

Financial Distress in Textile and Garment Companies: The Influence of Financial Performance, Firm Size, and Good Corporate Governance

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Keywords: *financial distress; financial performance; firm size; good corporate governance; textile and garment companies*

Abstract

The textile and garment industry plays an important role in Indonesia's economy but faces financial pressures that may increase the risk of financial distress. This study aims to examine the effects of financial performance, firm size, and good corporate governance on financial distress in textile and garment companies listed on the Indonesia Stock Exchange during 2020–2024. Using a quantitative explanatory design, this study analyzed secondary data from 13 companies, resulting in 65 firm-year observations. Financial distress was measured using the Altman Z-Score, while financial performance, firm size, and corporate governance were measured by ROA, natural logarithm of total assets, board of directors, and board of commissioners, respectively. Panel data regression was conducted using EViews 13. The results show that ROA, firm size, and board of directors have no significant effect on financial distress, while the board of commissioners has a positive and significant effect on the Altman Z-Score. Simultaneously, all independent variables significantly affect financial distress. These findings highlight the importance of effective board supervision in strengthening corporate financial resilience.

INTRODUCTION

The textile and garment industry has become one of the major contributors to Indonesia's manufacturing sector, playing a significant role in employment generation, export activities, and economic growth. Despite its strategic importance, the industry has experienced substantial challenges in recent years, including rising production costs, fluctuations in global demand, increasing competition from imported products, and economic uncertainty. These challenges have weakened the financial condition of many textile firms and increased their vulnerability to financial distress. Financial distress refers to a condition in which a company's financial position deteriorates, making it increasingly difficult to meet financial obligations and support operational activities required to sustain the business (Agustin & Hapsari, 2024).

The financial difficulties experienced by several textile companies illustrate the seriousness of this issue. One notable example is PT Sri Rejeki Isman Tbk (Sritex), which encountered severe financial problems and eventually entered bankruptcy proceedings. The closure of several textile factories in Indonesia has further highlighted the structural and financial pressures faced by the industry. From the perspective of Signalling Theory, these financial conditions can serve as

negative signals to external stakeholders, particularly investors and creditors, regarding the company's ability to maintain its financial sustainability. Signalling Theory explains that management communicates information about the company's internal condition and future prospects to external parties because management possesses more information than investors and other stakeholders (Ross, 1977). Therefore, changes in financial performance and corporate conditions can provide signals that are interpreted by external parties in assessing the company's financial prospects and potential financial distress.

Previous studies have identified financial performance as one of the primary determinants of financial distress. Financial performance is commonly assessed through Return on Assets (ROA), which reflects the effectiveness of a company in utilizing its total assets to generate profits. A higher ROA indicates better managerial efficiency in converting resources into earnings and maintaining financial sustainability (Dini Wahjoe Hapsari et al., 2025). According to Signalling Theory, ROA can function as a positive or negative signal regarding a company's financial condition. A high ROA indicates that management is able to utilize company resources efficiently to generate profits, thereby providing a positive signal regarding the company's ability to maintain its financial condition. Conversely, a declining or low ROA may provide a negative signal concerning the company's profitability and ability to sustain its operations, which may indicate a greater potential for financial distress.

In addition to financial performance, firm size has received considerable attention in financial distress research. Firm size generally reflects the scale of a company's operations and resources, often measured through total assets. Larger firms are typically assumed to have broader access to funding sources, stronger market positions, and greater flexibility in dealing with economic uncertainty (Muslimin & Bahri, 2022). In the context of Signalling Theory, firm size can also provide information about the stability and capacity of a company to survive financial pressures. A larger asset base may signal stronger resources and greater capacity to manage risks and fulfill financial obligations. Conversely, relatively smaller firms may provide a weaker signal regarding their capacity to withstand economic shocks, potentially increasing concerns about financial distress. Thus, firm size can be interpreted by external stakeholders as an indicator of the company's financial stability and resilience.

Another important factor associated with financial distress is Good Corporate Governance. Good Corporate Governance (GCG) represents a system of structures, processes, and control mechanisms designed to ensure transparency, accountability, reliability of reporting, and effective supervision of management activities. Governance mechanisms such as board structures, ownership configurations, audit committees, and disclosure practices contribute to

stronger monitoring and improved organizational performance (Riyadh et al., 2026; Saraswati et al., 2024). From the perspective of Signalling Theory, effective corporate governance can provide a positive signal to external stakeholders because transparent reporting, accountability, and effective managerial supervision indicate that the company is committed to maintaining sound management practices. Strong governance may therefore reduce information asymmetry between management and external stakeholders and increase confidence in the company's ability to manage financial risks. Conversely, weak governance may generate negative signals regarding managerial effectiveness and the company's ability to prevent financial deterioration.

The board of commissioners and board of directors represent important corporate governance mechanisms that have different roles within the company. The board of commissioners is primarily responsible for supervising management, while the board of directors is responsible for managing the company's operations and making strategic decisions. Based on Signalling Theory, the effectiveness of these governance mechanisms can influence the signals received by external stakeholders. An effective board of commissioners may provide a positive signal through stronger monitoring and oversight of management, while an effective board of directors may signal the company's ability to formulate and implement appropriate strategies to maintain operational and financial performance. Consequently, the effectiveness of these governance mechanisms may influence how stakeholders assess the company's financial condition and potential for financial distress.

Despite the growing body of literature, several research gaps remain. First, previous studies have reported inconsistent findings regarding the effects of financial performance, firm size, and Good Corporate Governance on financial distress. These inconsistencies indicate that the signals conveyed by financial and governance indicators may vary depending on the characteristics and conditions of the companies examined. Signalling Theory provides a theoretical basis for understanding these differences because the same financial or governance information may reflect different levels of financial stability depending on the company's circumstances. Second, limited studies have specifically focused on textile and garment companies despite the considerable challenges faced by this industry. Third, previous research has frequently treated Good Corporate Governance as a single construct, providing limited understanding of the distinct roles of the board of commissioners and the board of directors.

Based on these gaps, this study seeks to answer whether financial performance, firm size, the board of commissioners, and the board of directors significantly influence financial distress among textile and garment companies listed on the Indonesia Stock Exchange during 2020–2024. Accordingly, the objective of this study is to examine the effects of these variables on financial

distress. The application of Signalling Theory in this study provides a theoretical framework for explaining how financial performance, firm size, and corporate governance mechanisms convey information regarding the company's financial condition to external stakeholders. Positive signals reflected in profitability, organizational scale, and effective governance are expected to indicate stronger financial stability, whereas negative signals may indicate a higher risk of financial distress. The novelty of this study lies in its focus on the Indonesian textile and garment industry, the use of recent data covering the 2020–2024 period, and the separate examination of the board of commissioners and the board of directors as distinct governance mechanisms.

METHODS

This study employed a quantitative research approach with an explanatory research design to examine the influence of financial performance, firm size, and good corporate governance on financial distress in textile and garment companies listed on the Indonesia Stock Exchange (IDX). Quantitative research was selected because it enables the empirical examination of relationships among variables using numerical data and statistical analysis. Secondary data were utilized in this study, obtained from annual reports and financial statements published by companies and available through the official IDX website.

The population consisted of all textile and garment subsector companies listed on the Indonesia Stock Exchange during the 2020–2024 period. The sample was selected using a purposive sampling technique based on the following criteria: (1) companies listed continuously on the IDX during the observation period, and (2) companies that consistently published complete annual financial statements from 2020 to 2024. Based on these criteria, 13 companies were selected as the research sample, resulting in 65 firm-year observations.

Financial distress served as the dependent variable and was measured using the Altman Z-Score model. The independent variables consisted of financial performance measured by Return on Assets (ROA), firm size measured by the natural logarithm of total assets, and good corporate governance measured through the board of directors and board of commissioners. Data collection was conducted using documentation and archival research techniques by downloading annual reports and financial statements from the IDX website and the official websites of the respective companies.

The data were analyzed using panel data regression with the assistance of EViews 13 software. The analysis began with descriptive statistics to provide an overview of the characteristics of the research variables. Furthermore, classical assumption tests, including normality, multicollinearity, heteroscedasticity, and autocorrelation tests, were conducted to ensure the validity of the regression model. To determine the most appropriate panel data estimation model,

the Chow test, Hausman test, and Lagrange Multiplier (LM) test were performed. The selected model was subsequently used to examine the effect of financial performance, firm size, and good corporate governance on financial distress in textile and garment companies listed on the Indonesia Stock Exchange during the 2020–2024 period.

Variable Operational Definition

This study employs one dependent variable, namely Financial Distress (FD), and three independent variables consisting of Financial Performance (ROA), Firm Size (SIZE), and Good Corporate Governance (GCG). The operational definitions of each variable are described as follows:

Dependent Variable

Financial Distress (FD)

The dependent variable used in this study is Financial Distress (FD). Financial distress refers to a condition in which a company experiences financial difficulties that may threaten its ability to continue operating and fulfill its obligations. Financial distress is commonly regarded as an early warning signal of potential bankruptcy. According to (Sitorus et al., 2022) financial distress occurs when a company faces increasing financial pressure that weakens its operational capability. In this study, financial distress is measured using the Altman Z-Score model. The formula is as follows:

$$Z = 6.56X_1 + 3.26X_2 + 6.72X_3 + 1.05X_4$$

where X_1 represents Working Capital to Total Assets, X_2 represents Retained Earnings to Total Assets, X_3 represents Earnings Before Interest and Taxes to Total Assets, and X_4 represents Book Value of Equity to Total Liabilities. A lower Z-Score indicates a higher probability of financial distress, while a higher score indicates better financial health.

Independent Variables

Financial Performance (ROA)

Financial performance is measured using Return on Assets (ROA). ROA reflects a company's ability to generate profits from its total assets and is widely used as an indicator of profitability. According to (Krisnawati, 2020) financial performance represents the effectiveness of a company in managing its financial resources to generate earnings. The formula used to calculate ROA is as follows:

$$ROA = \frac{\text{Net Income After Tax}}{\text{Total Assets}} \times 100\%$$

ROA represents Return on Assets, Net Income After Tax refers to the company's net profit after tax expenses, and Total Assets represent all economic resources owned by the company. A higher ROA indicates better profitability and more efficient asset utilization.

Firm Size (SIZE)

Firm Size reflects the scale of a company's operations and resources. Larger companies generally have greater access to financing, stronger market positions, and better capabilities to withstand financial difficulties. According to (Nuridah et al., 2023) firm size is commonly measured by the total assets owned by a company. In this study, firm size is measured using the natural logarithm of total assets, as follows:

$$SIZE = \ln (Total Assets)$$

where SIZE represents Firm Size and Total Assets represent the total resources controlled by the company during the reporting period. The natural logarithm is used to reduce data variability and improve normality.

Good Corporate Governance (GCG)

Good Corporate Governance (GCG) refers to the system of rules, practices, and processes used to direct and control a company. Effective governance mechanisms help ensure accountability, transparency, and proper oversight of management decisions. According to (Alkhairani et al., 2020), corporate governance is influenced by the roles and responsibilities of the board of directors and the board of commissioners. In this study, GCG is measured using the size of the Board of Directors and the Board of Commissioners, as follows:

$$Board\ of\ Directors = Total\ Number\ of\ Directors$$

$$Board\ of\ Commissioners = Total\ Number\ of\ Commissioners$$

The Board of Directors represents the individuals responsible for managing the company's operations, while the Board of Commissioners performs supervisory and monitoring functions. A larger and more effective governance structure is expected to strengthen oversight and reduce the likelihood of financial distress.

Hypothesis Testing

Hypothesis testing in this study was conducted using panel data regression analysis with the assistance of EViews 13 software. The analysis process began with selecting the most appropriate panel data regression model among the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). Model selection was carried out through the

Chow Test, Hausman Test, and Lagrange Multiplier (LM) Test to identify the model that best fit the data characteristics.

After determining the most suitable model, descriptive statistical analysis was performed to provide an overview of the characteristics of the research variables. Subsequently, panel data regression analysis was applied to examine the relationship between Financial Performance (ROA), Firm Size (SIZE), and Good Corporate Governance (GCG) on Financial Distress (FD).

The hypothesis testing process involved the t-test to evaluate the partial effect of each independent variable on Financial Distress and the F-test to assess the simultaneous effect of all independent variables. In addition, the coefficient of determination (Adjusted R²) was used to measure the ability of the regression model to explain variations in Financial Distress. The higher the Adjusted R² value, the greater the explanatory power of the model.

The panel data regression model used in this study is formulated as follows:

$$FD_{it} = \alpha + \beta_1 ROA_{it} + \beta_2 SIZE_{it} + \beta_3 GCG_{it} + \varepsilon_{it}$$

where:

- FD_{it} = Financial Distress of company i in period t
- α = Constant term
- $\beta_1, \beta_2, \beta_3$ = Regression coefficients
- ROA_{it} = Financial Performance measured by Return on Assets
- $SIZE_{it}$ = Firm Size measured by the natural logarithm of total assets
- GCG_{it} = Good Corporate Governance measured by the Board of Directors and Board of Commissioners
- ε_{it} = Error term

The results of the regression analysis were then used to determine whether Financial Performance, Firm Size, and Good Corporate Governance significantly influence Financial Distress in textile and garment companies listed on the Indonesia Stock Exchange during the 2020–2024 period.

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Descriptive statistical analysis was conducted to provide an overview of the characteristics and distribution of the research variables. This analysis summarizes the data through the mean, median, maximum value, minimum value, and standard deviation. Descriptive statistics are useful for understanding the profile of the variables before conducting further analysis using panel data regression. In this study, descriptive statistics were used to describe Financial Distress,

Profitability, Firm Size, Board of Directors, and Board of Commissioners in textile and garment companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. The results of the descriptive statistical analysis are presented in Table 1.

Table 1.
Descriptive Statistical Test Results

Statistic	Financial Distress	Profitability (ROA)	Firm Size	Board of Directors	Board of Commissioners
Mean	2.6815	-3.5019	28.5077	3.5846	3.4000
Median	2.8584	-3.4359	29.0000	4.0000	3.0000
Maximum	6.7336	0.5710	30.0000	6.0000	6.0000
Minimum	-1.0913	-6.5885	27.0000	2.0000	2.0000
Std. Dev.	1.5689	1.3500	0.9207	1.1844	1.0724
Observations	65	65	65	65	65

Based on Table 1, the average Financial Distress score of the sample companies during the observation period was 2.6815, with values ranging from -1.0913 to 6.7336. The standard deviation of 1.5689 indicates a relatively high variation in the financial condition of the sampled companies. This suggests that while some companies experienced financial difficulties, others maintained relatively healthy financial positions throughout the study period. Profitability, measured by Return on Assets (ROA), had an average value of -3.5019, with a minimum value of -6.5885 and a maximum value of 0.5710. The negative average indicates that many of the sample companies experienced low profitability or losses during the observation period. The standard deviation of 1.3500 reflects moderate variation in profitability among the companies. Firm Size recorded an average value of 28.5077, with values ranging from 27.0000 to 30.0000. The standard deviation of 0.9207 indicates that the size of the companies in the sample was relatively homogeneous. This finding suggests that the textile and garment companies included in the study generally operated on a similar scale in terms of total assets. The Board of Directors variable had an average of 3.5846 members, with the number of directors ranging from 2 to 6 members. The standard deviation of 1.1844 indicates moderate variation in board size across companies. Meanwhile, the Board of Commissioners variable showed an average of 3.4000 members, with a minimum of 2 members and a maximum of 6 members. The standard deviation of 1.0724 suggests that the composition of the board of commissioners was relatively similar among the sampled companies. Overall, the descriptive statistics indicate that the sampled textile and garment companies exhibited considerable variation in financial distress and profitability, while firm size and corporate governance characteristics, represented by the board of directors

and board of commissioners, were relatively more homogeneous during the 2020–2024 period.

Classical Assumption Tests

Classical assumption tests were conducted to ensure that the regression model met the statistical requirements before hypothesis testing. The tests included normality, multicollinearity, heteroscedasticity, and autocorrelation tests. The results are presented in Table 2.

Table 2.
Classical Assumption Test Results

Test	Indicator	Result	Criterion	Conclusion
Normality	Jarque-Bera Probability	0.813352	Prob. > 0.05	Normal Distribution
Multicollinearity	Highest Centered VIF	2.036161	VIF < 10	No Multicollinearity
Heteroscedasticity	Obs*R-Squared Probability	0.1330	Prob. > 0.05	No Heteroscedasticity
Autocorrelation	Durbin-Watson Statistic	1.212991	-2 < DW < 2	No Autocorrelation

Based on Table 2, all classical assumption tests indicate that the regression model satisfies the required statistical assumptions. The normality test shows a probability value of 0.813352, which is greater than 0.05, indicating that the residuals are normally distributed. The multicollinearity test reveals that the highest Centered VIF value is 2.036161, well below the threshold value of 10, suggesting the absence of multicollinearity among the independent variables. Furthermore, the heteroscedasticity test produces an Obs*R-squared probability value of 0.1330, exceeding the 0.05 significance level, indicating homoscedastic residuals. The Durbin-Watson statistic of 1.212991 falls within the acceptable range of -2 to +2, demonstrating that the model does not suffer from autocorrelation. Therefore, the panel regression model fulfills all classical assumption requirements and is appropriate for further analysis.

Panel Data Estimation Results

To determine the most appropriate panel data regression model, three model selection tests were conducted, namely the Chow Test, Hausman Test, and Lagrange Multiplier (LM) Test. These tests were used to identify whether the Common Effect Model (CEM), Fixed Effect Model (FEM), or Random Effect Model (REM) was the most suitable model for analyzing the relationship between profitability, firm size, good corporate governance, and financial distress. The results of the panel data model selection tests are presented in Table 3.

Table 3.
Panel Data Model Selection Results

Test	Probability Value	Criterion	Selected Model
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Chow Test	0.0000	Prob. < 0.05	Fixed Effect Model
Hausman Test	0.6332	Prob. > 0.05	Random Effect Model
Lagrange Multiplier Test	0.0000	Prob. < 0.05	Random Effect Model

Based on Table 3, the Chow Test produced a probability value of 0.0000, which is lower than the significance level of 0.05. This result indicates that the Fixed Effect Model (FEM) is more appropriate than the Common Effect Model (CEM). Subsequently, the Hausman Test generated a probability value of 0.6332, which exceeds 0.05, indicating that the Random Effect Model (REM) is preferred over the Fixed Effect Model (FEM). Furthermore, the Lagrange Multiplier Test yielded a probability value of 0.0000, confirming that the Random Effect Model (REM) is superior to the Common Effect Model (CEM). Therefore, based on the results of the Chow Test, Hausman Test, and Lagrange Multiplier Test, the Random Effect Model (REM) was selected as the most appropriate estimation model for this study. The REM was subsequently used to analyze the effect of profitability, firm size, board of directors, and board of commissioners on financial distress in textile and garment companies listed on the Indonesia Stock Exchange during the 2020–2024 period.

Panel Data Regression Analysis

After selecting the Random Effect Model (REM) as the most appropriate model, panel data regression analysis was conducted to examine the effect of profitability, firm size, board of directors, and board of commissioners on financial distress. The regression results are presented in Table 4.

Table 4.
Panel Data Regression Results

Dependent Variable: Y01				
Method: Panel EGLS (Cross-section random effects)				
Date: 06/21/26 Time: 20:41				
Sample: 2020 2024				
Periods included: 5				
Cross-sections included: 13				
Total panel (balanced) observations: 65				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.061169	10.81638	-0.560369	0.5773
LN _{X1}	0.040616	0.077342	0.525141	0.6014
X ₂	0.256975	0.383223	0.670563	0.5051
X ₃	-0.027107	0.249316	-0.108725	0.9138
X ₄	0.487154	0.175995	2.767997	0.0075
Effects Specification				
			S.D.	Rho
Cross-section random			1.547271	0.8496
Idiosyncratic random			0.650958	0.1504

Weighted Statistics			
R-squared	0.151882	Mean dependent var	0.495826
Adjusted R-squared	0.095341	S.D. dependent var	0.676163
S.E. of regression	0.643123	Sum squared resid	24.81643
F-statistic	2.686222	Durbin-Watson stat	1.212991
Prob(F-statistic)	0.039672		
Unweighted Statistics			
R-squared	0.057883	Mean dependent var	2.681522
Sum squared resid	148.4153	Durbin-Watson stat	0.202824

Based on Table 4, the estimated panel regression equation can be formulated as follows:

$$FD_{it} = -6.061 + 0.040ROA_{it} + 0.256SIZE_{it} - 0.027BOD_{it} + 0.487BOC_{it} + \varepsilon_{it}$$

where *FD* represents Financial Distress, *ROA* represents Profitability, *SIZE* represents Firm Size, *BOD* represents the Board of Directors, and *BOC* represents the Board of Commissioners. The regression results indicate that profitability has a positive coefficient of 0.040616 but is not statistically significant ($p = 0.6014$). Similarly, firm size has a positive coefficient of 0.256975 and is not significant ($p = 0.5051$). The board of directors has a negative coefficient of -0.027107, indicating an inverse relationship with financial distress; however, the effect is not statistically significant ($p = 0.9138$). In contrast, the board of commissioners has a positive coefficient of 0.487154 and a probability value of 0.0075, indicating a positive and statistically significant effect on financial distress at the 5% significance level. Furthermore, the model produces an F-statistic probability of 0.039672, which is lower than 0.05, indicating that all independent variables jointly have a significant effect on financial distress. The Adjusted R-squared value of 0.095341 suggests that approximately 9.53% of the variation in financial distress can be explained by profitability, firm size, board of directors, and board of commissioners, while the remaining 90.47% is explained by other factors outside the model.

Simultaneous Test (F-Test)

Referring to Table 4, the F-statistic value of 2.686222 is associated with a probability value of 0.039672. Since this probability is lower than the 0.05 significance level, the null hypothesis is rejected. The finding suggests that profitability, firm size, board of directors, and board of commissioners collectively exert a significant influence on financial distress. Accordingly, the regression model is considered appropriate for examining the determinants of financial distress in textile and garment companies listed on the Indonesia Stock Exchange over the 2020–2024 observation period.

Coefficient of Determination (Adjusted R²)

Based on Table 4, the Adjusted R-squared value is 0.095341. This result indicates that approximately 9.53% of the variation in financial distress can be explained by profitability, firm size, board of directors, and board of commissioners. Meanwhile, the remaining 90.47% is explained by other factors outside the scope of this study. The relatively low adjusted R^2 suggests that financial distress may also be influenced by other factors not included in this study, such as leverage, liquidity, sales growth, ownership structure, and macroeconomic conditions.

Partial Test (t-Test)

Based on Table 4, the partial test results indicate varying effects of the independent variables on financial distress. First, profitability has a coefficient value of 0.040616 with a probability value of 0.6014, which is greater than the significance level of 0.05. This result indicates that profitability does not have a significant effect on financial distress; therefore, the first hypothesis is rejected. Second, firm size shows a coefficient value of 0.256975 and a probability value of 0.5051. Since the probability value exceeds 0.05, firm size is not found to significantly affect financial distress, leading to the rejection of the second hypothesis. Third, the board of directors variable has a coefficient value of -0.027107 with a probability value of 0.9138. The probability value is substantially higher than 0.05, indicating that the board of directors does not significantly influence financial distress. Consequently, the third hypothesis is rejected. Finally, the board of commissioners has a coefficient value of 0.487154 and a probability value of 0.0075, which is below the significance level of 0.05. This finding demonstrates that the board of commissioners has a positive and significant effect on financial distress. Therefore, the fourth hypothesis is accepted. Overall, the results suggest that among the independent variables examined in this study, only the board of commissioners significantly affects financial distress, whereas profitability, firm size, and the board of directors do not have statistically significant effects on financial distress in textile and garment companies listed on the Indonesia Stock Exchange during the 2020–2024 period.

DISCUSSION

The Effect of Profitability on Financial Distress

The results of this study indicate that profitability, measured by Return on Assets (ROA), does not have a significant effect on financial distress in textile and garment companies listed on the Indonesia Stock Exchange during the 2020–2024 period. This finding is evidenced by the probability value of 0.6014, which exceeds the significance level of 0.05. Therefore, the hypothesis proposing that profitability affects financial distress is not supported.

According to Signalling Theory, financial information disclosed by a company serves as a signal to external stakeholders regarding its current condition and future prospects (Ross, 1977). Profitability is commonly regarded as a positive signal because it reflects management's ability to utilize company assets efficiently to generate earnings. A higher ROA generally indicates better financial performance and a lower likelihood of experiencing financial difficulties. Conversely, a declining ROA may signal weakening operational performance and increase concerns regarding the company's financial stability.

However, the results indicate that profitability is not a significant determinant of Altman Z-Score among textile and garment companies during the observation period. Although profitability reflects the firm's ability to generate earnings from its assets, the findings suggest that variations in profitability are insufficient to explain differences in the financial health of the sampled companies. This condition may occur because financial distress, as measured by the Altman Z-Score, is influenced by multiple financial dimensions, including liquidity, leverage, retained earnings, and asset turnover, rather than profitability alone. One possible explanation is that the textile and garment industry experienced considerable challenges during the 2020–2024 period, including rising raw material prices, dependence on imported materials, increasing labor costs, and intense competition from imported products. These conditions may have placed financial pressure on companies regardless of their profitability levels. As a result, firms that were able to generate profits did not necessarily achieve higher Altman Z-Score values if they simultaneously faced liquidity constraints, high debt burdens, or declining sales performance. Therefore, profitability alone may not have been sufficient to explain variations in the financial condition of textile and garment companies during the study period.

Furthermore, financial distress is a multidimensional condition influenced by various aspects of corporate financial management, such as liquidity, leverage, operational efficiency, and cash flow adequacy. Although profitability reflects the company's capacity to generate earnings, it does not necessarily indicate whether the company possesses sufficient liquidity or financial flexibility to meet its short-term and long-term obligations. As a result, profitable companies may still encounter financial distress if they face cash flow constraints or excessive debt burdens. The findings are not consistent with the expectation derived from Signalling Theory, which suggests that higher profitability should signal stronger financial conditions and reduce the likelihood of financial distress (Ross, 1977). Furthermore, the results differ from those of (Ermar & Suhono, 2021) and (Sitorus et al., 2022), who found a significant negative relationship between profitability and financial distress. Nevertheless, the present study indicates that profitability is not a significant factor affecting the Altman Z-Score of textile and garment companies listed on the Indonesia

Stock Exchange during the 2020–2024 period. Therefore, other financial and governance-related factors may play a more substantial role in explaining the financial condition of these firms.

The Effect of Firm Size on Financial Distress

The results of this study indicate that firm size does not have a significant effect on financial distress in textile and garment companies listed on the Indonesia Stock Exchange during the 2020–2024 period. This finding is evidenced by the probability value of 0.5051, which exceeds the significance level of 0.05. Therefore, the hypothesis proposing that firm size affects financial distress is not supported.

According to Signalling Theory, firm size represents an important signal regarding a company's strength, stability, and long-term sustainability. Larger firms are generally perceived as having greater resources, stronger market positions, broader access to external financing, and better capabilities to withstand economic uncertainty (Ross et al., 1977). Consequently, firm size is often viewed as a positive signal that reduces the likelihood of financial distress. In this study, firm size is measured using the natural logarithm of total assets, which reflects the company's economic capacity and operational scale.

However, the empirical findings reveal that firm size is not a significant determinant of financial distress among textile and garment companies. This result suggests that having a large asset base does not necessarily guarantee financial stability or protect a company from financial difficulties. The textile and garment industry faced various challenges during the 2020–2024 period, including increasing production costs, fluctuations in raw material prices, intense global competition, and changing consumer demand. These external pressures may affect both large and small firms regardless of their asset size. Furthermore, textile and garment companies often require substantial investments in machinery, inventories, and working capital to maintain their operations. Consequently, a larger asset base does not always translate into stronger financial health as reflected by the Altman Z-Score. In addition, declining purchasing power and shifts in consumer preferences may have affected sales performance across the industry, limiting the advantages typically associated with larger firms. Therefore, both large and small companies were exposed to similar operational and financial risks during the study period.

Furthermore, firm size, as measured by total assets, does not necessarily reflect the overall financial health of a company as represented by the Altman Z-Score. The Altman Z-Score incorporates several financial dimensions, including working capital, retained earnings,

profitability, and solvency. Therefore, companies with larger asset bases may not always achieve higher Z-Score values if they are unable to utilize their assets efficiently or maintain sound financial performance. Likewise, smaller firms may still demonstrate favorable financial conditions when supported by effective asset management and strong operational performance.

The findings of this study do not support the expectation derived from Signalling Theory that larger firms are less likely to experience financial distress. In addition, the results are inconsistent with previous studies conducted by (Alfiana Alfiana et al., 2025; Muslimin & Bahri, 2022), which found that firm size negatively affects financial distress. Nevertheless, the present findings indicate that firm size is not a significant determinant of the Altman Z-Score of textile and garment companies during the observation period. This suggests that the financial condition of firms is influenced not only by the scale of their assets but also by other financial and governance-related factors that may have a more substantial impact on their financial stability.

The Effect of the Board of Directors on Financial Distress

The results of this study indicate that the board of directors does not have a significant effect on financial distress in textile and garment companies listed on the Indonesia Stock Exchange during the 2020–2024 period. This finding is evidenced by the probability value of 0.9138, which is higher than the significance level of 0.05. Therefore, the hypothesis proposing that the board of directors affects financial distress is rejected.

According to Signalling Theory, the existence of an effective board of directors serves as a positive signal regarding a company's ability to manage its operations and make strategic decisions. The board of directors is responsible for directing corporate activities, formulating business strategies, and ensuring that company objectives are achieved efficiently. A larger board of directors is generally expected to improve the quality of supervision and decision-making, thereby reducing the likelihood of financial distress (Ross, 1977). Furthermore, the board of directors constitutes an important mechanism of good corporate governance that can enhance organizational performance and strengthen a company's ability to respond to financial challenges (Saraswati et al., 2024).

However, the findings of this study suggest that the size of the board of directors does not significantly influence the Altman Z-Score of textile and garment companies. This result indicates that the number of directors alone may not be sufficient to improve a company's overall financial condition. The effectiveness of the board is likely to depend more on factors such as managerial competence, experience, expertise, coordination, and the quality of strategic decision-making rather than merely the number of board members. Consequently, companies with larger boards of

directors do not necessarily exhibit better financial conditions as reflected by their Altman Z-Score values.

The results of this study are inconsistent with the theoretical expectation that a larger board of directors can strengthen governance mechanisms and reduce financial difficulties. Moreover, the findings contradict those of (Febriyanti & Khalifaturafi'ah, 2023), who found that a larger board of directors significantly reduces the likelihood of financial distress through enhanced monitoring and more effective strategic decision-making. One possible explanation is that the textile and garment industry during the 2020–2024 period faced substantial external pressures, including fluctuations in raw material prices, increasing production costs, and intense market competition. Under such circumstances, the financial condition of companies, as measured by the Altman Z-Score, may be influenced more by external economic factors and operational performance than by the size of the board of directors itself. This suggests that governance structures alone may not be sufficient to explain variations in corporate financial health within the textile and garment industry.

Therefore, this study suggests that the board of directors is not a determining factor in mitigating financial Therefore, this study suggests that the board of directors is not a significant determinant of the Altman Z-Score of textile and garment companies during the observation period. While the board of directors remains an important component of good corporate governance, its size does not appear to significantly influence the financial condition of firms. Instead, the quality and effectiveness of governance practices may play a more important role than the mere number of directors in shaping corporate financial performance and stability.among textile and garment companies. Instead, the quality and effectiveness of governance practices may play a more important role than the mere size of the board in influencing a company's financial condition.

The Effect of the Board of Commissioners on Financial Distress

The results of this study indicate that the board of commissioners has a positive and significant effect on the Altman Z-Score of textile and garment companies listed on the Indonesia Stock Exchange during the 2020–2024 period. This finding is supported by the probability value of 0.0075, which is lower than the significance level of 0.05. Therefore, the hypothesis proposing that the board of commissioners affects financial distress is accepted. The positive coefficient indicates that an increase in the number of commissioners tends to improve the company's financial condition as reflected by a higher Altman Z-Score, thereby reducing the likelihood of financial distress.

According to Signalling Theory, the implementation of good corporate governance serves as a signal of transparency, accountability, and effective oversight to investors and other stakeholders (Ross et al., 1977). The board of commissioners is one of the key governance mechanisms responsible for monitoring managerial activities and ensuring that company policies are implemented in accordance with shareholders' interests. An effective board of commissioners is expected to reduce agency conflicts and information asymmetry, thereby supporting better corporate performance and lowering the risk of financial distress (Febriyanti & Khalifaturafi'ah, 2023). Furthermore, good corporate governance contributes to strengthening internal control systems and improving the quality of strategic decision-making within the organization (Saraswati et al., 2024).

The findings suggest that a larger board of commissioners enhances the effectiveness of supervisory functions within the company. A greater number of commissioners may provide broader expertise, more comprehensive monitoring, and stronger oversight of management decisions. These advantages can help companies identify financial risks at an earlier stage, improve corporate governance practices, and maintain financial stability. As a result, companies with larger boards of commissioners tend to exhibit higher Altman Z-Score values, indicating healthier financial conditions.

The results of this study are consistent with Signalling Theory, which argues that effective governance mechanisms provide positive signals regarding the company's ability to manage risks and maintain financial sustainability (Ross et al., 1977). The findings also support previous studies conducted by (Febriyanti & Khalifaturafi'ah, 2023; Manan & Hasnawati, 2022; Suharmadi & Suripto, 2024), which concluded that stronger corporate governance mechanisms contribute to reducing the likelihood of financial distress. In the context of textile and garment companies, effective supervision by the board of commissioners appears to play an important role in maintaining financial health and improving the company's ability to withstand business challenges during the observation period.

Therefore, this study implies that the board of commissioners is an important governance mechanism that contributes to improving the financial condition of textile and garment companies. Rather than merely increasing the number of commissioners, companies should also focus on enhancing the competence, independence, and effectiveness of commissioners in carrying out their supervisory responsibilities. Such improvements can strengthen governance quality and support long-term financial sustainability.

CONCLUSION

This study examined the effect of financial performance, firm size, and good corporate governance on financial distress in textile and garment companies listed on the Indonesia Stock Exchange during the 2020–2024 period. Financial performance was measured using Return on Assets (ROA), firm size was proxied by the natural logarithm of total assets, while good corporate governance was represented by the board of directors and board of commissioners. Financial distress was measured using the Altman Z-Score model.

The results indicate that profitability, firm size, and the board of directors do not have a significant effect on the Altman Z-Score. These findings suggest that variations in profitability, company size, and the number of directors are not sufficient to explain the financial condition of textile and garment companies during the observation period. In contrast, the board of commissioners has a positive and significant effect on the Altman Z-Score, indicating that a larger board of commissioners contributes to better financial conditions and a lower likelihood of financial distress. Collectively, the independent variables significantly affect financial distress, suggesting that the regression model is appropriate for explaining the financial condition of the sampled companies.

This study contributes to the existing literature by providing empirical evidence that governance mechanisms, particularly the board of commissioners, play a more important role in explaining corporate financial conditions than profitability and firm size in the Indonesian textile and garment industry. The findings also support Signalling Theory, which suggests that effective governance structures serve as positive signals regarding a company's ability to maintain financial stability and sustainability.

However, this study has several limitations. The research is limited to textile and garment companies listed on the Indonesia Stock Exchange and covers only the 2020–2024 period, which may restrict the generalizability of the findings. In addition, the study only includes profitability, firm size, the board of directors, and the board of commissioners as explanatory variables, whereas financial distress may also be influenced by other financial, governance, and macroeconomic factors.

Therefore, future studies are recommended to expand the sample across different industrial sectors, extend the observation period, and incorporate additional variables such as leverage, liquidity, institutional ownership, managerial ownership, and macroeconomic indicators. Furthermore, future researchers may consider using alternative financial distress measurement models to provide a broader understanding of the determinants of corporate financial health. From a practical perspective, companies should strengthen the effectiveness of their board of commissioners to enhance supervisory functions and support long-term financial sustainability.

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