High leverage can increase financial risk, making firms more susceptible to financial distress (Masdupi et al., 2018). The variation in leverage highlights the differing financial strategies and risk profiles among the firms.

Furthermore, this study also employs a dummy variable for its dependent variable, using values 0 and 1, where 0 refers to non-distressed companies and 1 refers to companies potentially experiencing distress. Table 2 illustrates distress distribution, the most distressed companies occurred in 2020, with a total of 17 sampled companies. This is because 2020 marked the early wave of the COVID-19 pandemic, prompting many companies to adapt to the crisis. Then, the majority of non-distressed companies occurred in 2021, totalling 295 sampled companies. Then a dummy variable is also used for measuring the BIG4 control variable, where the value of 1 (one) is assigned to companies audited by BIG 4 audit firms (Deloitte, EY, KPMG, and PwC), and the value of 0 (zero) otherwise. Based on Table 3, companies audited by BIG 4 audit firms were most numerous in 2021, with a total of 83 sampled companies. Meanwhile, companies not audited by BIG 4 audit firms were most numerous in 2021, totalling 226 sampled companies.

This study employed logistic regression analysis to test two hypotheses with financial distress as the dependent variable and institutional ownership and independent commissioners as independent variables. Logistic regression analysis was chosen due to the dummy nature of the dependent variable, DISTRESS. Statistical calculations and hypothesis testing using logistic regression analysis were conducted using SPSS version 29. The study employed the Hosmer and Lemeshow's Goodness of Fit Test to assess the regression model's adequacy. This test aimed to ensure that the logistic regression model used was appropriate by examining the accuracy between the model's predictions and observed data. If the significance value of the Hosmer and Lemeshow's Goodness of Fit Test  $> \alpha$  ( $\alpha = 0.05$ ), the logistic regression model is accepted as suitable for use, indicating compatibility with observational data.

Based on Table 4, the Chi-square value from the Hosmer and Lemeshow's Goodness of Fit Test was 2.857, with a significance level of 0.943. Since the significance value is greater than  $\alpha = 0.05$  (5%), it can be concluded that

Table 5. Results of Overall Fit Model Test

Condition	-2 Log likelihood	Result	Description
Block 0	355.880	There is a decrease in the -2 Log likelihood from block 0 to block 1	The model is feasible to use
Block 1	37.331		

Source: Processed SPSS Data Results (2023)

**Table 6.** Classification Table

		Predicted			
		DISTRESS		Percentage Correct	
Observed		0	1		
Step 1	DISTRESS	0	840	1	99.9
		1	5	40	88.9
Overall Percentage					99.3

Source: Processed SPSS Data Results (2023)

there is no difference between the logistic regression model's predictions and the research results. Hence, the logistic regression model is accepted and deemed suitable for further analysis. The first step in logistic regression analysis is to assess the overall model's fitness with the data. To test the null and alternative hypotheses, L is transformed into -2 Log likelihood. Using the -2 Log likelihood value obtained from the logistic regression model, the Overall Fit Model test results are presented in Table 5.

Based on the Overall Fit Model test results in Table 5, it is evident that the hypothesized model fits the data used in this study. The -2 Log likelihood initially at 355.880 decreases to 37.331 in the final calculation. This indicates a decrease of -2 Log likelihood from the initial to final conditions. Next, the results from the classification matrix table clarify the logistic regression model's accuracy with research data, demonstrating the prediction outcomes against research results. The classification table results are presented in Table 6.

According to the classification table test in Table 6, the classification table demonstrates the performance of the logistic regression model used to predict financial distress among companies. The model accurately predicted 840 out of 841 companies that did not experience financial distress, yielding a 99.9% accuracy for non-distressed firms. It also correctly identified 40 out of 45 companies that experienced financial distress, with an 88.9% accuracy for distressed firms. Overall, the model achieved a high accuracy rate of 99.3%, indicating its strong effectiveness in distinguishing between distressed and non-distressed companies. This high level of accuracy suggests that the model is reliable for predicting financial distress in companies listed on the Indonesia Stock Exchange.

The evaluation of the model using the Nagelkerke R Square value is conducted to determine how much the dependent variable is explained by the independent variable. Nagelkerke R Square is a modification of Cox & Snell R Square, interpreted similarly to the R Square value in logistic regression. As shown in Table 7, the Cox & Snell R Square is 0.302, and the Nagelkerke R Square is 0.913. The Nagelkerke R Square value of 0.913 means that 91% of the data used in this study influences financial distress. The remaining 9% of financial distress is influenced by other variables not considered in this study.

The hypothesis testing employed the Wald test to examine the significant influence of each independent variable on the dependent variable. The significance level (Sig.) of each independent variable was observed at a confidence level of 5% (0.05). The results of the logistic regression coefficient significance test are presented in Table 8. Based on the estimated results in Table 8, the regression coefficient for institutional ownership (INSOWN) is -3.492, signifying a negative influence on financial distress. The logistic regression test in Table 8 yielded a value of -3.492 with a significance level of 0.040, indicating significance below the confidence level of 0.05 ( $\alpha = 5\%$ ). Consequently, H1 is accepted, demonstrating that institutional ownership significantly and negatively affects financial distress, reducing the probability of financial distress.

Similarly, the regression coefficient for independent commissioners (INDMET) is 7.601, reflecting a negative impact on financial distress. The logistic regression test in Table 4.8 produced a value of -7.601 with a significance level of 0.005, showing significance below the confidence level of 0.05 ( $\alpha = 5\%$ ). Therefore, H<sub>2</sub> is accepted, indicating that independent commissioners significantly and negatively influence financial distress, thereby lowering the probability of financial distress. The regression coefficient for firm size (FIRMSIZE) is 0.631 with a negative sign, implying a negative effect on financial distress. Additionally, the positive regression coefficient for leverage (LEV) is 4.468, indicating a positive impact on financial distress. Finally, the regression coefficient for BIG 4 auditors (BIG4) is 26.055 with a negative sign, indicating a negative effect on financial distress.

### The Influence of Institutional Ownership on Financial Distress

The research findings confirm Hypothesis 1, indicating that institutional ownership can reduce the probability of financial distress during the COVID-19 pandemic. This aligns with agency theory, a fundamental principle underlying corporate governance, emphasizing the role of institutional ownership as a component of the corporate

**Table 7.** Results of Coefficient of Determination Test

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	37.331 <sup>a</sup>	0.302	0.913

Source: Processed SPSS Data Results (2023)

**Table 8.** Parameter Estimation and Its Interpretation

		<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
Step 1	INSOWN	-3.492	1.697	4.232	1	0.040	0.030
	INDMET	-7.601	2.694	7.961	1	0.005	0.001
	FIRMSIZE	-0.631	0.296	4.530	1	0.033	0.532
	LEV	4.468	1.093	16.712	1	<0.001	87.161
	BIG4	-26.055	8.756	8.854	1	0.003	0.000
	Constant	19.557	9.003	4.719	1	0.30	311474965

Source: Processed SPSS Data Results (2023)

governance mechanism. Institutional investors, as shareholders, act as a tool for overseeing a company's operational activities and controlling managerial opportunistic behavior, mitigating agency conflicts between owners and agents and achieving convergence between shareholders and company management (Harahap, 2017).

In a company, institutional ownership often holds the largest ownership structure compared to other stock ownership structures. It is widely recognized that an increase in institutional ownership structure can serve as a means to enhance the monitoring role in overseeing managerial behavior related to corporate operations and, at the same time, reduce the likelihood of significant agency conflicts (Chrissentia & Syarif, 2018). Increasing institutional ownership has an impact on improving the efficiency of the company's asset utilization and managerial performance, thus reducing the likelihood of financial distress (Widhiadnyana, 2020). Oversight is determined by the proportion of investment made by institutional investors. Therefore, the influence of institutional investors' votes will increase due to a high proportion of investment, leading to enhanced management oversight by institutional investors. Additionally, institutional investors possess extensive knowledge and resources, enabling them to effectively monitor the company's performance, evaluate any deviations within the company, and prevent the implementation of risky decisions that could threaten the company's financial stability (Dong et al., 2014). These findings are supported by the research of Chen et al. (2022), Gerged et al. (2022), and Guo & Platikanov (2019), stating that there is a significant influence between the presence of institutional stock ownership on mitigating the risk of financial distress. In line with the previous explanation, institutional ownership will influence voting and encourage increased management oversight, such as the use of assets or other operational activities. Moreover, institutional ownership will enhance the monitoring capabilities of corporate management. Therefore, it can be concluded that institutional ownership can reduce the probability of financial distress during the COVID-19 pandemic.

### The Influence of Independent Commissioners on Financial Distress

Similarly, Hypothesis 2 is validated, indicating that independent commissioners can decrease the probability of financial distress during the COVID-19 pandemic. This finding is consistent with agency theory, asserting that independent commissioners are an integral component of corporate governance mechanisms. Independent commissioners aim to balance decisions, especially safeguarding the interests and rights of minority shareholders and other related entities, thereby mitigating agency problems in the company (Lukman & Geraldine, 2020). Within the implementation of good corporate governance, independent commissioners play a crucial role. They are responsible for protecting and overseeing external parties, mediating disputes between internal managers, advising the board of directors, and overseeing management policies (OJK, 2014). Independent commissioners directly influence the integrity of financial reports produced by management, monitor management performance, and act independently without external pressures. Their presence controls opportunistic managerial behavior, ensuring managers act in the shareholders' best interests (Fama & Jensen, 1983; Jensen & Meckling, 1976). The presence of independent commissioners fosters a more independent and objective environment, enhancing the principle of equality in safeguarding shareholder interests. With an independent board of commissioners, companies are expected to implement good corporate governance, avoiding conflicts of interest that could lead to the risk of financial distress (Mujiati & Pratama, 2021). This is supported by studies such as Ashraf et al. (2022), Goh et al. (2016), and Permana & Serly (2021), indicating a significant influence of independent commissioner presence on mitigating the risk of financial distress. The presence of independent commissioners contributes to transparency and control over company management, enhancing performance and minimizing agency conflicts to prevent financial distress.

## CONCLUSIONS

This study aimed to provide empirical evidence regarding the influence of corporate governance, represented by institutional ownership and independent commissioners, on the probability of financial distress. Additionally, it contributes theoretically by enhancing the understanding of the role of corporate governance in preventing financial distress, enriching literature on the importance of implementing corporate governance during both normal and unpredictable crisis conditions like the COVID-19 pandemic. From a practical perspective, the research contributes to the formulation of regulations on corporate governance implementation, offering insights to responsible regulators



such as the Financial Services Authority.

The study draws two main conclusions. Firstly, institutional ownership plays a crucial role in mitigating financial distress. The active involvement of institutional investors enhances oversight and monitoring of managerial actions, which effectively reduces agency conflicts. By holding substantial shareholdings, institutional investors have both the incentive and resources to enforce stricter oversight, promoting efficient management practices and better utilization of company assets. This improved oversight helps prevent risky managerial behaviors that could lead to financial instability, supporting the findings of previous research (Chrissentia & Syarief, 2018; Gerged et al., 2022).

Secondly, independent commissioners are found to significantly lower the probability of financial distress. Their role in providing unbiased and independent oversight ensures that managerial decisions align with shareholders' interests, enhancing transparency and accountability. Independent commissioners act as a critical component of corporate governance by mitigating agency problems and preventing opportunistic behavior by managers. Their active participation in governance processes ensures that companies adhere to good governance practices, which is particularly vital during economic downturns like the COVID-19 pandemic. This finding is consistent with existing research on the importance of independent commissioners in promoting corporate stability (Ashraf et al., 2022; Goh et al., 2016).

The study has several limitations. The measurement of both independent variables, institutional ownership and independent commissioners, may not fully reveal the actual performance of control exerted by institutional investors and independent commissioners. Future research is encouraged to develop better measurements through methods such as questionnaires or interviews. The measurement of the independent commissioner variable is relatively new and challenging to obtain. Future studies are advised to refine this measurement for a more accurate assessment of control performance. The measurement of the dependent variable, the probability of financial distress, uses widely known proxies; however, alternative measurements could be explored for more varied and nuanced results, such as profit analysis or cash flow analysis. Despite these limitations, the study provides valuable insights into corporate governance's impact on financial distress.

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