

Original Article

Financial Leverage to Predict the Company's Financial Distress

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Abstract: *The company's operations and performance have been impacted by the constantly shifting economic landscape. Bankruptcy haunts both big and small businesses, even some that appear to be in good standing. The accounting records of a business can be used to see and quantify its bankruptcy. Financial distress occurs before bankruptcy in a company. In financial distress, the company's condition is experiencing serious financial problems that threaten the continuity of its operations. Financial leverage indicates a company's ability to meet obligations for both the short and long term. The indicator used to measure the level of Financial Leverage of companies in this study is the total debt divided by total capital (Debt to Equity Ratio). The data used in this study is taken from the financial statements of manufacturing companies listed on the Indonesia Stock Exchange for 2020-2022. With quantitative methods, the analysis is carried out by linear regression. The analysis results show that financial leverage does not significantly impact the financial distress condition of manufacturing companies listed on the IDX. The effect of the DER variable on financial distress showed a figure of 72.6%.*

Keywords: Financial Distress, Financial Leverage, Finance, Financial Condition, Financial Statements.

I. INTRODUCTION

The constantly changing economic climate has impacted the company's activities and achievements. (Pratama & Idawati, 2019). Small companies and large companies are haunted by bankruptcy, including some companies that look in good condition. The bankruptcy of an organization's accounting records provides insight and metrics. To make the information provided in the financial statements more helpful when making decisions, financial data must be converted into information that is useful in economic decision-making (Utama & Suryani, 2023). To prove that financial statements are useful, it is necessary to do testing (Utama & Efrina, 2023). Studies that predict company performance, such as bankruptcy and financial distress, using ratios of finances is one type of examination.

A company experiences financial difficulties prior to bankruptcy (Abdu, 2022). It is, therefore, necessary to create a financial anxiety model in order to take action to foresee circumstances that could result in bankruptcy by early detection of the organization's financial distress state. Statements of finances can be analyzed to determine the level of financial distress. Financial statements result from a technical activity founded on techniques and processes that necessitate justification to accomplish the goal of delivering relevant information. Financial statements are a useful instrument for forecasting different areas of a business's finances in the future (Lesmana et al., 2022).

An unhealthy or crisis-ridden state of an organization's finances is referred to as financial distress. Financial difficulty precedes bankruptcy (Farooq et al., 2023). Developing a financial distress framework is necessary because, by identifying the company's financial anxiety early on, steps may be implemented to prevent future financial distress that could result in bankruptcy. The prediction of financial distress of this company is a concern for many parties (Kamaluddin et al., 2019). Parties using the model include:

1. Lenders. Lending institutions can benefit from research on forecasting financial distress when making decisions about whether to grant loans and how to oversee those that have already been granted.
2. Investor. Prediction of financial distress models can aid investors in determining how likely it is that a business will have trouble paying back its interest and principal.
3. Regulators. Regulators bear the duty of monitoring a company's capacity to pay back debt and maintain stability. This makes an appropriate model necessary to evaluate the organization's protection and ascertain its ability to pay off debt.
4. Government. Government oversight and antitrust laws also depend on the ability to predict economic collapse.
5. Auditor. Financial distress prediction models are a helpful resource for auditors in making judgments about a company's going concern.
6. Administration. The firm will be responsible for paying both direct costs—such as attorney and accountant fees—and indirect costs—such as sales losses or losses mandated by court orders—should it file for bankruptcy. It is hoped that by using the economic distress forecasting model, businesses will be able to prevent bankruptcy and the direct and indirect



costs.

In financial distress, the company's condition experiences serious financial problems that threaten the continuity of its operations (Karakara et al., 2022). This can happen when the company is unable to meet financial obligations that should be done, such as paying debts to creditors, employee salaries, or other operational costs. When a company experiences financial distress, this can have a negative impact on various parties, including company owners, employees, suppliers, and creditors. Company owners may have to deal with a decrease in the value of their shares or even lose their entire investment if the company goes bankrupt (Cardao-Pito, 2021). On the other hand, employees may face wage cuts or even job losses if the company cannot survive. Suppliers can also suffer losses because companies cannot pay their debts, while creditors have to bear the risk of not receiving payments or facing debt restructuring (Xiao & Tao, 2021).

Financial distress can be caused by a variety of factors, including low revenue or sales, high operating costs disproportionate to revenue, the company's inability to manage debt properly, or significant changes in the business environment (Utama, A. N. B., & Suryani, A. I., 2023). When a business is facing financial difficulties, it's critical to act to improve the circumstances. This can include reducing operating costs, restructuring debt, seeking additional funds through loans or investments, or even selling company assets (Hermansson & Jonsson, 2021). It is also important for companies to have good financial management and conduct strict supervision of the financial status of the company in order to minimize the risk of financial distress.

Financial leverage measures a company's capacity to pay both short- and long-term debts (Kalash, 2023). In the event that the business is liquidated or dispersed, a review of this proportion is required to determine the extent of the business's capacity to pay both its immediate and future debt. The debt to the ratio of equity, or total debt allocated by total capital, is the indication used in the present research to assess the degree of economic leverage exhibited by the firms in question. A business with significant financial leverage owes a lot of money to outside parties. (Kijkasiwat et al., 2022). This indicates that since the organization is going through financial difficulties, it faces a significant financial risk. A high level of financial risk suggests the business is having financial difficulties. Financial challenges are serious issues that negatively impact how well-performing businesses are in society. (Utama & Syarif, 2023).

Manufacturing companies in Indonesia are a very important sector for the country's economic growth (Utama, A. N. B., & Suryani, A. I., 2023). These companies play a role in the production process of finished goods through the use of sophisticated labor, raw materials, and equipment. They contribute to creating jobs for society, increasing economic growth, and producing competitive products in both domestic and international markets (Maisiri & Van Dyk, 2021). Several manufacturing companies in Indonesia have achieved achievements globally, such as in the automotive, textile, electronics, and food industries. Although manufacturing companies in Indonesia still face several challenges, such as infrastructure that has not yet formed an integral and complex bureaucracy, they continue to grow and innovate to face the changing times and global competition (Obradović et al., 2021).

The problem of financial anxiety in manufacturing firms in Indonesia is one of the challenges often faced by these companies. Some of the main problems that can cause financial distress include unstable economic growth, fluctuations in raw material prices and outside variables like the COVID-19 pandemic, which can affect market supply and demand (Utama & Mustika, 2022). In addition, excessive debt burden, high production costs, and lack of effective financial management can also cause companies to fall into financial distress. This study was also carried out to reconsider a number of variables from earlier studies that impact the company's financial distress state, such as a study from Hidayat (2021). Research shows that leverage has a significant negative effect on financial distress.

Furthermore, previous research conducted by Rahma (2020) shows leverage has a negative influence on financial distress. Further research done by Claudia Moleong (2018), the results of partial and simultaneous testing show that financial distress has a significant effect on accounting conservatism and leverage has a significant effect on accounting conservatism. In light of the preceding information previously provided, the issue at hand in this investigation is stated as follows:

1. Did financial leverage affect the financial distress condition of industrial firms listed on the IDX?
2. How much does financial leverage affect the financial hardship experienced by manufacturers stated on the IDX?

II. RESEARCH METHODS

A) Population and Sample

All manufacturing organizations listed between 2020 and 2022 on the Indonesia Stock Exchange comprise the research's population. The purposive sampling method, which determines specimens based on the researcher's specific criteria, is the sampling method employed in the present research. The criteria selected in determining the sample are:

1. A manufacturer listed from 2020 to 2022 on the Indonesia Stock Exchange (IDX).

2. In compliance with the research period needed for the years 2020–2022, the company has been submitting accounting records on December 31 every year for the past three years.
3. The Company's net income was negative for a minimum of two years in a row. This criterion denotes financial trouble since a company with a net loss for two or more years in a row either reduced its losses or its financial condition has improved.
4. Companies that typically do not face financial difficulties serve as validation models (defined as having no adverse net income for two or more years in a row).

B) Data Types and Sources

The secondary information gathered for the research came from various media sources, as well as the financial records and independent auditor statements from the manufacturing businesses that are part of a company stated in the Indonesia Stock Exchange during the 2020–2022 period. The dependent variable of the research is the degree of financial trouble experienced by the company, being a category variable with 0 representing financially distressed companies and 1 representing healthy companies. Businesses that do not typically experience financial distress (defined as having no negative net income for at least two years) and businesses that do (defined as having negative net income for two or more years).

Financial leverage serves as the study's independent variable. Financial leverage is a measure of a company's capacity to pay both immediate and future debt. If the organization is ever liquidated or dispersed, an analysis of this proportion is required to determine the extent of its ability to pay both current and future debts (Sigit, 2008). Financial leverage proxied with DER is a comparison between total debt divided by DER capital in this study formulated as follows:

$$\text{DER} = \text{Total Hutang} / \text{Total Modal}$$

C) Metode Analisis Data

Testing in this study uses quantitative research methods (Sugiyono, 2018) By using linear regression to determine leverage in predicting whether or not a business will encounter financial difficulties. The models applied to this research are:

$$P = \{1 + \text{Exp} - (B_0 + B_1 \text{LEVERAGE})\} \dots 1$$

Where:

- P = Probability of the company experiencing financial distress
 B₀ = Konstanta
 LEVERAGE = Leverage
 B₁₋₄ = Regression coefficient
 Exp = Error that has an expected value of zero

III. FINDINGS AND DISCUSSION

A) Findings

Descriptive statistics describe the magnitude of the mean value, standard deviation, minimum value, and maximum value for variables except the dummy variable. The descriptive statistical results are presented in the Table below:

Table 1: Statistical Descriptive Results

Research Variables	N	Mean	Standard Deviation	Minimum	Maximum
DER	310	1,725	2,082	-9,60	9,77

Source: Data processed using SPSS

Table 1 shows descriptive statistical research variables. DER has an average value from the descriptive statistical test results of 1.725, a standard deviation of 2.082, with a negative low of 9.60 and a high of 9.77.

An analysis of linear regression is utilized to ascertain the impact of the independent variable, DER. The following are the findings of a regression analysis that compared financial distress to DER, one of the independent variables:

Table 2: Regression Analysis Results

	Variable	Coefficient	Standard Error	DF	Significance
	DER (X3)	-0,145	0,002	1	0,110

Source: Data processed using SPSS

Based on the regression analysis's findings, it appears to show a significance number of 0.110, with a value of DF 1.

Table 3: Results of Coefficient of Determination Analysis (Model Summaryb)

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
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1	130,474a	,629	,826
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Source: Data processed using SPSS

Based on the value of Cox and Snell R square of 0.629 or 62.9% and Nagelkerke R square of 0.726 or 72.6%, it means that the influence of the DER variable on financial distress is 72.6%, while the rest is influenced by variables outside the study of 27.4% (100% - 72.6%).

Table 4: Prediction Accuracy

Observed	Predicted		
	Financial distress		Percentage Correct
	FD	TFD	
Step 1 Financial FD Distress TFD Overall	144	11	92,4
Percentage	16	139	88,5
			90,4

Source: Data processed using SPSS

Table 4 above represents two predictive values of financial anxiety conditions (1), the dependent variable in this instance, rather than financial anxiety situations (0), whereas the line displays the subject variable's actual observed values for the economic hardship circumstances (1) rather than financial hardship conditions (0). The results of Table 4.4 show that in the column, the companies' forecasts that are not financial distress are 16 companies, while the observations are 155 companies or have a prediction accuracy of 92.4%. While companies experiencing financial distress are predicted as many as 139 companies from observations, as many as 155 have a prediction accuracy of 88.5%. Thus, the overall prediction accuracy result is 90.4%.

B) Discussion

The analysis's findings indicate that DER has little bearing on the organization's economic distress situation. This is evidenced by the results of DER testing with a significance level of 0.110 (>0.05). This means that the hypothesis that DER affects financial distress in public manufacturing companies in Indonesia is rejected. Debt proxied with DER cannot cause the company to experience financial distress. It follows that DER is unable to forecast a company's financial difficulties. A comparison of total debt allocated by company capital is called DER. The DER ratio shows how much of a company's capital is financed by debt. In order to increase profits, businesses seeking funding will select low-risk funding sources and enhance corporate management.

For the value of Cox and Snell R square of 0.629 or 62.9% and Nagelkerke R square of 0.726 or 72.6%, it means that the influence of the DER variable on financial distress shows a figure of 72.6%, while for the remainder is affected by factors not included in the research of 27.4% (100% - 72.6%). This study used a 95% confidence level for significance. Meanwhile, in companies experiencing financial distress, it is predicted that as many as 139 companies from 155 observations have a prediction accuracy of 88.5%. Thus, the overall prediction accuracy result is 90.4%.

IV. CONCLUSION

The purpose of this research is to determine if financial leverage affects economic distress. The analysis was performed using linear regression. The analysis's findings indicate that the financial distress state of manufacturing firms stated in the IDX is not significantly impacted by their financial leverage. The effect of the DER variable on financial distress showed a figure of 72.6%, while for the rest, it was influenced by variables outside the study of 27.4% (100% - 72.6%). This study used a 95% confidence level for significance. Meanwhile, in companies experiencing financial distress, it is predicted that as many as 139 companies from 155 observations have a prediction accuracy of 88.5%. Thus, the overall prediction accuracy result is 90.4%.

This study used only one index to measure the group of companies that experienced financial distress or did not experience financial hardship. This study deals with financial distress. In this research, negative profit was the only measure used to determine categories. In addition, this study only discusses manufacturing companies, so it does not compare with other types of industries. For example, if a non-manufacturing company is truly a representative issuer on the Indonesia Stock Exchange, then future studies should use flow-based financial hardship criteria and test manufacturing and non-manufacturing companies so that there is a better comparison.

V. REFERENCES

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