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Characteristics of the Board of Commissioners, Directors, and Financial Distress

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ABSTRACT

Purpose: The purpose of this study is to determine whether the quality of the board of directors and commissioners affects financial distress. These characteristics are reviewed based on the percentage of female commissioners, independent commissioners, size of the board of commissioners, education of the board of commissioners, percentage of female directors, percentage of independent directors, education of directors, and size of the board of directors.

Method : The study used a sample of 222 Indonesian State-Owned Enterprises from 2016 to 2021. The data analysis technique used was logistic regression analysis.

Findings: First, the data empirically demonstrates that the percentage of female commissioners, independent commissioners, educational policy, and board size all positively impact financial distress. Second, financial trouble is unaffected by the percentage of female directors, independent directors, the education of the board of commissioners, and the size of the board.

Novelty: The research sample is where this study differs from other research. Prior research only looked at one industry of companies experiencing financial trouble in wealthy nations. The State-Owned Enterprises industry in Indonesia is the main subject of this study.

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INTRODUCTION

Companies experiencing financial difficulties will have difficulty paying bills, their income is not enough to cover all their expenses, and they will experience losses (Zulfa et al., 2021). Conversely, financial distress is defined as a situation where a company's operating cash flow is insufficient to cover its existing obligations (Wesa & Otinga, 2018). Examining the reasons behind financial distress is a subject that has already been covered. Research has been done since 1960 by (Beaver, 1966; Altman, 1968). The majority of earlier research was on analyzing accounting and financial data using a variety of statistical methods. However, financial suffering cannot be fully explained by economic statistics. The necessity for the firm to be supported by sound corporate governance is one of the factors contributing to financial hardship (Fathonah, 2016). This claim is supported by research showing that, in stable economic times, corporate governance measures may improve a company's performance and shield it from harm in the event of a financial crisis (Erkens et al., 2012; Orazalin et al., 2016).

This issue is important for this study for several reasons. First, although the prediction of financial distress has attracted much attention, previous research findings still need to be resolved. Historians want to try to bridge the gap in the literature. So far, most studies have been conducted on how financial distress develops in developed countries (Tsai, 2014; Baklouti et al., 2016; (Al-Tamimi, 2012). Therefore, researchers want to expand this research to developing countries to conduct more in-depth research. Second, Because the Board of Commissioners and Directors is one of the features of corporate governance that typically plays a major role in the Company, this study focuses more on the characteristics of the Board of Commissioners and Directors (Begum et al., 2023). In addition to the ownership structure and the reputation of public accountants, board characteristics are the most important components of corporate governance (Detthamrong et al., 2017). Thus, this study identifies four attributes of the Board of Directors, namely the number of female directors, independent directors, the size of the Board of Directors, the education of the Board of directors, the proportion of

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female commissioners, independent commissioners, the education of the Board of commissioners, and the size of the Board of commissioners.

This research was conducted at State-Owned Enterprises throughout Indonesia. Researchers used State-Owned Enterprises because They play an important role in running a country's economy and contribute to providing state revenue. The purpose of this study is to answer the following question: Does financial distress depend on the characteristics of the board of directors and commissioners? The researcher is eager to investigate this subject further to make the findings interesting for shareholders, management, regulators, and other stakeholders who are interested in studying how the characteristics of the board of commissioners and directors affect financial distress. The theory used in this research is agency theory. Agency theory explains that in companies, there are differences in interests between principals (investors) and agents (managers), which can cause agency problems (Jensen & Meckling, 1976). Because the board is an internal organ of the corporation that is tied to shareholders, one of the major ramifications of this agency problem is regulations related to corporate governance, specifically in terms of oversight and board composition. Therefore, agency theory examines and attempts to resolve issues in the interaction between principals (shareholders or owners) and agents (business management).

Terjesen et al. (2016) state that the board of commissioners is tasked with supervising and disciplining management in an organization. It's an intriguing field of study to look at how commissioner traits affect financial distress. The presence of women on the board of commissioners is one of them. Compared to male leaders, female leaders are typically more circumspect and risk-averse (Kristanti & Isynuwardhana, 2018). This will affect the idea of high reward at high risk. Having a large number of female executives in the organization will lessen danger, but if little risk is taken, the firm will also see little profit. A little return might also bring on financial anguish. Numerous other studies (Rahimipour, 2017; Hoseini & Gerayli, 2018) have indicated a strong negative influence on financial hardship related to the position of women on the board of commissioners. Thus, the probability of financial hardship decreases with the number of women on the board. On the other hand, research conducted by (Salloum et al. 2016; García-Meca & Santana-Martín, 2022) shows that having female members of the board of commissioners does not significantly reduce financial suffering. As a result, companies experience losses and cannot overcome their financial difficulties by adding more women to the board of commissioners. So, the following is the research's hypothesis:

H.: Proportion of Female on the Board of Commissioners Negatively Affects Financial Distress

Representing women on the board of directors and commissioners also helps lessen the company's financial problems. A female board of directors might encourage creativity in the company's management (Guizani & Abdalkrim, 2023). A disappointing financial situation considering the proportion of female directors. This implies that there will be fewer financial issues the more female directors there are. This was discovered by (Benkraiem et al., 2017). in an earlier study. Having more women on the board of directors may improve function and productivity, leading to greater corporate success. However, Solakoglu & Demir (2016), research revealed a positive financial hardship and the proportion of female directors are correlated. This implies that there are an excessive number of women serving on the board of directors, which might have a negative impact on the company. This is due to the perception that men are more competent than women, but women's success is more due to luck in making decisions. This is different from research conducted by Santen & De Bos (2015), which found that the proportion of female directors did not influence financial distress. So, the following is the research's hypothesis:

H₂: Proportion of Female Directors Negatively Affects Financial Distress

According to agency theory, the opportunistic conduct of directors needs to be unified and restrained by independent commissioners. Independent commissioners are better equipped to keep an eye on and control the acts of corporate directors if their proportion is higher. This idea is consistent with study by (Fathonah, 2018), which discovered a negative correlation between financial difficulty and the independence of the board of commissioners. The more the independent board of commissioners' oversight is effective, the more the directors' deviations may be reduced. This is in contrast to earlier study by Widhiadnyana & Ratnadi (2019), which looked at the influence of independent commissioners and discovered a link between financial distress and independent commissioners that was favorable. This is because the company's independent commissioners have a controlling role has not been running efficiently. The process of selecting independent commissioners in companies is still limited to providing requirements to comply with corporate governance laws. So, the following is the research's hypothesis:

H₃: Independent Commissioners Have a Negative Impact on Financial Distress

The presence of independent directors is also important for the organization. Independent directors are believed to reduce agency problems. Previous research by Widiatami et al. (2023), found that independent directors have the ability to act independently due to affiliation. This allows them to supervise company directors in making decisions and limit policies that may conflict with the interests of certain parties. Independent directors therefore have a detrimental effect on financial hardship. However, in reality, according to Dharma et al. (2021), being overly independent might be bad for the firm because when there are too many independent directors, cannot freely implement policies that can benefit the company so that it can increase the risk of financial difficulties. Therefore,

the existence of independent directors in the company is only for compliance requirements and more or less for ceremonial purposes. So, the following is the research's hypothesis:

H₄: Independent Directors Have a Negative Impact on Financial Distress

Members of the board of commissioners with greater expertise are more capable of overseeing the company and making wiser judgments than those lacking a certain degree of education (Singhal et al., 2021). Permana & Serly (2021), research revealed a negative correlation between financial difficulty and the board of commissioners' educational background. This implies that the likelihood of the firm feeling financial difficulties reduce with the amount of education possessed by the board of commissioners. Highly educated members of the board of commissioners are better equipped to oversee the board of directors' performance and can make better decisions for the company because they have a deeper understanding of the financial industry. The oversight of the company's board of directors was not impacted by the high or low educational levels of the board of commissioners, according to a study by (Kharis & Nugrahanti, 2022). This is due to the possibility that the Board of Commissioners' decision-making may be influenced by a wide range of educational backgrounds, which might lead to inefficiency in providing monitoring. So, the following is the research's hypothesis:

H₅: Board of Commissioners Education Has Negative Influence on Financial Distress

The educational background of the board of directors plays a major influence in determining the company's strategy. Since a director's education influences the success of the firm, a prior study by Kristanti et al. (2016) revealed a negative correlation between financial problems and a director's level of education. This is because knowledgeable directors with good judgment and strategic understanding may help the company avoid financial trouble. The findings of this study are different from those of the study of Mahardini & Framita (2022), which discovered a positive correlation between financial difficulty and the board of directors' educational attainment. This implies that financial strain may also rise with a higher degree of education on the board of directors. This is because the board of directors' educational backgrounds diverge with the nature of the company's industry, making it impossible for them to support the company's continued operations. This contrasts with a study by Budiningsih et al. (2022) that discovered no relationship between board education and financial difficulty. So, the following is the research's hypothesis:

H₂: Directors' Education Has a Negative Impact on Financial Distress

The board of commissioners is responsible for supervising and directing the board of directors in managing and representing the corporation. Reduced board performance may arise from an organization's bigger board of commissioners' inability to effectively carry out its supervisory role. As a result, financial difficulties for the company are expected (Agustina & Anwar, 2021). A large and diverse board of commissioners with various skills and expertise can provide a broader perspective for the company and help make better judgments. Thus, the size of the commission has a negative impact on financial distress (Lestari & Wahyudi, 2021). In contrast to the research conducted by Kalbuana et al. (2022), the size of the board of commissioners has a beneficial impact on financial hardship since it serves as a less effective watchdog over the Company's directors. So, the following is the research's hypothesis:

H₂: Board of Commissioners Size Has Negative Impact on Financial Distress

One of the most crucial corporate governance systems is the board of directors, whose presence affects how well the business performs (Triwahyuningtias & Muharam, 2012). A large board of directors is anticipated to influence the efficacy of business strategies that improve long-term performance and enhance the company's reputation, according to (Kusanti & Andayani, 2015). A large number of directors not only impacts the company's image but also lessens the likelihood of financial difficulty. Therefore, financial difficulty is negatively impacted by the size of the board of directors. Vania & Supatmi (2014), claim that board size has a positive impact on financial distress. This is because the board of directors does not function as a party that is in line with its obligations; it only functions to provide the prerequisites for establishing a company. This is different from research conducted by (Nuswantara et al., 2023), which found no relationship between financial distress and board size. So, the following is the research's hypothesis:

H₈: Board of Directors Size Has Negative Impact on Financial Distress

RESEARCH METHODS

Research of this kind is quantitative. Secondary data is employed. All Indonesian state-owned businesses make up the sample for this study, which has an observation period of 2016–2021. The research uses a purposive sampling strategy for sample selection, meaning that the following conditions must be met: 1) the firms must be state-owned and have financial records and annual reports available from 2016 to 2021. 2) State-owned businesses that have not yet suffered setbacks or declared bankruptcy. Based on these criteria, a research sample of 37 companies

was obtained. Based on the sample determination criteria, 222 research analysis units comprised 37 state-owned companies with six financial reporting accounting periods. Companies are classified as either financially troubled or financially healthy based on their Z-score (Guizani and Abdalkrim, 2023). A company is categorized as financially sound if its Z-score is 1.81 or above (scoring 0), and it is considered to be in financial hardship if its Z-score value is less than 1.81 (scoring 1). The determined Z-score value and a firm's financial difficulty have an inverse relationship, meaning that the lower the Z-score value, the higher the likelihood of the company going bankrupt (formula 1).

$$Z$$
-score = $1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.05X5$ formula 1

Where:

 X_1 = Working Capital/Total assets

X₂ = Retained Earnings/Total Assets

 X_3^2 = Profit Before Interest and Tax/Total Assets

X₄ = Market Value of Equity/Book Value of Total Debt

 $X_r = Sales/Total Assets$

Gender diversity is a separate study variable. The percentage of female board members relative to the total number of commissioners may be used to calculate gender diversity based on the number of women (WOMEN) on the board. The number of female members of the board of directors (WOMEN) as a percentage of the total board of directors is measured by the proportion of women (Kabir et al., 2022). In addition, researchers used the Blau Index to calculate a gender diversity index measure for the board of commissioners and directors based on the number of gender categories (men and women). (Guizani & Abdalkrim, 2023). The Blau Index can be measured by formula 2.

Blau Index =
$$1 - \sum_{i=1}^{n} P_i^2$$
 formula 2

Where N is the number of categories and P_1^2 is the proportion of each type. The types used in this study are "male" and "female." The Independent Board of Commissioners (INDKOM) can be computed by independent commissioners using the number of commissioners; the size of the Board of Commissioners, or BSIZE, can be computed by counting the number of commissioners; and EDUC, or board education, can be computed by dividing the number of members with a master's degree or higher by the total number of commissioners. The proportion of independent directors (INDIR) is the ratio of independent directors to the total number of directors. Directors' education is determined by dividing the number of directors with a master's degree or higher by the total number of directors. The size of the board is determined by considering the number of directors.

Particular companies from earlier research have been employed as control variables to control the firm's financial state to examine the effects of gender diversity and board features on financial distress (Shahwan, 2015). The liquidity ratio (LIQ) measurement is the ratio of current assets to current liabilities; the measurement of the ratio of total debt to total assets (DER), namely the ratio of debt to equity; and the size of the Public Accounting Firm (BIG4) is the application of a dummy variable which gives a value of 1 if the company is audited by one of the Big Four Public Accounting Firms, namely PricewaterhouseCoopers, Deloitte Touche Tohmatsu, Ernst and Young, and KPMG. If one of the Big Four does not audit a company, then that company gets a score of 0. The logistic regression analysis approach is the foundation for this study's regression model. Data management using the computer application Eviews version 12. Researchers developed the following model to investigate the impact of board characteritics and gender diversity on financial distress:

Board of Commissioners:

$$\begin{split} \operatorname{Ln} &= \operatorname{FD}/(\operatorname{1-FD}) = \alpha + \beta_1 \operatorname{WOMEN} + \beta_2 \operatorname{INDKOM} + \beta_3 \operatorname{EDUC} + \beta_4 \operatorname{BSIZE} + \beta_5 \operatorname{DER} + \beta_6 \operatorname{LIQ} + \beta_7 \operatorname{BIG4} + \varepsilon \quad ... 1 \\ \operatorname{Ln} &= \operatorname{FD}/(\operatorname{1-FD}) = \alpha + \beta_1 \operatorname{BLAU} + \beta_2 \operatorname{INDKOM} + \beta_3 \operatorname{EDUC} + \beta_4 \operatorname{BSIZE} + \beta_5 \operatorname{DER} + \beta_6 \operatorname{LIQ} + \beta_7 \operatorname{BIG4} + \varepsilon \quad 2 \\ \operatorname{Board of Directors:} \\ \operatorname{Ln} &= \operatorname{FD}/(\operatorname{1-FD}) = \alpha + \beta_1 \operatorname{WOMEN} + \beta_2 \operatorname{INDIR} + \beta_3 \operatorname{EDUC} + \beta_4 \operatorname{BSIZE} + \beta_5 \operatorname{DER} + \beta_6 \operatorname{LIQ} + \beta_7 \operatorname{BIG4} + \varepsilon \quad 3 \\ \operatorname{Ln} &= \operatorname{FD}/(\operatorname{1-FD}) = \alpha + \beta_1 \operatorname{BLAU} + \beta_2 \operatorname{INDIR} + \beta_3 \operatorname{EDUC} + \beta_4 \operatorname{BSIZE} + \beta_5 \operatorname{DER} + \beta_6 \operatorname{LIQ} + \beta_7 \operatorname{BIG4} + \varepsilon \quad 4 \\ \end{split}$$

Information:

FD = Financial Distress

WOMEN = Proportion of women on the board

INDKOM = Independent commissioner INDIR = independent director

BLAU = Blau index EDUC = Board Education BSIZE = Board Size

DER = Debt to Equity Ratio

LIQ = Liquidity

BIG4 = Size of the Public Accounting Firm

RESULTS AND DISCUSSIONS

Table 1 shows the descriptive data of the chosen sample firms. This research sample's mean and median financial distress values are 0.545 and 1. Since this number is less than 1.81, some Indonesian state-owned businesses between 2016 and 2021 are deemed to be financially unhealthy and in the risky zone. As we go on to the independent variable, gender diversity, we can see that there are still several organizations with no women on the board of commissioners. The mean and median values for the presence of women on the board of commissioners are 0.121 and 0. The percentage of corporations with female commissioners on the board is 12.1% on average. The mean and median of the percentage of women on the board of directors are 0.106 and 0, respectively, indicating that some organizations still do not have any women. Additionally, the average percentage of women on a company's board of directors is 10.6%.

The commissioner index's mean and median values of 0.156 and 0 (based on BLAU) and the board of directors' mean and median values of 0.153 and 0 both demonstrate how little gender diversity there is on the Board of Commissioners and Directors. As a result, men continue to predominate on the boards of Indonesian state-owned businesses in terms of gender diversity. On average, there are 15.3% of women serving on the Board of Directors and 15.6% on the Board of Commissioners. In reference to the board characteristic data, the mean and median values for independent commissioners are 0.328 and 0.833, respectively. This indicates that the average percentage of independent commissioners within the organization is 32.8%. Based on the average and median board of directors values of 0.715 and 0.833, the company's average proportion of independent board members is 71.5%.

The mean and median values for the Board of Commissioners' variable education level are 0.823 and 0.833, respectively. This means 82.3% of Indonesia's state-owned businesses are controlled and operated by a board of commissioners with a master's degree or above. The mean and median values for the board's education level were 0.779 and 0.800, respectively. This means that 7.79% of organizations have a board of directors with a master's degree or above. In terms of board size, the company's board of commissioners has an average of 5.518 board commissioners, according to the mean and median values for the board of commissioners, which are 5.518 and 5. The average size of the company's board of directors is 5.671, which is the number of directors the company owns.

Regarding the control variables, the typical state-owned corporation in Indonesia is highly susceptible to financial hardship, as evidenced by the mean and median debt-to-equity ratio (DER) values of 2.260 and 1.373. The cause of this situation is rising debt levels. The mean, median, and liquidity ratio values are 7.200 and 1.544, and these numbers indicate that a company's capacity to pay down debt increases with its present asset level. According to the mean and median values for public accounting firms (BIG4), which are 0.396 and 0, respectively, 39.6% of state-owned businesses in Indonesia are audited by public accounting firm (Big Four). In this study, logistic regression is used for hypothesis testing. The test measures the extent to which the independent variable may predict the probability of the dependent variable occurring. Conventional assumption checks on the independent variables, and

Tabel 1. Descriptive Statistics

Variable	N	Mean	Median	Minimum	Maximum	Std. Deviation
FD	222	0.545	1	0	1	0.499
WOMEN (Commisioners)	222	0.121	0	0	1	0.169
WOMEN (Directors)	222	0.106	0	0	0.667	0.137
BLAU (Commisioners)	222	0.156	0	0	0.500	0.186
BLAU (Directors)	222	0.153	0	0	0.500	0.172
INDKOM	222	0.328	0.333	0	1.000	0.203
INDIR	222	0.715	0.833	0	1.000	0.332
EDUC (Commisioners)	222	0.823	0.833	0.200	1.000	0.200
EDUC (Directors)	222	0.779	0.800	0.200	1.167	0.203
BSIZE (Commisioners)	222	5.518	5.000	1.000	11.00	1.839
BSIZE (Directors)	222	5.671	5.000	2.000	10.000	1.916
DER	222	2.260	1.373	0.002	36.878	3.337
LIQ	222	7.200	1.544	0.001	233.771	28.468
BIG4	222	0.396	0	0	1	0.490

Source: Eviews 12 Output, Secondary Data Processing

a normality test is not necessary when using the logistic regression analysis approach. (Ghozali, 2018).

The results of the hypothesis test in Table 2 indicate that the proportion of women on the board of commissioners (WOMEN) has a substantial positive effect on financial distress with a probability of 0.01 < 0.05. This means that the proportion of women on the board of commissioners increases the level of financial distress. The results of this study are in line with those of Salloum et al. (2016), who discovered that an excessively high percentage of women can also cause losses for the company. Therefore, H_1 is rejected. This finding is corroborated by agency theory, which examines the agreements between agents and shareholders while managing a company since the primary cause of agency expenses is the mismatch between the interests of the principal and agent. The agency cost is the total cost of the principal's spending monitoring. As a result of the increased the proportion of women on the commissioners' board, the monitoring expenses of the business will increase.

 $\rm H_2$ is rejected because there is no clear relationship between the percentage of female directors (WOMEN) and financial distress, with a probability of 0.61>0.05. The findings of this study are consistent with the research of (Santen & De Bos, 2015), which found no relationship between the percentage of female directors and financial

Table 2. The Results of Logistic Regression Analysis

Variable	Board of Co	mmissioners	Board of Directors		
Variable	Model (1)	Model (2)	Model (3)	Model (4)	
WOMEN (Commisioners)	0.018 **				
	(2.693)				
BLAU (Commisioners)		0.018 **			
		(2.416)			
WOMEN (Directors)			0.616		
			(0.617)		
BLAU (Directors)				0.899	
				(0.133)	
INDKOM	0.000 *	0.001*			
	(3.941)	(3.779)			
INDIR			0.988	0.900	
			(-0.008)	(0.070)	
EDUC (Commisioners)	0.431	0.496			
	(-0.723)	(-0.623)			
EDUC (Directors)			0.017**	0.019**	
			(2.320)	(2.274)	
BSIZE (Commisioners)	0.011**	0.025**			
	(0.314)	(0.275)			
BSIZE (Directors)			0.231	0.163	
			(0.128)	(0.123)	
DER	0.000*	0.000*	0.000*	0.000*	
	(1.270)	(1.247)	(1.312)	(1.303)	
LIQ	0.003*	0.002*	0.003*	0.004*	
	(-0.218)	(-0.218)	(-0.188)	(-0.189)	
BIG4	0.082	0.154	0.3882	0.3658	
	(-0.733)	(-0.606)	(-0.341)	(-0.356)	
Constant	0.0014	0.0018	0.0010	0.0007	
	(-3.631)	(-3.514)	(-3.778)	(-3.724)	
McFadden R-squared	0.425	0.426	0.381	0.382	
LR statistic	129.983	130.256	116.621	116.979	
Prob(LR statistic)	0.000	0.000	0.000	0.000	

Source: The Processed Data (2023)

Notes: This table presents the results of a logit regression that estimates the effect of gender diversity and board characteristics on financial distress. WOMEN is the proportion of Women on the board. INDKOM is an independent commissioner. INDIR is an independent director. EDUC is the Council's Education Level. BSIZE is the board size. DER is the debt-to-equity ratio. LIQ is liquidity. BIG4 is a measure of public accounting firms. *,***, ****, significance 1%, 5%, 10%.

distress. This is because men still control state-owned companies in Indonesia. After all, there is only one, or at most, two or three, female directors in the company. Using gender diversity (blau index), the researcher ran further tests to verify the integrity of the research findings about the percentage of female board members experiencing financial hardship. With a probability of 0.01 <0.05, the findings indicated that the percentage of female board members utilizing gender diversity (blau index) remained significant and positively correlated with financial hardship. This outcome is consistent with the ratio-based results in model 1. With a probability of 0.89>0.05, the study's findings for the board of directors using the Blau index indicated that gender diversity on the board did not significantly affect financial hardship. This outcome is consistent with the ratio-based test findings in model 1.

H₃ is rejected because there is a positive and substantial impact of the independence of the board of commissioners (INDKOM) on financial hardship, with a probability of 0.00 < 0.05. This demonstrates that the degree of financial difficulty rises as the number of independent commissioners does, suggesting that the independent commissioners' monitoring role is not operating efficiently inside the organization. This is consistent with study by Widhiadnyana & Ratnadi (2019), which discovered a favorable correlation between financial hardship and the commissioners' independence. H, is rejected because independent directors (INDIR) have a probability of 0.98>0.05, indicating that it doesn't significantly affect financial hardship. This shows that the company's process in selecting independent directors is still limited to providing legal requirements to comply with good corporate governance practices. This finding is consistent with Sewpersadh (2022) companies are compelled to reassess operational policies and reengineer strategic formulations to discern value maximising uses for limited resources. The executive's agility to react to financial distress determines the probability of bankruptcy. Proper governance drives sound and sustainable, value maximising decision-making, while inept practices lead to value diminishing, self-serving behaviour that financially constrains companies, resulting in an acceleration of financial distress. This study examined the correlation between financial distress and corporate governance within a sample of 116 listed South African companies using the GMM estimation. Key financial distress determinants were found to be audit committees and shareholder activism (proxied by equity ownership research, which found no independent directors and financial distress are related.

The level of education (EDUC) on the board of commissioners is negative and does not significantly affect financial distress with a probability of 0.43 > 0.05, so H_5 is rejected. The high or low level of education of the board of commissioners does not affect the supervision of the company's board of directors. The results of this study are in line with research conducted by (Kharis & Nugrahanti, 2022). H_6 is rejected since the study's conclusions on the board of directors' education level (EDUC) indicate that the board's education has a substantial positive influence on financial hardship with a probability of 0.01 < 0.05. This implies that there will be greater financial difficulties the more educated the board of directors is. This suggests that there is a possibility that the highly educated backgrounds of the board members don't align with the company's line of business, making it unable to sustain the corporation's ongoing operations. The result of this investigation are in line with the findings of other research (Mahardini & Framita, 2022).

 $\rm H_7$ is rejected since the study's findings demonstrate that the board of commissioners' size (BSIZE) is positively and significantly affects financial hardship, with a probability of 0.01 <0.05. This implies that the financial difficulty increases with the number of the board of commissioners. Therefore, it may be concluded that a big board of commissioners is a less useful watchdog on corporate executives. This outcome is in line with research that has been done by (Kalbuana et al., 2022). $\rm H_8$ is rejected because the results of the study on the direction of board size (BSIZE) do not have a significant effect on financial difficulties, with a probability of 0.23>0.05. These results are in accordance with research conducted by Nuswantara et al. (2023), the size of the board of directors shows that the company's financial difficulties are not always significantly influenced by the size of the board of directors.

The debt-to-equity ratio (DER) coefficient has a substantial positive correlation with financial difficulty with a probability of 0.00<0.05. This implies that the DER value will increase with increasing financial distress. Therefore, total assets must be greater than total liabilities; in other words, the corporation has to have a low DER in order to pay off its obligations without significantly jeopardizing the interests of its capital owners. On the other hand, if it turns out that the company has a high DER, then there are concerns that it will be difficult for the business to pay its obligations. Financial hardship may result from this. The findings of this study are consistent with previous research by (Budiningsih et al., 2022).

Liquidity research (LIQ) results, on the other hand, have a probability of 0.00<0.05 and have a strong negative impact on financial hardship. This suggests that there is a strong correlation between financial hardship and liquidity, namely that when a company's liquidity rises, the likelihood of financial difficulty falls. On the other hand, if the company's liquidity decreased, there would be a higher chance of financial difficulties. The idea put forward by Brigham and Houston in Murni (2018), according to which a company's liquidity would decline and issues arise if its current obligations increase more quickly than its current assets, is the foundation for the research findings. The size of the public accounting firm (BIG4) is negative and has no bearing on financial distress, with a probability of 0.08>0.05. This means that most state-owned companies are audited by small public accounting firms, which tend to be less independent. In this case, it is the data obtained from 20 data companies experiencing financial distress; only 7 companies' data have used public accounting firm (BIG4). Big-four, and the rest use public accounting firm Non-Big-four. The findings of this study are consistent with those of (Pratitis, 2012).

CONCLUSIONS

In order to provide empirical data on the characteristics of the board of commissioners and directors with regard to financial distress, the following conclusions were drawn from testing the research data: First, the size of the board of directors, the percentage of independent directors, the education of the board of commissioners, and the number of female directors do not affect financial distress; Second, the size of the board of directors, the percentage of independent directors, the education of the board of commissioners, and the number of female directors do not affect financial distress; and Third, in relation to the control variables, financial distress is positively influenced by the debt-to-equity ratio, negatively influenced by liquidity, and not influenced by Public Accounting Firm (BIG4).

There are many theoretical and practical consequences presented by this work. Theoretically, this study can improve our knowledge of how the characteristics of boards of commissioners and directors can affect financial crises. Practically, this study offers useful information for business decision makers in developing countries to help them design boards with positions and memberships that support corporate governance principles and prevent financial distress. In addition, by outlining the characteristics of boards of commissioners and directors, these results can help regulators understand the need to take actions to improve board performance. This study has unavoidable limitations. First, it only observes Indonesian state-owned companies between 2016 and 2021. Second, it only uses the Altman z-Score as a metric of financial distress. In the future, scholars can use Zmijewski to help address other financial distress and expand the research sample to cover more developing countries. To further expand this study, future researchers can include board tenure, board age, and foreign board members in the list of board characteristics.

REFERENCES

- Agustina, Y., & Anwar, C. E. (2021). The Influence of Corporate Governance Structures on Financial Distress: A Study of Coal Mining Companies. *KnE Social Science*, 313–321. https://doi.org/10.18502/kss.v5i8.9383
- Al-Tamimi, H. A. H. (2012). The effects of corporate governance on performance and financial distress: The experience of UAE national banks. *Journal of Financial Regulation and Compliance*, 20(2), 169–181. https://doi.org/10.1108/13581981211218315
- Altman, E. I. (1968). Financial Ratios, Discriminant Analysis and The Predictions of Corporate Bankruptcy. *The Journal of Finance*, 29(1), 589–609. https://doi.org/10.1111/j.1540-6261.1974.tb00057.x
- Baklouti, N., Gautier, F., & Affes, H. (2016). Corporate Governance and Financial Distress of European Commercial Banks. Journal of Business Studies Quarterly, 7(3), 75–96.
- Beaver, W. H. (1966). Financial Ratios as Predictors oh Failure. Journal of Accounting Research, 4(1966), 71-111.
- Begum, M. M., Sarker, N., & Nahar, S. (2023). The Impact of Corporate Governance Attributes on Financial Distress among the Listed Firms in Pharmaceuticals Industry of Bangladesh. *International Journal of Economics and Financial Issues*, 13(6), 155 167. https://doi.org/10.32479/ijefi.15096
- Benkraiem, R., Hamrouni, A., Lakhal, F., & Toumi, N. (2017). Board independence, gender diversity and CEO compensation. *Corporate Governance: The International Journal of Business in Society*, 17(5), 845–860. https://doi.org/10.1108/CG-02-2017-0027
- Budiningsih, B. A. S., Kristanto, A. T., & Agustinawansari, G. (2022). Analisis Pengaruh Mekanisme Corporate Governance terhadap Kemungkinan Terjadinya Financial Distress. *EXERO: Journal of Research in Business and Economics*, 4(1), 84 126. https://doi.org/10.24071/exero.v4i1.5027
- Detthamrong, U., Chancharat, N., & Vithessonthi, C. (2017). C orporate governance, capital structure and firm performance: Evidence from Thailand. *Research in International Business and Finance*, 42, 689–709. https://doi.org/10.1016/j.rib-af.2017.07.011
- Dharma, D. A., Damayanty, P., & ...(2021). Analisis Kinerja Keuangan dan Corporate Governance Terhadap Manajemen Laba. *Jurnal Bisnis, Logistik* http://ejournalibik57.ac.id/index.php/blogchain/article/view/327
- Erkens, D. H., Hung, M., & Matos, P. (2012). Corporate governance in the 2007-2008 financial crisis: Evidence from financial institutions worldwide. *Journal of Corporate Finance*, *18*(2), 389–411. https://doi.org/10.1016/j.jcorpfin.2012.01.005
- Fathonah, A. N. (2016). Pengaruh Penerapan Good Corporate Governance Terhadap Financial Distress. *Jurnal Ilmiah Akuntansi*, *1*(2), 133–150. https://doi.org/10.23887/jia.v1i2.9989
- Fathonah, A. N. (2018). Pengaruh Gender Diversity dan Age Diversity Terhadap Kinerja Keuangan The Effects of Gender Diversity and Age Diversity on Financial Performance. *Jurnal Riset Akuntansi Dan Keuangan*, 6(3), 373–380.
- García-Meca, E., & Santana-Martín, D. J. (2022). Board gender diversity and performance in family firms: exploring the faultline of family ties. In *Review of Managerial Science* (Vol. 17, Issue 5). Springer Berlin Heidelberg. https://doi.org/10.1007/s11846-022-00563-3
- Ghozali, I. (2018). Aplikasi Analisis Multivariate dengan Program IBM SPSS 25. Badan Penerbit Universitas Diponegoro.
- Guizani, M., & Abdalkrim, G. (2023). Does gender diversity on boards reduce the likelihood of financial distress? Evidence from Malaysia. *Asia Pacific Journal of Business Administration*, 15(2), 287–306. https://doi.org/10.1108/APJBA-06-2021-0277
- Hoseini, M., & Gerayli, M. S. (2018). The Presence of Women on the Board and Tax Avoidance: Evidence from Tehran Stock Exchange. *International Journal of Finance and Managerial Accounting*, 3(9), 53–62.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics, 3, 305–360. https://doi.org/10.1016/0304-405X(76)90026-X
- Kabir, A., Ikra, S. S., & Saona, P. (2022). Board Gender Diversity and Firm Performance: New Evidence from Cultural Diversity in the Boardroom Diversity. *Journal of Sustainable Finance and Investment*. https://doi.org/10.1108/LBSJMR-06-2022-0022
- Kalbuana, N., Taqi, M., Uzliawati, L., & Ramdhani, D. (2022). The Effect of Profitability, Board Size, Woman on Boards, and

- Political Connection on Financial Distress Conditions. *Cogent Business and Management*, 9(1), 1–22. https://doi.org/10.1 080/23311975.2022.2142997
- Kharis, J. B., & Nugrahanti, Y. W. (2022). Board Diversity, Koneksi Politik dan Financial Distress. *E-Jurnal Akuntansi*, 32(8), 1987. https://doi.org/10.24843/eja.2022.v32.i08.p03
- Kristanti, F. T., & Isynuwardhana, D. (2018). Survival Analysis of Industrial Sectors in Indonesia Companies. *Jurnal Keuangan Dan Perbankan*, 22(1), 23 36. https://doi.org/10.26905/jkdp.v22i1.1601
- Kristanti, F. T., Rahayu, S., & Huda, A. N. (2016). The Determinant of Financial Distress on Indonesian Family Firm. *Procedia Social and Behavioral Sciences*, 219, 440–447. https://doi.org/10.1016/j.sbspro.2016.05.018
- Kusanti, O., & Andayani. (2015). Pengaruh Good Corporate Governance dan Rasio Keuangan Terhadap Financial Distress. Jurnal Ilmu & Riset Akuntansi, 4(10).
- Lestari, T., & Wahyudi, A. (2021). Pengaruh Mekanisme Corporate Governance terhadap Financial Distress dengan Profitabilitas sebagai Variabel Moderating. *Business and Economic Analysis Journal*, *I*(1), 50–62. http://dx.doi.org/10.15294/beaj.yli1.3014
- Mahardini, N. Y., & Framita, D. S. (2022). Financial Distress: Studi pada Jumlah Dewan Komisaris, Karakteristik CEO, dan Leverage Perusahaan Manufaktur di Indonesia. *Journal of Applied Management Research*, 2(2), 81–90. https://doi.org/10.36441/jamr.v2i2.1209
- Murni, M. (2018). Analisis Faktor-Faktor Yang Mempengaruhi Tingkat Financial Distress Pada Perusahaan Manufaktur Yang Terdaftar Di Bei Tahun 2010-2014. *JURNAL AKUNTANSI DAN BISNIS :Jurnal Program Studi Akuntansi*,4(1). https://doi.org/10.31289/jab.v4i1.1530
- Nuswantara, D. A., Prameswari, R. D., Rusdiyanto, R., & Hendrati, I. M. (2023). The role of political connection to moderate board size, woman on boards on financial distress. *Cogent Business & Management*, 10(1). https://doi.org/10.1080/2331 1975.2022.2156704
- Orazalin, N., Mahmood, M., & Jung Lee, K. (2016). Corporate governance, financial crises and bank performance: lessons from top Russian banks. *Corporate Governance (Bingley)*, 16(5), 798–814. https://doi.org/10.1108/CG-10-2015-0145
- Permana, F. D., & Serly, V. (2021). Pengaruh Karakteristik Dewan Komisaris Terhadap Kemampuan Memprediksi Financial Distress. *Jurnal Eksplorasi Akuntansi*, 3(4), 908–921.
- Pratitis, Y. T. (2012). Auditor Switching: Analisis Berdasar Ukuran Kap, Ukuran Klien Dan Financial Distress. *Accounting Analysis Journal*, 1(1), 27 32. https://doi.org/10.15294/aaj.v1i1.709
- Rahimipour, A. (2017). Investigation of The Impact of Women's Representation and Participation on Board of Directors on Tax Avoidance in Listed Companies on The Tehran Stock Exchange (TSE). *Specialty Journal of Accounting and Economics*, 3(2), 12–22.
- Salloum, C., Azzi, G., Mercier-Suissa, C., & Khalil, S. (2016). The rise of women and their impact on firms' performance. *International Journal of Entrepreneurship and Small Business*, 27(2–3), 213–246. https://doi.org/10.1504/IJESB.2016.073976
- Santen, B. P. A., & De Bos, A. (2015). The Effects of Legal Measures to Empower Supervisory Directors: Evidence from a Financial Distress Perspective. *Journal of Management and Strategy*, *6*(1), 45–61. https://doi.org/10.5430/jms.v6n1p45
- Sewpersadh, N. S. (2022). An econometric analysis of financial distress determinants from an emerging economy governance perspective. *Cogent Economics and Finance*, 10(1). https://doi.org/10.1080/23322039.2021.1978706
- Shahwan, T. M. (2015). The Effects of Corporate Governance on Financial Performance and Financial Distress: Evidence form Egypt. *Corporate Governance: The International Journal of Business in Society*, *15*(5), 543–562. https://doi.org/10.1108/CG-11-2014-0140
- Singhal, R., Singhal, V., Singhal, R. K., & Singh, A. (2021). Board of Directors Qualification and Composition: Study of Its Impact on Service Sector of India. *Information Technology in Industry*, 9(1), 1213–1219. https://doi.org/10.17762/itii.v9i1.259
- Solakoglu, M. N., & Demir, N. (2016). The role of firm characteristics on the relationship between gender diversity and firm performance. *The Eletronic Library*, 34(1), 1–5. https://doi.org/10.1108/MD-02-2015-0075
- Terjesen, S., Couto, E. B., & Francisco, P. M. (2016). Does the presence of independent and female directors impact firm performance? A multi-country study of board diversity. *Journal of Management and Governance*, 20(3), 447–483. https://doi.org/10.1007/s10997-014-9307-8
- Triwahyuningtias, M., & Muharam, H. (2012). Analisis Pengaruh Struktur Kepemilikan, Ukuran Dewan, Komsaris Independen, Likuiditas dan Leverage Terhadap Terjadinya Kondisi Financial Distress (Studi Pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia Tahun 2008-2010). *Diponogoro Journal Of Management, 1*(1), 1–14.
- Tsai, C. F. (2014). Combining cluster analysis with classifier ensembles to predict financial distress. *Information Fusion*, *16*(1), 46–58. https://doi.org/10.1016/j.inffus.2011.12.001
- Vania, H., & Supatmi. (2014). The Effect Of Board Diversity Towards The Company Value Of Financial Institutions In Indonesia. *International Journal of Business and Management Invention*, 3(4), 32–41.
- Wesa, E. W., & Otinga, H. N. (2018). Determinants of Financial Distress Among Listed Firms At the Nairobi Securities Exchange, Kenya. *Strategic Journal of Business & Change Management*, *5*(4), 1056–1073. https://doi.org/10.61426/sjbcm.y5i4.933
- Widhiadnyana, I. K., & Ratnadi, N. M. D. (2019). The impact of managerial ownership, institutional ownership, proportion of independent commissioner, and intellectual capital on financial distress. *Journal of Economics, Business & Accountancy Ventura*, 21(3), 351–360. https://doi.org/10.14414/jebav.v21i3.1233
- Widiatami, A. K., Fadli, D. A., Aeni, I. N., Widhiastuti, R., & Nurkhin, A. (2023). Do Managerial Ownership, Gender Diversity, and Intellectual Capital Matter in Predicting State-Owned Companies Financial Distress? *Jurnal REKSA: Rekayasa Keuangan, Syariah Dan Audit, 10*(1), 36–45. https://doi.org/10.12928/jreksa.v10i1.7757
- Zulfa, I. A., Unggul, P., & Rida, P. (2021). Faktor-Faktor Yang Mempengaruhi Financial Distress Perusahaan Terdampak Covid-19 di ASEAN. *Jurnal Akuntansi, Perpajakan Dan Auditing*, 2(3), 710–734.