

Key Financial Determinants in Reducing Financial Distress in Indonesia's Manufacturing Industry

*Determinants of
Manufacturer
Stability*

¹Harlen Silalahi, ²Ganda Tua Sitompul, ³Dumariani Silalahi, ⁴Zulkheiri Surya Putra Siregar, ⁵Megawati Nababan

Department of Accounting, Universitas Mandiri Bina Prestasi

¹⁾ harlen.silalahi10@gmail.com, ²⁾ sitompulgandatua@gmail.com,

³⁾ silalahidumariani@gmail.com, ⁴⁾ zulkheiris@gmail.com, ⁵⁾ megawatinbbn18@gmail.com

361

Submitted:
FEBRUARY 2025

Accepted:
MAY 2025

ABSTRACT

This study is motivated by the limited literature discussing financial factors that can reduce the risk of financial distress in manufacturing companies in Indonesia. To address this gap, the research aims to identify key financial variables that significantly influence the reduction of financial distress. The study examines 27 manufacturing companies listed on the Indonesia Stock Exchange over a five-year period (2018–2022), resulting in 135 observations. The dependent variable is the change in financial distress, measured by the year-on-year difference in Altman Z-Score, while the independent variables include profitability (ROA), liquidity (CR), leverage (DAR), and sales growth. A multiple linear regression analysis is employed to assess the effect of these financial indicators. The results show that profitability and liquidity have a positive and significant effect on reducing financial distress. Conversely, leverage and sales growth do not show a significant impact. The study also finds a general downward trend in financial distress among manufacturing firms during the observation period. Based on these findings, the study recommends strategic actions such as optimizing asset utilization, reducing short-term debt reliance, enhancing liquidity through effective current asset management, and ensuring sufficient cash availability to meet short-term obligations.

Keywords: Profitability, Liquidity, Stability, Manufacturer

INTRODUCTION

Developments and changes in the business environment have caused competition between companies to become increasingly tight, encouraging many companies to innovate in order to increase profitability and competitiveness (Putra & Serly, 2020). However, not all companies are able to face these challenges, so some of them experience financial distress which can even lead to the risk of bankruptcy (Nugroho, Sutrisno, & Mardiaty, 2020). Financial distress refers to the condition of a company that is unable to meet its financial obligations in a timely manner (Kristyaningsih, Hariyani, & Sudrajat, 2021). Some indicators that are often used to identify this condition include declining profitability, low liquidity, high leverage, slowing sales growth, small company size, negative cash flow, difficulty in paying debts, and declining sustainable financial performance for several years (Sutra & Mais, 2019; Purba & Achmad, 2023). This condition can be caused by internal factors such as declining revenue, high debt burden, and weak corporate governance, or external factors such as macroeconomic turmoil, regulatory changes, or unexpected natural disasters (Sutra & Mais, 2019). Therefore, it is important for companies to recognize early signs of financial distress in order to anticipate wider negative impacts.

This study is based on data from the Central Statistics Agency (BPS) which shows a decline in Indonesia's economic growth at the beginning of the pandemic. In the first quarter of 2020, economic growth was recorded at -2.07%, and reached its lowest point in the second quarter of 2020 at -5.32%. The COVID-19 pandemic has slowed economic

JIAKES

Jurnal Ilmiah Akuntansi
Kesatuan
Vol. 13 No. 2, 2025
pg. 361 - 372
IBI Kesatuan
ISSN 2337 - 7852
E-ISSN 2721 - 3048
DOI: 10.37641/jiakes.v13i2.3337

activity, resulting in a sudden decline in revenue in various industrial sectors. This condition makes it difficult for many companies to meet their debt obligations, increase profitability and cash flow, and gain access to additional credit or financing. In addition, investor confidence in these companies has also decreased (Armenda & Hertina, 2023). The phenomenon of financial distress not only impacts the company concerned, but also the stability of the Indonesian economy as a whole. In addition, stricter regulations and more effective policies can encourage banking towards more sustainable practices. To assess the success rate of green banking policy adoption, previous studies have used content analysis of green banking disclosures in annual reports or corporate sustainability reports as a proxy for measurement, although the indicators used vary across studies (Bose, Khan, Rashid & Islam, 2018; Dewi & Dewi, 2017; Karyani & Obrien, 2020; Khan et al., 2021). This report serves as a basis for stakeholders to evaluate a company's commitment to sustainable principles.

Several studies, such as Ryu & Fan (2023), Sayidah, Assagaf & Faiz (2020), and Kristyaningsih, Hariyani & Sudrajat (2021), state that financial distress is a form of emotional response to worsening economic conditions. Psychological pressure due to the crisis often triggers manipulative actions from management, such as profit manipulation and tax avoidance to maintain the company's financial performance. This is in line with agency theory which explains the conflict of interest between principals (shareholders) and agents (managers), where agents tend to prioritize short-term compensation even though it has the potential to harm the company's long-term growth (Ammar & Gafsi, 2021). Financial factors such as profitability, liquidity, leverage, and sales growth have been empirically proven to influence the occurrence of financial distress (Chan & Abdul-Aziz, 2017; Farooq et al., 2021). Low profitability is an indication of the company's weak ability to generate sufficient income to cover operating expenses, while low liquidity indicates the company's difficulty in meeting short-term obligations. A high leverage ratio indicates a heavy dependence on debt, while slow sales growth indicates minimal market expansion. Management needs to understand these factors as a basis for designing anticipation and mitigation strategies (Aviantara, 2023). Solutions to financial distress can be taken through financial and non-financial approaches, such as finding additional sources of income, cost efficiency, debt restructuring, reducing production costs, and optimizing capital expenditures (capex). On the other hand, non-financial approaches involve re-evaluating business strategies, improving production processes and sales management, and increasing product and service innovation (Purba & Achmad, 2023; Aviantara, 2023).

This study is designed to provide guidance for companies in designing prevention strategies to face the possibility of financial distress, considering the significant contribution of the manufacturing sector to the national economy. The focus of the study is on the evaluation of financial factors that have the potential to reduce the risk of financial distress and the analysis of the influence of these variables on the company's financial stability. Unlike previous studies that focused more on identifying financial distress using methods such as Altman Z-Score, Grover G-Score, and Springate S-Score, this study emphasizes the preventive aspect through financial management. According to Prasetya & Oktavianna (2021), limited funds are one of the root causes of financial distress in Indonesia. Several factors that influence this condition include high loan interest rates, high operational costs, and limited access to resources. This condition encourages companies to take loans from third parties as a solution for operational and investment financing. However, dependence on debt actually increases the financial burden because the greater the amount of debt, the higher the interest that must be paid (Rohmadini, Saifi, & Darmawan, 2018). This ultimately causes the company to have difficulty meeting its financial obligations, which is characterized by late payments, late debt repayment, and potential bankruptcy.

Financial distress has occurred in several manufacturing companies in Indonesia, one of which is the case of Sritex in 2023. As a textile company listed on the Indonesia Stock Exchange (IDX) since 2013, Sritex experienced severe financial difficulties to the

point of almost being delisted. On May 18, 2022, the company temporarily suspended trading of its shares due to very high debt levels and worsening financial conditions. In the first semester of 2023, Sritex recorded a capital deficit due to liabilities that far exceeded the value of its assets. The company's total liabilities reached IDR 23.8 trillion, while assets were only IDR 10.75 trillion. The company's long-term debt from bank loans and bond issuance reached IDR 19.82 trillion, with details of IDR 14.22 trillion from bank loans and IDR 5.6 trillion from bonds. Although the company has sold some of its assets, the debt still cannot be fully repaid. The main causes of this crisis are ineffective capital structure policies, lack of innovation, and external impacts in the form of the Covid-19 pandemic which caused a decline in sales and profits. This case has a wide impact on stakeholders such as employees, investors, and business partners, and is an important lesson about the need for proactive financial management and careful debt control (CNBC Indonesia, 2023).

The manufacturing sector was chosen as the object of research because it has a strategic role in the Indonesian economy. Based on data from the Central Statistics Agency (BPS), this sector contributed an average of 19.66% to GDP each quarter during the period 2018–2021, making it the main driving force of the national economy. However, intense competition in this sector often triggers price wars that have the potential to reduce company profitability (Chatha & Butt, 2015). In addition, manufacturing companies are also required to comply with various complex regulations, including environmental and occupational safety regulations. Failure to comply with these regulations can result in large fines that further burden the company's financial condition. Manufacturing companies listed on the Indonesia Stock Exchange (IDX) also have quite high business diversity, making them worthy of being research objects to understand the factors causing financial distress. Therefore, the analysis of the manufacturing sector is designed to provide a broader picture of the dynamics of company finances and their implications for Indonesia's macroeconomic stability.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Agency Theory

Agency theory, according to Jensen and Meckling (1976), is a theory derived from the contractual relationship between the principal (company owner) and the agent (manager), where the principal gives the agent a mandate to act on his behalf through the delegation of decision-making authority. In this dynamic, the principal is interested in optimizing the use of resources, while the agent tends to focus on efforts to increase the company's profits (Putra & Serly, 2020). The inconsistency of interests between the two parties often triggers agency conflicts, which are generally influenced by low transparency, weak accountability, or management decisions that are not in line with the principal's goals (Li, Li, Xiang, & Djajadikerta, 2020; Putra & Serly, 2020). This conflict has the potential to reduce company performance and cause financial distress if not managed properly. To reduce the potential for this conflict, companies can implement strategies such as increasing transparency, strengthening corporate governance, and providing incentives that are in line with the interests of the principal (Kasbar et al., 2023). In Indonesia, agency theory is very relevant in guiding managerial behavior to stay in line with the interests of capital owners in order to prevent the risk of financial difficulties and increase the effectiveness of company management (Nugroho, Sutrisno, & Mardiaty, 2020).

Financial Distress

Financial distress is a critical condition experienced by a company when facing serious financial difficulties, one of which is marked by a consecutive decline in profits to the point of recording losses (Kristanti, 2019). Another definition states that financial distress occurs when a company fails to meet its debt obligations (Kristyaningsih, Hariyani, & Sudrajat, 2021). As a result, the company experiences liquidity problems and has difficulty running operations normally due to limited funds. If this condition persists for a long time, it has the potential to lead to the risk of bankruptcy (Karim, Shetu &

Razia, 2021). The impact of financial distress is not only felt by the company but also on the industrial sector and the macro economy. Roncagliolo & Blas (2022) state that *financial distress* can slow economic growth, reduce the rate of labor absorption, and reduce investor confidence. When companies experience financial distress, they usually reduce investment and cut production capacity, according to the findings of Rismadhani & Kadarningsih (2020) who stated that decreased investment and production are factors causing slow economic growth. On the social side, companies often rationalize their workforce as an effort to achieve efficiency, which leads to an increase in unemployment. This situation also affects investor perceptions, who begin to doubt the company's performance and are reluctant to invest, which has an impact on the company's access to funding and further worsens the company's financial condition. Therefore, it is important for management to detect symptoms of financial distress early on and immediately take mitigation steps so that the company remains sustainable.

Financial distress detection can be done through various analysis methods, such as financial ratio evaluation, periodic financial performance trend analysis, and industry and market analysis (Sari, Hasbiyadi, & Arif, 2020; Arif, 2022; Aruni & Istikhoroh, 2021). To support this analysis, specific models are used such as Altman Z-Score, Springate S-Score, and Grover G-Score recommended by Aviantara (2023). Some financial ratios that are relevant to identifying financial distress include profitability (such as return on assets/ROA), liquidity (current ratio), leverage (debt asset ratio/DAR), and sales growth. Profitability describes a company's ability to generate profits, as measured by ratios such as ROA, ROE, profit margin, and *basic earning power* (Ummah & Yuliana, 2023). Liquidity measures a company's ability to meet short-term obligations, including the current ratio, quick ratio, and cash ratio (Ho, 2024). Leverage describes the company's funding structure, which is measured through various ratios such as DAR, DER, *long-term debt to equity ratio*, *time interest earned ratio*, and *cash coverage ratio* (Sapiri, 2023). *Sales growth* is also an important indicator that shows the success of previous investments and potential future income. Increasing or maintaining *sales growth* is an important strategy for management because it contributes directly to the company's value and shareholder welfare (Susilowati & Fadlillah, 2019).

The Influence of Profitability on Reducing *Financial Distress*

Profitability ratio is an important tool to assess the company's ability to generate profits, which is the main responsibility of managers as agents in maintaining business continuity and meeting the expectations of principals (shareholders). In this study, profitability is measured using Return on Assets (ROA) because it is able to represent the efficiency of asset use in generating profits, allows comparison with other companies in the same sector, and helps detect potential symptoms of financial distress. According to Sutra and Mais (2019), high profitability indicates a good return on investment and the company's ability to finance its operations independently, thus becoming an indicator of a stable financial condition and far from the financial crisis. This view is supported by several researchers such as Kembery & Rasyid (2023), Mappadang et al. (2019), and Kamaluddin, Ishak, & Mohammed (2019), who emphasize that the higher the profitability of a company, the lower the risk of financial distress experienced. Therefore, ROA is chosen as a measure of profitability because of its ability to directly describe asset performance and its relevance in industry comparison analysis. Based on this framework, the first hypothesis is formulated: (H1): profitability has a positive influence in reducing the level of financial distress.

The Effect of Liquidity on Reducing Financial Distress

The liquidity ratio is used to assess a company's ability to meet short-term financial obligations, which is one of the main responsibilities of management as an agent in maintaining business continuity. Within the framework of agency theory, managers are required to ensure the financial health of the company, including in meeting short-term obligations, and this ratio is a tool for evaluating their performance to prevent financial distress. Sutra and Mais (2019) stated that the higher the company's liquidity,

the greater the company's ability to convert assets into cash, thereby increasing the company's capacity to pay off short-term obligations using its current assets, which has an impact on lowering the risk of financial distress. This statement is supported by the results of research by Ammar & Gafsi (2021), which found a negative relationship between liquidity and financial distress, meaning that high liquidity can be a factor in reducing the risk of financial distress. In this study, liquidity is measured using the current ratio because of the relevance of this ratio in evaluating the company's ability to pay short-term debt and detecting early symptoms of financial distress. Therefore, H2 is formulated as follows: H2: Liquidity has a positive influence in reducing the level of financial distress.

The Effect of Leverage on Reducing Financial Distress

Leverage is an important indicator in assessing the capital structure and financial risk of a company, which has the potential to affect long-term investment and operational decisions. According to agency theory, management as an agent must ensure that the use of debt does not exceed the company's capacity in order to maintain financial health and avoid financial distress. Mappadang, Ilmi, Handayani, & Indrabudiman (2019) stated that the lower the proportion of debt in operational financing, the lower the chance of financial difficulties. This statement is supported by Kembery and Rasyid (2023), who stated that although leverage can increase company profits, this ratio also increases the potential for financial distress due to interest expenses and the risk of default. Therefore, in this study, leverage is measured using the Debt to Asset Ratio (DAR), which reflects the proportion of company assets financed by debt, making it an appropriate instrument for evaluating the company's financial risk profile. A high DAR level indicates a heavy dependence on debt, which risks increasing financial instability and vulnerability to financial distress. Thus, the following hypothesis is formulated:

H3: Leverage has a negative effect on efforts to reduce financial distress.

The Impact of Sales Growth on Reducing Financial Distress

Sales growth is an important factor that can contribute to increasing company value. Within the framework of agency theory, managers as agents are obliged to maintain and increase company value for the benefit of the principal or business owner. Increased sales are an indicator of healthy operational performance and can help companies obtain adequate cash flow to meet their debt obligations. Kembery and Rasyid (2023) stated that the higher the sales growth, the lower the risk of financial distress because the company has a greater capacity to pay off its obligations. This is supported by the opinion of Sutra and Mais (2019), who stated that financial distress conditions tend to inhibit sales growth, so that significant sales increases can be an effective prevention strategy against financial distress. Therefore, this study proposes the following hypothesis: H4: Sales growth has a positive influence in reducing the level of financial distress.

METHODS

This study uses quantitative methods to analyze the relationship between financial factors that influence financial distress in the manufacturing sector. Data collection was carried out from annual reports and financial statements of companies listed on the Indonesia Stock Exchange (IDX) during the period 2018–2022. Information on market capitalization was obtained through online access to the company's official website or authoritative sources such as the Indonesia Stock Exchange, the Central Bureau of Statistics, and Market Screener. The sampling technique used was purposive sampling, focusing on manufacturing companies listed on the IDX during the research period and had been in a "bankrupt" condition in 2018. In detecting financial distress conditions, the Altman Z-Score formula was used ($Z = 1.2 X_1 + 1.4 X_2 + 3.33 X_3 + 0.6 X_4 + 0.999 X_5$), which consists of five main financial ratios: working capital to total assets (X_1), retained earnings to total assets (X_2), EBIT to total assets (X_3), market value of equity to total liabilities (X_4), and sales to total assets (X_5). Companies were then classified into three groups based on their level of financial health, namely the "bankrupt" category ($FD < 1.81$), "gray area" ($1.81 \leq FD \leq 2.99$), and "good" ($FD > 2.99$). From 31 companies observed for five years (2018–2022), 155 data were obtained which were used in the

analysis. The sample selection process is shown in Table 1, while hypothesis testing was carried out through a multiple linear regression model with the equation:

$$DFD = \alpha + \beta_1PROF + \beta_2LIQ + \beta_3LEV + \beta_4SG$$

where DFD is a decrease in financial distress, PROF is profitability, LIQ represents liquidity, LEV shows leverage, and SG describes sales growth.

RESULT AND DISCUSSION

Descriptive Statistics

Table 1 contains the results of descriptive statistical analysis that provide initial information on the characteristics of the data used in this study, including the minimum, maximum, average, and standard deviation values of each variable. The dependent variable in this study is the decline in financial distress (DFD), which has a range of values between -7.105 and 7.985, with an average of 0.02710 and a standard deviation of 1.242456. The relatively low average value indicates that in general the decline in financial distress during the study period is still limited. Profitability (X1_PRO), as the first independent variable, has a minimum value of -1.080 (PT Tirta Mahakam Resorts Tbk) and a maximum of 0.607 (PT FKS Food Sejahtera Tbk). The average profitability of -0.00097 with a standard deviation of 0.150125 indicates that overall manufacturing companies tend to experience a decline in their ability to generate profits from their assets.

Liquidity (X2_LIQ) as the second independent variable has a minimum value of 0.020 (PT Eterindo Wahanatama Tbk) and a maximum of 3.696 (PT Barito Pacific Tbk), with an average of 1.08601 and a standard deviation of 0.587322. These values indicate that most manufacturing companies have adequate liquidity to meet short-term obligations and face emergencies. Leverage (X3_LEV) recorded an average of 0.76661 with a standard deviation of 0.474390, indicating that in general the company's funding structure is dominated by debt, but still within manageable limits so that the risk of bankruptcy remains under control. Meanwhile, sales growth (X4_SG) ranges from -0.998 to 12.001, with an average of 0.19296 and a standard deviation of 1.324868, indicating a positive trend in increasing sales volume even though there are still fluctuations among manufacturing companies. Thus, this data profile is an important basis for hypothesis testing and regression analysis to evaluate factors that influence the decline in financial distress in the manufacturing sector during the 2018–2022 period.

Table 1. Sample Determination

Criteria	Amount
Manufacturing Companies (BEJ) in 2018-2022	159
Companies with incomplete annual reports	(20)
Companies categorized as "good" in 2018	(71)
Company categorized as "grey area" in 2018	(37)
Companies selected as research samples	27
Number of observations (27 x 5)	135

Table 2. Operational Variables

Variables	Definition	Measurement
Decrease in Difficulty Finance (DFD)	Financial distress is a situation of financial distress in which a company is unable to pay off its debts, thus increasing the risk of bankruptcy (Kristanti, 2019). In this study, the measurement was carried out using the difference between the current year's Financial Distress minus the previous period's Financial Distress.	$DFD = Z_t - Z_{t-1}$ Z-score is measured using the Altman Z-Score formula (1968). $Y = 1.2 X1 + 1.4 X2 + 3.3 X3 + 0.6$

Profitability (PRO)	Profitability is a measure of a company's ability to generate profits (Ummah & Yuliana, 2023).	$ROA = \text{Net Income} / \text{Total Assets}$
Liquidity (LIQ)	Liquidity is a measure of a company's ability to pay its short-term obligations (Ningsih & Sari, 2019).	$CR = \text{Current Assets} / \text{Current Liabilities}$
Leverage (LEV)	Leverage is a measure of a company's use of debt to finance its operations (Sapiri, 2023).	$DAR = \text{Total Debt} / \text{Total Assets}$
Sales Growth (SG)	Sales Growth is a measure of a company's ability to increase its revenue over time (Sutra and Mais, 2019).	$SG = (\text{Sales}_t - \text{Sales}_{t-1}) / \text{Sales}_{t-1}$

This study uses the Altman Z-Score formula to measure the level of financial distress of a company, with three categories, namely "Bankrupt" ($FD < 1.81$), "Gray Area" ($1.81 \leq FD \leq 2.99$), and "Good" ($FD > 2.99$). To display the dynamics of changes in the company's financial condition from year to year, a diagram is used that illustrates the trend of increasing or decreasing financial distress. In general, a downward line represents a worsening financial condition, while an upward line represents an improvement. Based on the diagram presented in Figure 3, the level of financial distress of manufacturing companies in Indonesia during the 2018–2022 period shows a fluctuating pattern but tends to improve overall. In 2018, the average FD was at 0.401 and increased in 2019 to 0.479. However, in 2020 there was a decline again to 0.241, then improved significantly in 2021 with a value of 0.866, although it decreased slightly again in 2022 to 0.773. This fluctuation indicates the existence of external and internal dynamics that affect the financial stability of manufacturing companies.

Despite ups and downs over the past five years, in general the level of financial distress tends to decrease, meaning that the financial condition of Indonesian manufacturing companies is relatively more stable. Empirical evidence shows that several companies such as PT Asiaplast Industries Tbk, PT Multistrada Arah Sarana Tbk, and PT Sunson Textile Manufacture Tbk, which were initially in the “bankrupt” category in 2018, were able to improve their financial performance and move to the “good” category in the following years. This finding provides an illustration that despite the major challenges caused by the pandemic, several companies were still able to recover. This result also updates previous findings from Sari and Setyaningsih (2022), which stated an increase in financial distress before and during the early stages of the pandemic. By looking at the positive trend that occurred post-pandemic, it can be concluded that better financial management efforts have helped companies overcome financial pressures and reduce the risk of bankruptcy.

Hypothesis Testing

The determination coefficient test was conducted to evaluate the ability of the regression model to explain variations in the dependent variable. The adjusted R^2 value obtained was 0.317 indicating that 31.7% of the fluctuations in the decline in financial distress can be explained by changes in four independent variables, namely profitability, liquidity, leverage, and sales growth. Meanwhile, the remaining 68.3% is influenced by other factors not included in this research model. Furthermore, to test the simultaneous effect of independent variables on the dependent variable, an F test was conducted as part of the second hypothesis testing. This test provides a comprehensive overview of the

combined contribution of all independent variables to the decline in the level of financial distress.

Table 3. Descriptive Analysis Test Results

Variabel	N	Min	Max	Mean	Std. Dev
Y_DFD	155	-7.105	7.985	0.027	1.242
X1_PRO	155	-1.080	0.607	-0.000	0.150
X2_LIQ	155	0.020	3.696	1.086	0.587
X3_LEV	155	0.140	3.388	0.767	0.474
X4_SG	155	-0.998	12.001	0.193	1.325

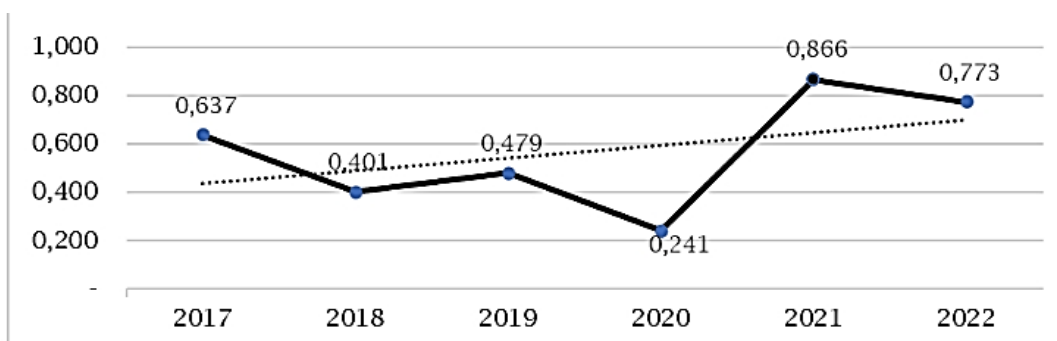


Figure 1. Financial Distress Diagram 2017-2022

The F-test results presented in Table 4 show a statistical value of 5.995 with a significance level below 0.001, which is lower than the threshold of 0.05. Thus, it can be concluded that all independent variables — namely profitability, liquidity, leverage, and sales growth — together have a significant effect on reducing financial distress. This means that the regression model used is quite feasible to explain the relationship between these financial factors and the possibility of reducing the risk of financial distress in manufacturing companies in Indonesia.

In addition, the t-test results show partial testing of each variable. Profitability (X1) has a significance value of 0.000 (≤ 0.05) with a positive coefficient of 1.300, so the first hypothesis (H1) which states that profitability has a positive effect on reducing financial distress is accepted. Liquidity (X2) also shows a significant effect with a significance value of 0.015 (≤ 0.05) and a coefficient of 0.335, so H2 is accepted. However, for leverage (X3), a significance value of 0.214 (> 0.05) with a coefficient of 0.427 is obtained, so H3 is rejected. Likewise with sales growth (X4), which has a significance value of 0.299 (> 0.05) and a coefficient of 0.111, so H4 is also rejected. In other words, only profitability and liquidity individually affect the reduction of financial distress, while leverage and sales growth do not have a significant effect.

Profitability has a positive impact on reducing financial distress

Based on agency theory, managers are motivated to maximize profits in order to obtain incentives in the form of bonuses or stock options that are directly related to the company's financial performance. In this context, the profitability ratio is an important indicator in assessing the effectiveness of strategic decisions taken by managers, including in preventing financial distress. Several researchers such as Kembery & Rasyid (2023), Mappadang et al. (2019), and Kamaluddin, Ishak & Mohammed (2019) stated that profitability has a negative and significant effect on financial distress, meaning that the higher the profitability, the lower the risk of experiencing financial difficulties. The findings of this study are in line with the literature, showing that the profitability ratio has a positive effect on reducing financial distress, proving that managers who actively increase profitability tend to succeed in maintaining the company's financial stability. In addition, the results of the data analysis also show that companies such as PT Asiaplast Industries Tbk and PT Multistrada Arah Sarana Tbk experienced a gradual increase in

Return on Assets (ROA), which also helped the company out of financial distress. This study emphasizes the importance of monitoring the profitability ratio as an early detection tool for potential financial crises and a basis for taking proactive corrective actions by management.

Liquidity has a positive impact on reducing financial distress

Within the framework of agency theory, principals utilize the liquidity ratio as a monitoring tool for manager performance, as well as an indicator of the company's ability to manage short-term liabilities to prevent financial distress.

Table 4. Hypothesis Test Results

Variable	Unstandardized Coeff. B	Sig. 2-tailed	Sig. 1-tailed
(Constant)	-0.572		
X1_PRO	1.300	<0.001	0.000
X2_LIQ	0.335	0.030	0.015
X3_LEV	0.427	0.453	0.214
X4_SG	0.111	0.598	0.299
R Square	0.381	F-statistic	5.995
Adjusted R ²	0.317	Sig.	<0.001

Liquidity ratio plays an important role in identifying potential cash flow problems and the company's ability to meet short-term obligations. Low levels of liquidity are an indicator that the company is having difficulty paying off short-term debt, which can trigger agency conflicts due to principal dissatisfaction with the agent's performance. This condition shows that managers who are able to manage and optimize assets effectively, as well as ensure the availability of current assets to meet short-term financial obligations, tend to be more successful in avoiding financial distress. This opinion is supported by Sutra and Mais (2019), who state that liquidity has a negative and significant effect on financial distress, meaning that the higher the liquidity, the lower the risk of financial distress. The results of this study are in line with this statement, with evidence that the liquidity ratio has a positive effect on reducing the level of financial distress. Therefore, regular monitoring of the liquidity ratio is very important as an early warning tool for companies to detect potential liquidity disruptions and implement mitigation measures so that cash flow remains stable and the risk of financial distress can be minimized. Empirical evidence shows that several companies such as PT Asiaplast Industries Tbk have succeeded in increasing their liquidity from year to year, with the current ratio value increasing from 1,406 in 2018 to 1,793 in 2022, which has helped the company move out of the "bankrupt" category towards a better financial condition.

Leverage has no impact on reducing financial distress

Based on agency theory, the use of leverage or debt in a company's capital structure can increase agency costs because the higher the level of debt, the greater the opportunity for managers to make decisions that are more beneficial to personal interests than principals, such as taking excessive risks or expanding without considering financial sustainability, which ultimately risks triggering financial distress (Mappadang, Ilmi, Handayani, & Indrabudiman, 2019; Kembery & Rasyid, 2023). However, under certain conditions, leverage does not always have a direct effect on financial distress, especially if the company has a well-managed debt structure through a balance between short-term and long-term debt, as well as the ability to adjust the debt burden with the company's cash flow and financial performance. The results of this study are in line with the view that leverage increases the risk of financial distress, but empirical testing shows that the leverage ratio does not have a significant impact on efforts to reduce financial distress, so the hypothesis stating the negative effect of leverage on financial distress is rejected.

Sales growth does not have an impact on reducing financial distress

Based on agency theory, managers tend to prioritize personal interests over principals, which risks triggering financial distress (Nursyamsiah & Wahyuni, 2024). Increased sales do have the potential to increase company profits, but this does not necessarily improve financial conditions if accompanied by a spike in operational costs,

such as high marketing or distribution costs. Therefore, sales growth is not always effective in reducing the level of financial distress (Kembery & Rasyid, 2023). The results of this study are in line with these findings, where sales growth does not have a significant effect on reducing financial distress. This is supported by Sutra and Mais (2019), who emphasize that even though sales increase significantly, financial distress will not decrease if accompanied by high operational costs during the increase period. Thus, sales growth must be managed efficiently in order to truly contribute to the company's financial stability.

CONCLUSION

This study has identified factors that influence the decline in financial distress in manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the period 2018–2022. The results of the analysis show that profitability and liquidity have a positive and significant effect in reducing the level of financial distress, while leverage and sales growth do not have a significant effect. In addition, there was a general downward trend in financial distress in the manufacturing sector over the past five years. Based on these findings, the author recommends several strategies to increase profitability and liquidity, including optimizing asset use, reducing production costs, increasing employee productivity, and implementing technology that supports business efficiency and innovation. To increase liquidity, companies are encouraged to reduce short-term debt through refinancing, strengthening financial management, and implementing better cash flow management. Tighter monitoring of receivables and strengthening the internal control system are also important to prevent the risk of bad debts and ensure transparency in financial management. Through these steps, companies are expected to be able to overcome financial pressures and maintain their business continuity in the long term, while increasing competitiveness amidst increasingly fierce industrial competition.

There are several limitations in this study that need to be noted. One of them is the limited availability of data because many manufacturing companies did not publish annual reports in 2018, and some companies were no longer operationally active in 2022. In addition, the availability of academic literature is also an obstacle, considering that most previous studies have focused more on the factors that cause financial distress than on efforts to reduce it (Sari & Setyaningsih, 2022). As input for future research, it is recommended that researchers expand or replace the industrial sectors studied to increase the number of samples and improve the quality of the results. In addition, the use of other more comprehensive variables can be done, such as Gross Profit Margin, Net Profit Margin, Basic Earning Power, Operating Profit Margin, or Return on Equity to replace or complement profitability measurements. Liquidity measurements can also be developed by adding Quick Ratio or Cash Ratio, while for leverage, alternatives such as Debt to Equity Ratio can be used as a substitute or complement to DAR. With a broader approach and more appropriate variables, it is hoped that the research results will be more valid and relevant to answer research questions.

REFERENCE

- [1] Arif, M.F. (2022). Analisis perbandingan model pendeteksi financial distress. Zenodo (CERN European Organization for Nuclear Research).
- [2] Armenda, D., & Hertina, D. (2023). Analisis
- [3] financial distress dampak pandemi Covid-19 berdasarkan Model Grover, Springate, dan Zmijewski pada perusahaan tekstil dan garmen. *Jurnal Ilmiah Akuntansi dan Keuangan*, 5(6), 2835–2844.
- [4] Aruni, D.P., & Istikhoroh, S. (2021). Analisis rasio keuangan sebagai alat untuk memprediksi financial distress pada PT. Smartfren Telecom Tbk. *Journal of Sustainability Business Research*, 2(4), 258-272.
- [5] Aviantara, R. (2023). Scoring the financial distress and the financial statement fraud of Garuda Indonesia with «DDCC» as the financial solutions. *Journal of Modelling in Management*, 18(1), 1–16.

- [6] Chan, T.K., & Abdul-Aziz, A.-R. (2017). Financial performance and operating strategies of Malaysian property development companies during the global financial crisis. *Journal of Financial Management of Property and Construction*, 22(2), 174–191.
- [7] Chatha, K.A., & Butt, I. (2015). Themes of study in manufacturing strategy literature. *International Journal of Operations & Production Management*, 35(4), 604–698.
- [8] CNBC Indonesia. (2023). Sritex hampir bangkrut ini penyebab dan jumlah hutangnya. Retrieved from <https://www.cnbcindonesia.com/>
- [9] Farooq, M., Noor, A., Qureshi, S.F., & Bhutta, Z.M. (2021, June 26). Indirect financial distress costs in non-financial firms: Evidence from an emerging market. *Pacific Accounting Review*, 33(4), 417-434.
- [10] Hazami-Ammar, S. & Gafsi, A. (2021). Governance failure and its impact on financial distress. *Corporate Governance*, 21(7), 1416-1439.
- [11] Ho, L. (2024). Liquidity and dynamic leverage: the moderating impacts of leverage deviation and target instability. *Journal of Economics and Development*, Vol. ahead-of-print No. ahead-of-print.
- [12] Jensen, M.C., & Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- [13] Kamaluddin, A., Ishak, N., & Mohammed, N.F. (2019). Financial distress prediction through cash flow ratios analysis. *International Journal of Financial Research*, 10(3), 63-76.
- [14] Karim, M.R., Shetu, S.A. and Razia, S. (2021). COVID-19, liquidity and financial health: empirical evidence from South Asian economy. *Asian Journal of Economics and Banking*, 5 (3), 307-323.
- [15] Kasbar, M.S.H., Tsitsianis, N., Triantafylli, A. & Haslam, C. (2023). An empirical evaluation of the impact of agency conflicts on the association between corporate governance and firm financial performance. *Journal of Applied Accounting Research*, 24(2), 235-259.
- [16] Kembery, K., & Rasyid, A. (2023). Faktor- faktor yang mempengaruhi financial distress pada perusahaan manufaktur DI BEI. *Jurnal Paradigma Akuntansi*, 5(2), 985–991.
- [17] Kristanti, F.T. (2019). *Financial distress: Teori dan perkembangannya dalam konteks Indonesia* (1 ed.). Malang: Inteligencia Media.
- [18] Kristyaningsih, P., Hariyani, D.S., & Sudrajat, M.A. (2021). Financial distress terhadap manajemen laba. *Business Innovation and Entrepreneurship Journal*, 3(3), 151–156.
- [19] Li, Y., Li, X., Xiang, E., & Djajadikerta, H.G. (2020). Financial distress, internal control, and earnings management: Evidence from China. *Journal of Contemporary Accounting & Economics*, 16(3), 1–18.
- [20] Mappadang, A., Ilmi, S., Handayani, W.S., & Indrabudiman, A. (2019). Faktor-faktor yang mempengaruhi financial distress pada perusahaan transportasi. *Jurnal Riset Manajemen dan Bisnis*, 4, 683–696.
- [21] Nugroho, R.P., Sutrisno, S.T., & Mardiaty, E. (2020). The effect of financial distress and earnings management on tax aggressiveness with corporate governance as the moderating variable. *International Journal of Research in Business and Social Science*, 9(7), 167–176.
- [22] Nursyamsiah & Wahyuni, P.D. (2024). The effect of current ratio, debt to equity ratio and sales growth on financial distress. *Journal of Accounting and Finance Management*, 5(2), 71–80.
- [23] Prasetya, E.R., & Oktavianna, R. (2021, May). Financial distress dipengaruhi oleh sales growth dan intellectual capital. *Jurnal Akuntansi Berkelanjutan Indonesia*, 4(2), 170–182.

- [24] Purba, M.C., & Achmad, T. (2023). [Pengaruh](#) kinerja keuangan pemerintah daerah dan [indikasi korupsi terhadap](#) kesejahteraan masyarakat . Diponegoro Journal of Accounting, 12(1), 1–10.
- [25] Putra, R.D., & Serly, V. (2020). Pengaruh karakteristik komite audit dan ukuran perusahaan [terhadap](#) financial distress. Jurnal Eksplorasi Akuntansi, 2(3), 3160–3178.
- [26] Rismadhani, F., & Kadarningsih, A. (2020). Rasio keuangan, financial distress dalam prediksi kebangkrutan perusahaan manufaktur. Kompak: Jurnal Ilmiah Komputerisasi Akuntansi, 13(1), 143–151.
- [27] Rohmadini, A., Saifi, M., & Darmawan, A. (2018). Pengaruh profitabilitas, likuiditas dan leverage terhadap financial distress (Studi pada perusahaan food & beverage yang terdaftar di Bursa Efek Indonesia periode 2013 – 2016) . Jurnal Administrasi Bisnis, 61(2), 11-19.
- [28] Roncagliolo, F.C., & Blas, R.N. (2022). Impact of financial stress in advanced and emerging economies. Journal of Economics Finance and Administrative Science, 27(53), 68–85.
- [29] Ryu, S., & Fan, L. (2023). The relationship between financial worries and psychological distress among U.S. adults. Journal of Family and Economic Issues, 44(1), 16–33.
- [30] Sapiri, M. (2023). Understanding Financial leverage: The effect of operating leverage and financial leverage on EPS in property and real estate companies on the Indonesia Stock Exchange. Atestasi: Jurnal Ilmiah Akuntansi, 6(1), 53–66.
- [31] Sari, N.R., Hasbiyadi, H., & Arif, M.F. (2020).
- [32] Mendeteksi financial distress dengan model Z-Score Altman (Studi pada perusahaan sektor utama yang terdaftar di Bursa Efek Indonesia). Jurnal Ilmiah Akuntansi dan Humanika, 10(1).
- [33] Sari, T.N., & Setyaningsih, P.R. (2022). Analisis financial distress dan financial performance sebelum dan selama pandemi Covid-19 pada perusahaan manufaktur. Jurnal Riset Akuntansi Mercu Buana, 8(1), 53-65.
- [34] Sayidah, N., Assagaf, A., & Faiz, Z. (202). Does earning management affect financial distress? Evidence from state-owned enterprises in Indonesia. Cogent Business & Management, 7(1), 1–14.
- [35] Susilowati, P.I., & Fadlillah, M.R. (2019). Faktor-faktor yang mempengaruhi financial distress pada perusahaan manufaktur di Indonesia. Jurnal AKSI (Akuntansi dan Sistem Informasi), 4 (1), 19–28.
- [36] Sutra, F.M., & Mais, R.G. (2019). Faktor- faktor yang mempengaruhi financial distress dengan pendekatan Altman Z - S c o r e p a d a p e r u s a h a a n pertambangan yang terdaftar di Bursa Efek Indonesia tahun 2015–2017. Jurnal Akuntansi dan Manajemen, 16(1), 34-72.
- [37] Ummah, D.R., & Yuliana, I. (2023). Liquidity relations, current ratio, profitability, gender diversity, company size, and company value: Studies in Indonesia. Jurnal Keuangan dan Perbankan, 27 (1), 81–95.