

THE IMPACT OF BOARD DIVERSITY ON FINANCIAL DISTRESS IN PROPERTY AND REAL ESTATE COMPANIES

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Abstract

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The low demand for real estate is reflected in the slow growth of global property prices in 2023. This is impacted by the state of the world economy, which did not grow significantly in 2023. In addition to the sluggish expectation for economic growth, the prospects for the global real estate industry in 2024 are anticipated to be characterized by uncertainty. Therefore, the Board of Directors' duty is essential to lessen the financial distress of Indonesian publicly traded property and real estate companies in order to prevent bankruptcy that starts with financial distress. The goal of this study is to investigate experimentally how board diversity may affect the financial crisis status of real estate and property enterprises between 2019 and 2024. Panel data regression analysis is used in this quantitative, descriptive study methodology. The results of the study show that while board duality has been shown to have no detrimental effect on the financial distress condition of real estate and property companies, the number of female directors and the size of the board can lessen the company's financial crisis situation.

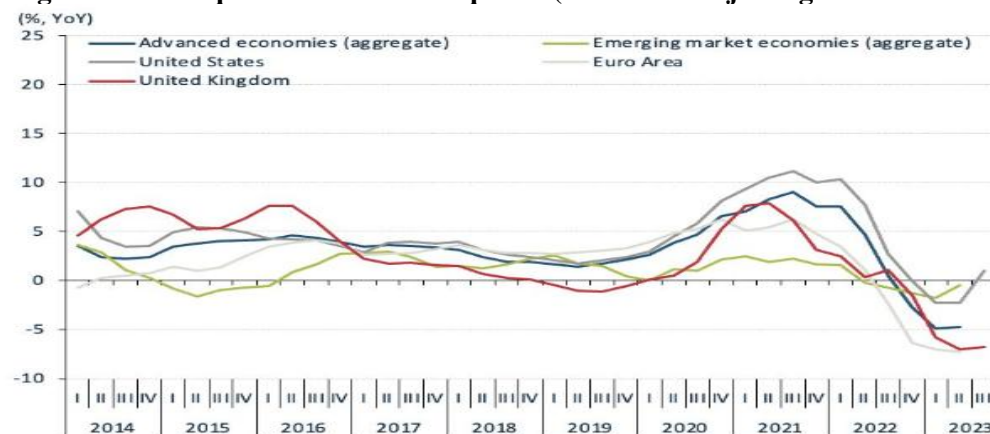
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1. Introduction

Throughout 2023, the global property sector has not shown any significant signs of recovery, as evidenced by the development of global property prices which have not experienced significant growth. This is further supported by evidence that global real property prices remained in a zone of negative growth throughout 2023 (Sunarsip, 2024) (see Figure 1). The low growth in global property prices reflects that demand for property remains low (Sunarsip, 2024). This is partly influenced by the global economic performance, which did not experience significant growth throughout 2023 (Sunarsip, 2024).

Figure 1. Development of real estate prices (in several major regions of the world)



Sumber: BIS, Analisis The Indonesia Economic Intelligence (IEI)

Uncertainty and the possibility of sluggish economic development are predicted to characterize the outlook for the global real estate market in 2024 (Sunarsip, 2024). A number of international organizations have released their outlooks for 2024, including the World Bank and the IMF (Sunarsip, 2024). Because of this, the majority predict that economic growth in 2024 will be less than that of the previous year (Sunarsip, 2024). The performance of the real estate industry is anticipated to be impacted by the anticipated downturn in global economic growth (Sunarsip, 2024). Even in China, a slowdown in economic growth has been caused by the property sector's poor performance as a result of numerous bankruptcy proceedings that have affected several significant firms in the real estate industry in recent years (Sunarsip, 2024). The board of directors must actively work to lower the danger of financial difficulty in order to prevent bankruptcy in Indonesian public property and real estate enterprises, similar to those in China. Thus, the purpose of this study is to investigate experimentally how board diversity may impact the financial distress status of real estate and property companies between 2019 and 2024.

Businesses with a small, independent board and a high proportion of female directors can lower the risk of financial difficulty, as demonstrated by Garcia and Herrero's (2021) study, which selected European public corporations. Research by Kalbuana et al. (2022), which looked at LQ45 public businesses from 2017 to 2021, indicated that board size has a beneficial effect on financial distress. These findings can demonstrate that board diversity helps lessen a company's financial distress. Younas et al. (2020) and Darrat et al. (2016) presented different findings using different samples. Younas et al. (2020) used a sample of Pakistani public companies, while Darrat et al. (2016) used a sample of financial sector companies. The findings showed that a smaller board size can increase the financial distress condition of those companies.

Second, alternative findings may be obtained from other studies that use board diversity, particularly the representation of women on the board. For instance, the study by Kalbuana et al. (2022) discovered that the financial distress state of LQ45 enterprises can be exacerbated by the inclusion of women on their boards. However, research by Wang (2020) and Ellwood & Garcia-Lacalle (2015) showed that having women on the board can lessen the company's financial difficulties.

The diversity of the board of directors that yields different results is board duality, where the study by Garcia and Herrero, which examined European public companies, proved that CEO duality does not have a significant impact on the likelihood of financial distress or capital structure decisions (2021). The results of the study by Indrati and Handayani (2022) also yielded the same outcome as the study by Garcia and Herrero, showing that board duality in Indonesian public non-financial companies does not affect financial distress (2022). However, different results demonstrated by Manazaneque et al. (2016) and Sujono et al. (2023) provide the same conclusion that duality of directors can reduce the financial distress condition of a company. This means that when someone holds the position of both director and chairman of the board of commissioners, the likelihood of financial distress occurring decreases (Sujono et al., 2023). This is because the combination of the director and board of commissioners in one position can influence the internal control system of a banking company, which can reduce the likelihood of financial difficulties for the company (Sujono et al., 2023). The research findings are also supported by Kashif et al. (2020), which show that CEO Duality has a positive impact on the occurrence of financial distress in the company.

The novelty in this research lies in using the research object of property and real estate companies listed on the Indonesia Stock Exchange, where the research object is related to the condition of the projected global economic slowdown, which impacts the financial distress experienced by property and real estate companies in the world and Indonesia.

2. Literature review

2.1. Financial distress

It denotes a persistent deterioration in a business's financial results over a specific time frame (OCBC NISP, 2023). When a company's entire obligations surpass its total equity, it is said to be in financial difficulty (Sujono et al., 2023). One of the most frequent causes of bankruptcy for businesses is financial difficulties. Because, in contrast to a typical drop in profits, the nominal losses brought on by financial difficulties might be extremely high, impairing the company's ability to run smoothly (OCBC NISP, 2023). As a result, putting strategy into practice is crucial for a company to overcome its

challenges. Predicting a company's financial difficulty is crucial for evaluating early indicators of bankruptcy as part of an early warning system for management, claim Ahsan et al. (2020).

One of the most important components of performance optimization is good corporate governance, which includes the interactions between the board of directors, the company's management, human rights advocates, and OECD stakeholders (Helena and Saifi, 2018). According to Cardoso (2019), the goal of corporate governance is to manage the business so that it can eventually provide value for stakeholders and shareholders. The percentage of women on the board, the size of the board (the number of directors), and the chair's duality serve as proxies for the corporate governance implementation method in this study.

2.2. Board diversity

2.2.1. Female directors

For the past ten years, scholars have focused a great deal of attention on the topic of women in the boardroom. As a result, at least European nations and Indonesia are starting to examine the gender balance of men and women in the boardroom, which can have an impact on the state of the firm. A number of corporate governance codes in developed nations stress the significance of gender diversity on the board of directors in order to prevent problems arising from individuals with similar mindsets and thereby improve the board of directors' effectiveness (García and Herrero, 2021). Gender diversity on the board of directors is also regarded as a key factor contributing to the quality of corporate governance.

Several studies have demonstrated a connection between the company's financial difficulty and the number of female directors. According to Mittal and Lavina (2018), García and Herrero (2021), and Guizani and Abdalkarim (2023), having women on the board of directors lowers the company's risk of bankruptcy (increased financial distress). However, some studies had opposite findings. For example, Kalbuana et al. (2022) discovered a significant association between the likelihood of financial trouble and the proportion of women on the boards of LQ 45 businesses from 2017 to 2021. The number of women on the board divided by the total number of directors the company has is the proxy employed in this study to gauge the presence of women on the board of directors.

2.2.2. Board size

A company's board size is determined by how many directors and commissioners it has. According to POJK Number 33/POJK.04/2014, the board of directors is the company's organ with full authority and responsibility for managing the business in the company's best interests in line with its goals and objectives. It also represents the business in court and in accordance with the terms of the articles of association. In general, a company's board size will dictate its policies and plans and guarantee that it has properly followed all of the provisions outlined in the articles of association as well as any applicable laws and regulations. According to the Agency Theory, a larger board will increase the effectiveness of management monitoring since it may have more expertise and knowledge, offer better guidance for the company's advancement, and boost performance (Jensen and Meckling, 1976).

Researchers frequently use this issue while conducting studies since the size of the board of directors can provide different results in each research sample. Similar to the study by Kalbuana et al. (2022), which employed a sample of LQ45 public firms, it was shown to have a positive impact on the financial distress situation of LQ45 public companies. In terms of communication, coordination, oversight, and decision-making, companies with a big board of directors are thought to be less competent than those with a smaller board. As a result, companies with large boards of directors often perform worse than those with smaller boards, which can lead to financial problems (Kalbuana, et al., 2022). Younas et al. (2020), on the other hand, found that the size of the board of directors had a negative impact on the financial difficulties of Pakistani public corporations.

2.2.3. Duality of the board

Indonesia adopts a two-tier board system that requires the existence of a Board of Directors as managers and a Board of Commissioners as supervisors of the Board of Directors (Putri and Deviesa, 2017). The duality of the Board of Directors refers to a person holding two positions simultaneously, namely the Chairman of the Board (Board of Commissioners) and Chief Executive Officer (Board of

Directors) in a company (Sujono et al., 2023). Due to the prevailing regulations, the duality of the Board of Directors in Indonesia may not directly involve a Board of Commissioners serving as Directors, but rather employs a kinship system in the placement of Directors and the Board of Commissioners, where there are still familial ties in these two positions (Putri and Deviesa, 2017). Many companies that initially started as family businesses eventually grew and became public companies listed on the Indonesia Stock Exchange (Putri and Deviesa, 2017) so that the company could obtain significant capital and operate as a going concern.

One element that the public can evaluate to ascertain whether the business has incorporated good governance standards into its operations is the board of directors' duality. It was demonstrated in the study by Sujono et al. (2023) that having a dual board of directors can lessen a company's financial difficulty. Accordingly, there is less chance of financial trouble when an individual serves as both chairman and director of the board of commissioners (Sujono et al., 2023). This is due to the fact that having both the director and the board of commissioners in one position can improve the banking company's internal control system and lessen the possibility of financial hardship (Sujono et al., 2023). Kurshid et al. (2020) presented several research findings, demonstrating that CEO Duality has a favorable impact on the occurrence of financial hardship in the organization. In the meantime, among the sample companies, dualism exhibits a strong positive correlation with financial troubles.

2.2.4. Agency theory

Agency theory was introduced by Jensen & Meckling, which discusses the contractual relationship between members of an organization using a model that focuses on two individuals, the principal and an agent, illustrating the bond between the principal and the agent (1976). This theory states that agents will behave based on personal interests that may conflict with the interests of the principal (Kalbuana et al., 2022). The principal will delegate tasks to the agent, and the agent is expected to act in the principal's interest. Based on this, the agency problem arises if the interests of the principal and agent do not align and the principal lacks information to accurately assess the agent's behavior. Insightful methods for solving research problems can be found in the agency theory function. Agency costs consist of three types: residual costs, bonding costs, and monitoring costs (Jensen & Meckling, 1976; Adi et al., 2022). Agency theory uses three assumptions about human nature, namely: generally selfish, limited in thinking about the future, and risk-averse (Hanim et al., 2019; Sudaryanto et al., 2020).

The agency theory argues that a diverse board of directors can enhance the role of corporate management oversight, as it consists of directors with different backgrounds and opinions (Benkraiem et al., 2017). Gender diversity in the board of directors can be used as a tool to control agency problems, which is then considered a good governance tool related to board composition (UIAin et al., 2020). Kalbuana et al. (2022) show that gender diversity in the board of directors allows for better oversight, which helps in making more effective decisions. The Agency Theory states that a larger Board of Directors will make management monitoring more effective, potentially possessing broader experience and knowledge, and providing better advice for the company's advancement, resulting in higher company performance. This is supported by the research of Younas et al. (2020), which sampled public companies in Pakistan and found that the size of the board of directors in these companies negatively affected their financial distress conditions.

2.1. Hypotheses development

Over the past ten or so years, scholars have given the topic of women in boardrooms a lot of attention. As a result, at least European nations and Indonesia are starting to examine the gender balance in boardrooms, which may have an impact on business success. Numerous studies that connect the presence of female directors to a company's financial difficulties make this clear. According to research by Mittal and Lavina (2018), García and Herrero (2021), and Guizani and Abdalkarim (2023), having women on boards of directors lowers a company's risk of bankruptcy (greater financial distress). Thus, the following hypothesis is put forth:

H1: Female board of directors negatively affects the financial distress of property and real estate companies

The public can evaluate a company's implementation of good governance in its operations by looking at factors like duality of directorship. Sujono et al. (2023) demonstrated in their study that having two directors can lessen a company's financial difficulties. Accordingly, the likelihood of financial trouble is reduced when an individual serves as both chairman and director of the board of commissioners (Sujono et al., 2023). This is due to the fact that merging the roles of director and board of commissioners can improve a banking company's internal control system and lower the likelihood of financial trouble (Sujono, et al., 2023). Consequently, the following theory is put forth:

H2: The duality of directors has a negative impact on the financial distress of property and real estate companies

According to agency theory, a larger board will increase the effectiveness of management supervision, possibly have more expertise and knowledge, offer better guidance for the firm's advancement, and result in higher corporate performance (Jensen and Meckling, 1976). According to research by Younas et al. (2020), which used a sample of Pakistani public firms, the size of the board of directors has a detrimental impact on the company's financial difficulty. Consequently, the following theory is put forth:

H3: The size of the board of directors has a negative impact on the financial distress of property and real estate companies.

3. Research methodology

According to Creswell and Creswell (2018), the research strategy used is descriptive using a quantitative approach that will test a theory by outlining particular hypotheses and then gathering data to confirm or deny these hypotheses based on statistical information. Companies in the real estate and property sector listed on the Indonesia Stock Exchange (IDX) between 2019 and 2024 make up the study's population. Only businesses that satisfy the predefined requirements may be used as research samples in this study. Companies in the property and real estate sector that are listed on the Indonesia Stock Exchange (IDX) between 2019 and 2024 make up the sample. The research sample can be viewed on the website www.sahamok.com, and the pertinent company data can be accessed on the IDX website at www.idx.co.id. Purposive sampling is the procedure used in the sampling process in order to produce a sample that meets the following specified criteria: (1) consistently listed on the IDX between 2019 and 2024; (2) not experiencing losses during that time; (3) financial reports using the Indonesian rupiah currency (symbol: IDR); (4) not going through mergers between 2019 and 2024; (5) not going through initial public offerings (IPOs); and (6) not going through delisting from the IDX between 2019 and 2024.

The following panel data regression equation is used in the research model's panel data regression analysis:

$$FD_t = a + bDW_{it} + cDD_{it} + dUD_{it} + eLEV_{it} + e \dots\dots\dots(1)$$

Explanation:

- FD = Financial distress
- DW = Female directors
- DD = Duality of directors
- UD = Size of directors
- LEV = Leverage
- e = error

3.1. Classical assumption test

The traditional assumption tests, including as the autocorrelation, multicollinearity, heteroscedasticity, and normality tests, are then performed on the data. According to Basuki and Prawoto (2017), panel data, which is a combination of time series and cross-section data, frequently does not require normality testing because the normality assumption tends to be naturally fulfilled with

a large number of observations. Thus, the traditional assumption tests—heteroscedasticity, multicollinearity, and autocorrelation—continue this investigation.

Four models are employed in panel data regression: the random effects model, the fixed effects within-group model, the pooled OLS model, and the fixed effects least square dummy variable (LSDV) model (Gujarati & Porter: 2015). The model specification test determines which model should be utilized. Random effects and fixed effects are the two types of specification testing.

Table 1. Variable definition

Variable	Measurement
Dependent variable	
Financial Distress (Khasanah et al., 2021)	Operating profit / interest expense
Independent variable	
Female director Garcia & Herrero (2021)	The proportion of the number of female directors divided by the total number of directors.
Duality of directos (Yousaf et al., 2021)	1 if the person serves as both a director and a commissioner, and 0 if otherwise.
Size of directors (Yousaf et al., 2021)	The number of directors
Control variable	
Leverage (Khasanah et al., 2021); (Yousaf et al., 2021)	DER = Total debt / total assets

3.2. Significance test

- a) F-Test. seeks to determine how much each independent variable affects the dependent variable as a whole. The dependent variable is significantly impacted by the independent variables taken together if the prob F value is less than the 10% significance level.
- b) t-Test. seeks to determine how much each independent variable contributes to the explanation of the dependent variable. When prob < sig level 10%, the test is performed using the computed t probability. It is determined that Ha is accepted and Ho is refused.
- c) Coefficient of determination (R²). used to determine how much the study can account for the dependent variable's fluctuation. In the meantime, the value of R2 typically falls between 0 and 1, and the closer it approaches 1, the better the research model, and vice versa.

4. Findings

4.1. Heteroskedasticity test

Table 2 shows the probability of the independent variable indicates that the data for DW and UD display heteroscedasticity (Prob. < 5%), according to the results of the heteroscedasticity test (Ghozali, 2020). Consequently, the data for the variables DW (Female Directors), UD (Board Size), and LEV (Leverage) must be treated by converting the data into natural logarithm (LN).

Table 2. Heteroskedasticity test results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3229.441	365.7519	8.829595	0.0000
DW	-3682.841	530.5859	-6.941084	0.0000
DD	234.2633	296.1310	0.791080	0.4291
UD	-346.4743	43.05272	-8.047675	0.0000
LEV	-5.18E-09	6.96E-09	-0.744247	0.0045

The most recent heteroscedasticity test results are presented in Table 3. Because the probability values of the independent variables are higher than 0.05 (5%), the results of the heteroscedasticity test demonstrate that the data LN_DW, DD, LN_UD, and LN_LEV are free from heteroscedasticity problems. The multicollinearity test is the next stage.

Table 3. Heteroscedasticity test results after treatment

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	873.2662	57.89161	15.08451	0.0000
LN_DW	42.60191	32.99694	1.291087	0.1972
DD	-571.9893	43.18156	-13.24615	0.4291
LN_UD	79.90249	36.86715	2.167308	0.0306
LN_LEV	-34.95815	3.140031	-11.13306	0.0560

4.2. Multicollinearity test

It shows that the correlation between independent variables proves that there is no high correlation value above 0.9 (Ghozali, 2020), so there is no multicollinearity among the independent variables.

Table 4. Results of the multicollinearity test

	LN_DW	DD	LN_UD	LN_LEV
LN_DW	1			
DD	-0.266	1		
LN_UD	-0.704	-0.043	1	
LN_LEV	0.148	-0.451	-0.205	1

4.3. Autocorrelation test

Based on the results from the image above, the value of the Durbin Watson (DW) is between -2 and +2, so it can be said that the data is not affected by autocorrelation (Ghozali, 2020) because the DW statistic value is 1.333801. Therefore, the next step is to conduct a panel data model analysis.

Table 5. Results of the fixed effect model test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-329.3691	95.10672	-3.463153	0.0006
LN_X1	-75.79775	45.02515	-1.683453	0.0929
X2	-39.26649	51.09430	-0.768510	0.4426
LN_X3	134.58054	54.58654	2.484110	0.0133
LN_X4	-138.5795	24.88602	-5.568570	0.0000

Effects Specification

Cross-Section fixed (dummy variables)			
R-squared	0.533413	Mean dependent var	52.49121
Adjusted R-squared	0.421547	S.D. dependent var	210.7410
S.E. of regression	160.2814	Akaike info criterion	13.16461
Sum squared resid	12536784	Schwarz criterion	14.02272
Log likelihood	-3870.878	Hannan-Quinn criter.	13.49851
F-statistic	4.768316	Durbin-Watson stat	1.333801
Prob(F-statistic)	0.000000		

4.4. Panel Data Model Analysis Technique

Chow Test. The aim is to understand which model, fixed effect or common effect, is best applied in this research.

H0: Common Effect

Ha: Fixed Effect

If the chi-square probability shows a result < 5%, then H0 is not accepted. Thus, it can be concluded that the research uses the fixed effect model.

Table 6. Results of the redundant fixed effect-likelihood ratio model test

Effect Test	Probabilitas
Cross-section F	0,0000
Cross-section Chi-square	0,0000

Source: Output Eviews-12

Based on the results from the image above, the value of the Durbin Watson (DW) is between -2 and +2, so it can be said that the data is not affected by autocorrelation (Ghozali, 2018) because the DW statistic value is 1.333801. Therefore, the next step is to conduct a panel data model analysis. From the table above, it is concluded that the appropriate model is the fixed effect, because its probability value is $0.0000 < 5\%$. Next, the Hausman Test model is conducted to choose the best research model, whether the fixed effect model or the random effect model, with the criteria:

H0: Random Effect

Ha: Fixed Effect

If the chi-square probability shows a result $< 5\%$, then H0 is not accepted. Thus, it can be concluded that the research uses the fixed effect model.

Table 7. Hausman model test results

Test Summary	Chi-Sq.Statistic	Probabilitas
Cross-section random	50,1473	0,0000

Sumber: output Eviews 12

From the table above, it is concluded that the best research model is the fixed effect compared to the random effect, because the Cross-section random value has a Probability of $0.0000 < 5\%$. From these results, it is determined that the best model for this research is the fixed effect model.

Next, a panel data regression test was conducted using Eviews 12 software, yielding the following results:

Table 8. Model estimation results (fixed effect model)

Variable	Coef.	t-stats	Prob.
C	-329.3691	-3.46312	0.0006
LN_DW	-75.7977	-1.6834	0.0929
DD	-39.2664	51.0943	0.4426
LN_UD	135.5543	54.5685	0.0133
LN_LEV	-138.5795	24.8860	0.0000
R ²	0.5334	Durbin-Watson stat.	1.3338
Adjusted R ²	0.4215		
F-stats.	4.7683		
Prob. F-stats.	0.0000		

4.5. Significance test results

- 1) Based on Table 5, the calculated F-value is 4.7683 and the F-probability is 0.0000. In this study, the significance level used is 10%, so it can be concluded that the F-test is proven to be significant. Therefore, it can be concluded that the diversity of the board of directors in property and real estate companies can influence the financial distress condition of property and real estate companies listed on the Indonesia Stock Exchange.
- 2) The results of the t-test analysis in Table 8 show that: (1) the number of female board members has been proven to reduce the financial distress condition of Indonesian property and real estate companies, as evidenced by a probability value of 0.0929 (which is smaller than the 10% significance level); (2) Conversely, the duality of the board of directors held by the property and real estate board of directors has not been proven to reduce the financial distress condition of the company, with a probability value of 0.4426 (which is larger than the 10% significance level); (3) And the variable of board size owned by property and real estate companies has been proven not to reduce the financial distress condition of the company, as evidenced by a probability value of 0.0133 (which is smaller than the 10% significance level); (4) The control variable, namely

leverage, has been proven to reduce the financial distress condition of property and real estate companies.

- 3) Coefficient of determination (Adjusted R²). The Adjusted R² or model fit based on the statistical test results is 0.4215. This value indicates that the independent variables used in the research model contribute 42.15% to explaining the dependent variable. Meanwhile, 57.85% shows the presence of other factors outside the research model that also influence the explanation of the dependent variable.

5. Discussion

The research trial using multiple regression analysis of panel data aims to understand the impact of board diversity on property and real estate companies in reducing their financial distress conditions. The research model used is the fixed effect model with multiple regression of panel data as follows:

$$FD = -329,3691 -75,7977*LN_DW - 39,2664*DD + 135,5543*LN_UD -138,5795*LN_LEV$$

Based on the panel regression equation, the constant coefficient value obtained is -329.3691. The independent variable in the model that impacts reducing financial distress is defined as follows:

H1: Female board of directors negatively affects the financial distress of property and real estate companies.

Based on the evidence in Table 5, the number of female directors in property and real estate companies can reduce the condition of financial distress. The results support this, while the research by García and Herrero (2021); Guizani and Abdalkarim (2023), and Wang (2020) proves that the presence of women on the board of directors can reduce the financial distress condition of the company. They reported that the presence of women in the board of directors reduces the likelihood of bankruptcy (increased financial distress) of the company. The reason is that female directors have a risk-averse character compared to male directors (Faccio et al., 2016), which can influence the company's financial decisions associated with the emergence of financial distress. Although evidence regarding this is limited, additionally, research by Mittal and Lavina (2018) has shown that greater gender diversity means lower financial distress risk due to the lower risk preference of female directors

H2: The duality of directors has a negative impact on the financial distress of property and real estate companies.

This research has provided evidence to reject hypothesis 2, which states that duality of directors does not negatively affect the financial distress of property and real estate companies. The results support the findings of Garcia and Herrero (2021), Indrati and Handayani (2022), who studied European public companies and proved that CEO duality does not have a significant impact on the occurrence of financial distress. This is because the merger of the board of directors and the board of commissioners into one position cannot influence the internal control system of a property and real estate company, which cannot reduce the likelihood of financial distress in the company (Garcia and Herrero, 2021; Indrati and Handayani, 2022).

H3: The size of the board of directors has a negative impact on the financial distress of property and real estate companies.

Hypothesis 3 provides results that accept the hypothesis where the number/size of the board of directors has a negative impact on the financial distress of property and real estate companies. The results support the research of Garcia and Herrero (2021); Younas et al., (2020) and also support agency theory which states that a larger board size will make management monitoring more effective, potentially having broader experience and knowledge, and providing better advice for the company's progress, resulting in higher company performance and reducing the company's financial distress condition (Jensen and Meckling, 1976).

5.1. Control variable

This study provides evidence that the leverage variable, as a control variable, has been proven to reduce financial distress in public property and real estate companies. The results are consistent with the research by Kalash (2023), which found that financial leverage has a negative and significant impact on financial performance, and this effect is stronger in companies with a higher risk of financial distress. The same results were demonstrated by the study of Wangsih et al. (2021), which indicated that companies using too much debt in their financing would result in long-term liabilities (debt) in the future and increase the likelihood of the company experiencing financial distress.

6. Conclusion

This research concludes that the number of female directors in property and real estate companies can reduce the condition of financial distress. The same result is also demonstrated by the variable of the number/size of the board of directors, which has a negative impact on the financial distress of property and real estate companies. However, a different result is shown by the variable of board duality, where the result does not have a negative impact on the financial distress of property and real estate companies. The recommendation given by the subsequent research is to replace the measurement/proxy of board duality with the proportion of the board of directors holding two job desks compared to the total number of directors in property and real estate companies. Meanwhile, the recommendation for the company is to implement a policy of employing female directors at more than 50% to be more effective in making operational decisions and to avoid financial distress.

References

- Adi, S., Irawan, B., Suroso, I., & Sudaryanto, S. (2022). Loyalty-Based Sustainable Competitive Advantage and Intention to Choose Back at One Bank. *Quality - Access to Success*, 23(189), 306–315. <https://doi.org/10.47750/QAS/23.189.35>
- Basuki, Agus Tri & Prawoto, Nano. (2017). *Analisis Regresi Dalam Penelitian Ekonomi & Bisnis: Dilengkapi Aplikasi SPSS & EVIEWS*. Depok: PT Rajagrafindo Persada.
- Beltran, A. (2019). Female leadership and firm performance. *Prague Economic Papers*, 28 (3), 363–377. <https://doi.org/10.18267/j.pep.695>.
- Cardoso, G.F., Peixoto F.M. & Barboza F. (2019). Board structure and financial distress in Brazilian firms. *International Journal of Managerial Finance*, 15(5), 813-828. <https://doi.org/10.1108/IJMF-12-2017-0283>
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design; Qualitative, Quantitative & Mixed Method Approaches 5th Edition*. California: Sage Publications, Inc.
- Darrat, A. F., Gray, S., Park, J. C., & Wu, Y. (2014). Corporate governance and bankruptcy risk. *Journal of Accounting, Auditing and Finance*, 31(2), 1–40. <https://doi.org/10.1177/0148558X14560898>.
- Ellwood, E., & Garcia-Lacalle, J. (2015). The influence of presence and position of women on the boards of directors: The case of NHS foundation trusts. *Journal of Business Ethics*, 130, 69–84. <https://doi.org/10.1007/s10551-014-2206-8>.
- Faccio, M., Marchica, M.-T., & Mura, R. (2016). CEO gender, corporate risk-taking, and the efficiency of capital allocation. *Journal of Corporate Finance*, 39, 193–209. <https://doi.org/10.1016/j.jcorpfin.2016.02.008>
- Flabbi, L., Macis, M., Moro, A., & Schivardi, F. (2019). Do female executives make a difference? The impact of female leadership on gender gaps and firm performance. *The Economic Journal*, 129(622), 2390–2423. <https://doi.org/10.1093/ej/uez012>.
- García, C. José & Herrero, Begoña. (2021). Female directors, capital structure, and financial distress. *Journal of Business Research*, 136, 592-601. <https://doi.org/10.1016/j.jbusres.2021.07.061>.
- Ghozali, I. (2020). *Desain Penelitian Kuantitatif dan Kualitatif Untuk Akuntansi, Bisnis, dan Ilmu Sosial Lainnya*. Semarang: Yoga Pratama.
- Gujarati, Damodar, & Porter, Dawn (2015). *Dasar-dasar Ekonometrika Buku 2. Edisi 5*. Jakarta: Salemba Empat.

- 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>
- Hanim, A., Zainuri, A., & Sudaryanto, S. (2019). Rationality of gender equality of Indonesian women migrant worker. *International Journal of Scientific and Technology Research*, 8(9), 1238–1242. <https://www.ijstr.org/final-print/sep2019/Rationality-Of-Gender-Equality-Of-Indonesian-Women-Migrant-Worker.pdf>
- Indrati, Meni & Handayani, Rafika. (2022). The effect of good corporate governance on financial distress. *Fair Value: Jurnal Ilmiah Akuntansi dan Keuangan*, 4(10). <https://journal.ikopin.ac.id/index.php/fairvalue>
- Jensen & Meckling. (1976). Theory of The Firm: Management Behavior, Agency Cost and Ownership Structure. *Journal of Financial Economics*, 3(4), 305- 360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Kalash, Ismail. (2023). The financial leverage–financial performance relationship in the emerging market of Turkey: the role of financial distress risk and currency crisis. *EuroMed Journal of Business*, 18(1), 1-20. <https://doi.org/10.1108/EMJB-04-2021-0056>
- 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 & Management*, 9(1), 1-22. <https://doi.org/10.1080/23311975.2022.2142997>
- Khurshid, Muhammad Kashif, Sabir, Hazoor Muhammad, Tahir, Safdar Hussain & Abrar, Muhammad. (2019). Impact of Ownership Structure and Board Composition on Financial Distress of Pakistan Stock Exchange Listed Manufacturing Firms. *International Transaction. Journal of Engineering, Management, & Applied Sciences & Technologies*, 11(2): 1-14. <https://doi.org/10.14456/ITJEMAST.2020.26>
- Loukil, N., Yousfi, O. & Yerbanga, R. (2019). Does gender diversity on boards influence stock market liquidity? Empirical evidence from the French market. *Corporate Governance: The International Journal of Business in Society*, 19(4), 669-703. <https://doi.org/10.1108/CG-09-2018-0291>
- Mittal, S. and Lavina, (2018). Females’ representation in the boardroom and their impact on financial distress: An evidence from family businesses in India. *Indian Journal of Corporate Governance*, 11(1), 35–44. <https://doi.org/10.1177/0974686218763857>
- Peraturan Otoritas Jasa Keuangan Nomor 33 /POJK.04/2014 Tentang Direksi dan Dewan Komisaris Emiten atau Perusahaan Publik
- Sujono, Saleh, Salma, & Natalia, Ade Rahayu. (2023). *The Influence of Board Size, CEO Duality and Bank Specific on Financial Distress*. Indonesian Annual Conference Series, 2. Univeristas Halu Oleo.
- Sunarsip. (2024). *Prospek Properti 2024: Potensi Pertumbuhan dan Tantangannya*. <https://www.cnbcindonesia.com/opini/20240131115052-14-510443/prospek-properti-2024-potensi-pertumbuhan-dan-tantangannya>.
- UIAin, Q., Yuan, X., Javaid, H.M., Usman, M. & Haris, M. (2020). Female directors and agency costs: evidence from Chinese listed firms. *International Journal of Emerging Markets*, 16(8), 1604-1633. <https://doi.org/10.1108/IJOEM-10-2019-0818>
- Wang, Y.-H. (2020). Does board gender diversity bring better financial and governance performances? An empirical investigation of cases in Taiwan. *Sustainability*, 12(8), 3205. <https://doi.org/10.3390/su12083205>.
- Wangsih, Ingkak Chintya, Yanti, Devia Rahma, Yohana, Kalbuana, Nawang, & Cahyadi, Catra Indra. (2021). Influence of Financial Leverage, Firm Size, and Sales Growth on Financial Distress. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 5(4), 180-194. <https://jurnal.stie-aas.ac.id/index.php/IJEBAR>
- Younas, N., Uddin, S., Awan, T., & Khan, M. Y. (2021). Corporate governance and financial distress: Asian emerging market perspective. *Corporate Governance (Bingley)*, 21(4), 702–715. <https://doi.org/10.1108/CG-04-2020-0119>