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# The Influence of Company Size, Sales Growth and Leverage on Financial Distress

(Empirical Study on Technology Sector Companies Listed on the Indonesia Stock Exchange for the Period 2021-2023)

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# Abstract

This research explores the relationship between financial vulnerability and three key corporate metrics, organizational magnitude, revenue expansion, and debt ratio, specifically examining technology enterprises registered on the Indonesian Securities Market from 2021 through 2023. The investigation treats organizational magnitude, revenue expansion, and debt ratio as predictor variables, with financial vulnerability serving as the outcome measure. The researchers employed a numbers-based analytical framework. The target population encompassed technology industry corporations listed on the ISM throughout the three-year period under scrutiny. Employing criterion-based selection methods, researchers identified 20 appropriate corporations for comprehensive evaluation. Statistical calculations utilized multiple correlation techniques through IBM's analytical software platform (SPSS v27). All numerical information was sourced secondarily via the Indonesian Securities Market's digital repository. The analytical outcomes reveal that organizational magnitude, revenue expansion, and debt ratio collectively demonstrate statistically meaningful correlation with financial vulnerability. Moreover, each individual factor, organizational magnitude, revenue expansion, and debt ratio, exhibits its own distinctive relationship with corporate financial vulnerability.

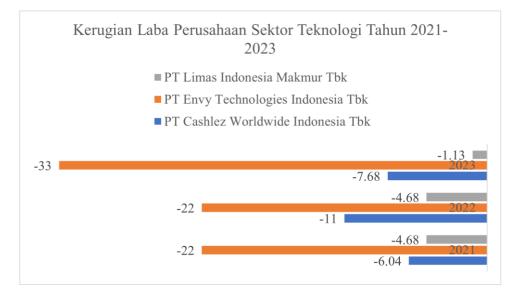
Keywords: financial distress, company size, sales growth, leverage

# Introduction

The rapid development of the technology sector in Indonesia, especially in the fields of digital applications, e-commerce, and internet-based services, has become one of the main pillars of national economic transformation. (Farooq et al., 2023) This sector has experienced significant growth, along with the increasing use of technology in everyday life, especially after the COVID-19 pandemic which drove a massive shift towards digitalization. (Abdu,

### 2022)

However, this growth does not necessarily guarantee the financial stability of the companies in it. Experiencing a decline of 42.61%, the technology sector index on the Indonesia Stock Exchange showed a notable downturn annually (YoY) from the end of 2021 to 2022, becoming the sector with the largest decline that year (IndoPremier, 2023). This decline was caused by a spike in inflation and a monetary policy that tightened interest rates, which ultimately increased the burden of corporate debt and triggered the potential for *financial distress*. (Ariff et al., 2023)



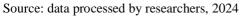


Figure 1. 1Company Profit Movement Graph

The impact of inflation on stocks is also indicated by a decline in corporate profits. Figure 1. shows technology companies experiencing symptoms of financial distress. This can be seen from the condition of several technology issuers who experienced consecutive losses, falling stock prices, and significantly increasing debt burdens. For example, PT Cashlez Worldwide Indonesia Tbk, PT Envy Technologies Indonesia Tbk, and PT Limas Indonesia Makmur Tbk were reported to have experienced losses for three consecutive years, reflecting the potential for serious *financial distress (IDX, 2023)*.

In line with this, the decline in profits of technology companies was also felt by large companies such as GoTo and Blibli, which continued to record losses, accompanied by asset reductions, investment sales, and mass layoffs. GoTo recorded a loss of IDR 40.4 trillion in 2022 and experienced a decrease in goodwill of IDR 78 trillion after releasing Tokopedia (Warta EQ, 2024). Meanwhile, Blibli posted a loss of IDR 5.53 trillion with asset depreciation of up to 23.45% due to debt payments to several large banks and the release of investments in GoTo shares (Warta Ekonomi, 2023).

This phenomenon indicates structural pressures in the technology sector influenced by various external and internal factors, including high leverage (the level of corporate debt) which can increase interest expenses and the risk of default, large company size does not

necessarily guarantee financial stability, and stagnant sales growth reflects low competitiveness and long-term revenue prospects. (Isayas, 2021)

This research aligns with prior studies as it offers deeper insights into the impact of firm size, sales growth, and leverage on financial distress. The novelty of this study lies in its focus on a different research subject, technology sector companies listed on the Indonesia Stock Exchange. This particular sector was selected due to the fact that much of the existing literature has primarily examined the manufacturing and banking industries, with limited exploration into how these variables interact within the post-pandemic technology landscape. Consequently, this study aims to deliver a more context-specific empirical contribution by analyzing the causes of financial distress in a sector that is not only rapidly expanding but also grappling with intricate financial challenges. (Park & Choi, 2023)

## **Literature Reviews**

## Signal Theory

In the context of financial distress, signaling theory plays a crucial role. Introduced by Ross (1977), this theory suggests that management can deliver signals to external stakeholders, providing insights into the firm's health and outlook. These signals are typically embedded in the financial information shared by the company. This information, such as financial reports and other performance indicators, is used to reduce information asymmetry between managers and investors. In the context of *financial distress* (Alshahrani et al., 2023), declining financial conditions are a negative signal for investors, while healthy financial growth and structure are considered positive signals.

# Agency Theory

Agency theory was developed by Jansen and Meckling (1976) which states that agency theory describes the relationship between the owner (principal) and the manager (agent), where the agent is trusted to manage the company according to the interests of the principal. This relationship creates a separation between ownership and control, which has the potential to cause problems due to information asymmetry, the agent knows the condition of the company better than the principal (Nuswantara et al., 2023). To reduce the potential for conflict, agents need to provide transparent financial reports as a form of accountability for their performance. In the context of *financial distress*, this theory explains that inefficient or non-transparent managerial decisions, such as excessive use of debt without good risk management, can increase the likelihood of a company experiencing financial difficulties.

# Company Size

A company's size, often measured by the total assets it owns, influences its financial stability. Faldiansyah et al. (2020) suggest that larger firms have better opportunities to diversify, making them less susceptible to bankruptcy.

Size = Ln (total asset)

# Sales growth

Sales growth is a metric that evaluates and reports on a company's sales development by examining its growth patterns. Sales growth demonstrates the effectiveness of previous investment periods and can serve as a predictive indicator for forecasting future sales performance (*AJ Rachmawati & Suprihhadi*, 2021).

 $Pertumbuhan Penjualan = \frac{\text{Penjualan Tahun}_t - \text{Penjualan Tahun}_{t-1}}{\text{Penjualan Tahun}_{t-1}}$ 

# Leverage

Leverage describes how a company uses debt financing for its operations, including both short and long-term debt obligations (Putri & Mulyani, 2019). It is typically quantified through ratios that show the percentage of company assets financed through debt. This research employs the Debt to Asset Ratio as the leverage variable, which demonstrates the relationship between a company's total debt and its total assets. This ratio can be determined using the following formula:

 $DAR = \frac{Total\ Liabilities}{Total\ Asset}$ 

## **Financial Distress**

According to Baros et al. (2022), financial distress, assessed in this study using the Modified Altman Z-Score model (1995), denotes a financial downturn phase preceding bankruptcy or liquidation. It becomes evident when a firm cannot generate or access adequate funds to satisfy its due liabilities. (Kalbuana et al., 2022)

Z" = 6,56X1 + 3,26X2 + 6,72X3 +1,05X4

# Hypothesis

In reference to the conceptual framework, the researcher develops the following alternative hypothesis:

- H1 : Company size, sales growth and leverage have a simultaneous effect on financial distress.
- H2 : Company size has an effect on financial distress.
- H3 : Sales growth has an effect on financial distress
- H4 : Leverage has an effect on financial distre

## **Research Method**

This research employs secondary data sources, which Sekaran & Bougie (2017) define as information gathered from pre-existing sources. These data are extracted from yearly

financial statements and records available through the Indonesia Stock Exchange (IDX). The study utilizes multiple linear regression analysis, conducted through SPSS software - a crucial tool for data processing and analysis in quantitative research.

As defined by Sekaran & Bougie (2017), a sample represents a subset of a population, functioning as a data source for research purposes. This study focuses on technology companies listed on the Indonesia Stock Exchange (IDX) between 2021 and 2023 as its population. The research employs a purposive sampling method for participant selection.

For data analysis, the study implements multiple linear regression through SPSS software. This analytical approach serves two primary purposes: to establish the relationship direction between dependent and independent variables, and to forecast dependent variable values based on fluctuations in independent variables (Ghozali, 2018).

$$\mathbf{Y} = \boldsymbol{\alpha} + \boldsymbol{\beta_1} \ \mathbf{X_1} + \boldsymbol{\beta_2} \ \mathbf{X_2} + \boldsymbol{\beta_3} \ \mathbf{X_3} + \mathbf{e}$$

Information:

Y	= Financial Distress
α	= Regression constant
β1 - β3	= Regression coefficient
X1	= Company Size
X2	= Sales Growth
X3	= Leverage
e	= Standard error

## Results

**Descriptive Statistics** 

	Ν	Minimum	Maximum	Mean	Std. Deviation
UKURAN PERUSAHAAN	52	24.72	31.43	27.8163	1.69819
PERTUMBUHAN PENJUALAN	52	63	17.84	.5885	2.58205
LEVERAGE	52	.05	.98	.3660	.23407
FINANCIAL DISTRESS	52	-1.49	28.02	6.4542	4.61758
Valid N (listwise)	52				

# Descriptive Statistics

As stated by Ghozali (2018), descriptive statistics offer a thorough representation of data through multiple quantitative measurements such as mean, standard deviation, variance, maximum and minimum values, sum, range, along with kurtosis and skewness. The descriptive analysis was performed using IBM SPSS version 27 for Windows, with the following results.

The table above presents the results of descriptive statistics of this study. The data used covers the period 2021-2023 with an initial observation of 60 data. However, after identifying and eliminating outliers using the SPSS 27 analysis tool, the amount of data that can be

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processed becomes 52 data. Data points that exhibit distinct characteristics and deviate significantly from other observations, presenting extreme values in single or multiple variables, are known as outliers. According to Ghozali (2018), these anomalies can be identified through methods such as z-score analysis or casewise diagnostics. The process of addressing outliers involves various approaches, including data augmentation, transformation, or elimination of extreme values. In this study, initial testing revealed that several variables failed to meet the classical assumptions, showing non-normal distribution and heteroscedasticity issues. Consequently, researchers implemented outlier testing procedures. Through this process, the original dataset of 60 entries was refined to 52 observations, which then constituted the final research sample.

According to the statistical analysis, with a total sample size of 52, the descriptive statistics including minimum, maximum, mean, and standard deviation for each variable are detailed below:

1. Financial Distress

The financial distress indicator shows a minimum value of -1.49 and reaches a maximum of 28.02. The calculated mean stands at 6.4542, with a standard deviation of 4.61758.

2. Leverage

For the leverage metric, the data ranges from a minimum of 0.05 to a maximum of 0.98. The mean value is recorded at 0.3660, accompanied by a standard deviation of 0.23407.

3. Sales Growth

Examining the sales growth parameter, values range from a minimum of -0.63 to a maximum of 17.84. The arithmetic mean is calculated at 0.5885, while the standard deviation amounts to 2.58205.

4. Company Size

Regarding company size measurements, the data exhibits a minimum value of 24.72 and a maximum of 31.43. The mean value is established at 27.8163, with a standard deviation of 1.69819.

## **Normality Test**

The normality test serves to establish whether the relationship between dependent and independent variables follows a normal distribution pattern. A regression model is considered effective when its data distribution is normal or approximates normality (Ghozali, 2018).

			Unstandardiz ed Residual
N			52
Normal Parameters <sup>a,b</sup>	Mean		.0000000
	Std. Deviation		1.76862553
Most Extreme Differences	Absolute		.093
	Positive	.072	
	Negative		093
Test Statistic			.093
Asymp. Sig. (2-tailed) <sup>c</sup>			.200 <sup>d</sup>
Monte Carlo Sig. (2-	Sig.		.316
tailed) <sup>e</sup>	99% Confidence Interval	Lower Bound	.304
		Upper Bound	.328

#### One-Sample Kolmogorov-Smirnov Test

Based on the table, analysis of normality using the one sample Kolmogorov-Smirnov test, which yielded a Monte Carlo significance value (2-tailed) of 0.316 (> 0.05), indicates that the data follows a normal distribution. This conclusion is drawn from the examination of 52 research samples.

## **Autocorrelation Test**

The purpose of autocorrelation testing is to examine whether correlations exist between error disturbances in the current period (t) and previous period (t-1) within a linear regression model. The presence of such correlation indicates an autocorrelation issue. This phenomenon typically occurs because observations collected sequentially over time tend to be interconnected. For a regression model to be considered robust, it must be free from autocorrelation. According to Ghozali (2018), the Durbin Watson test serves as an effective method for detecting autocorrelation, following these criteria:

- 1. When the DW value falls under -2 (DW < -2), positive autocorrelation is present
- 2. Autocorrelation is absent when the DW value lies between -2 and +2, expressed as -2 < DW < +2
- 3. When the DW value exceeds +2 (DW > +2), negative autocorrelation is detected

# Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.924 <sup>a</sup>	.853	.844	1.82306	1.558

a. Predictors: (Constant), LEVERAGE, PERTUMBUHAN PENJUALAN , UKURAN PERUSAHAAN

b. Dependent Variable: FINANCIAL DISTRESS

# **Multicollinearity Test**

Multicollinearity assessment aims to identify potential correlations among predictor variables within the regression framework. According to Ghozali (2018), an effective regression model should demonstrate independence between its predictor variables. The findings of the multicollinearity analysis are presented in the subsequent table:

			Coeffici	ents				
		Unstandardize	d Coefficients	Standardized Coefficients			Collinearity	Statistics
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-1.406	4.481		314	.755		
	UKURAN PERUSAHAAN	.426	.163	.157	2.611	.012	.849	1.177
	PERTUMBUHAN PENJUALAN	1.071	.106	.599	10.150	<.001	.878	1.139
	LEVERAGE	-12.619	1.154	640	-10.932	<.001	.893	1.120

# Coefficients<sup>a</sup>

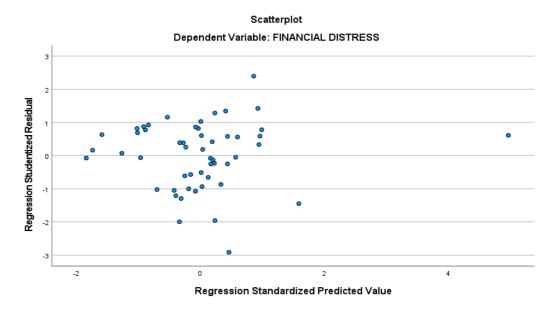
a. Dependent Variable: FINANCIAL DISTRESS

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The analysis reveals that all independent variables exhibit tolerance values exceeding 0.10. Furthermore, the computed variance inflation factor (VIF) values for all predictor variables remain below 10. These results indicate the absence of multicollinearity among the independent variables in the regression model.

### **Heteroscedasticity Test**

The heteroscedasticity evaluation seeks to determine whether the regression model displays variance inconsistency in residuals across observations. As noted by Ghozali (2018), optimal regression models should be free from heteroscedasticity, which can be assessed through scatterplot analysis. The heteroscedasticity test results are illustrated below:



The scatterplot visualization demonstrates that data points are distributed in a random pattern, dispersed both above and below zero on the vertical axis. This distribution pattern suggests that the regression model does not exhibit heteroscedasticity, thus meeting the assumption of homoscedasticity required for reliable regression analysis.

## **Multiple Linear Regression Test**

Multiple regression analysis seeks to establish the relationship direction between dependent and independent variables, while also predicting dependent variable values when independent variable values increase or decrease (Ghozali, 2018). The following results were obtained using IBM SPSS version 27 software:

		Coefficients					
		Unstandardize	d Coefficients	Standardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	-1.406	4.481		314	.755	
	UKURAN PERUSAHAAN	.426	.163	.157	2.611	.012	
	PERTUMBUHAN PENJUALAN	1.071	.106	.599	10.150	<.001	
	LEVERAGE	-12.619	1.154	640	-10.932	<.001	

Coefficie	
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. a

a. Dependent Variable: FINANCIAL DISTRESS

The table presented above reveals that the study's multiple linear regression equation can be expressed as:

$$Y = -1.406 + 0.426X1 + 1.071X2 - 12.619X3 + e$$

The interpretation of this multiple linear regression equation is as follows:

- 1. A constant value of -1.406 indicates that when all independent variables (Company Size, Sales Growth, and Leverage) equal zero, the dependent variable (Y) of financial distress stands at -1.406.
- 2. For the Company Size variable (X1), the regression coefficient shows 0.426 with a positive correlation. This indicates that an increment of 1 point in Company Size (X1) leads to a 0.426-point increase in financial distress, independent of other variables.
- 3. Regarding the Sales Growth variable (X2), its regression coefficient is 1.071, demonstrating a positive relationship. This means a 1-point increase in Sales Growth (X2) corresponds to a 1.071-point rise in financial distress, holding other factors constant.
- 4. The Leverage variable (X3) exhibits a regression coefficient of -12.619, showing a negative correlation. This implies that for every 1-point increase in Leverage (X3), financial distress decreases by 12.619 points, assuming all other factors remain unchanged.

## F Statistic Test

To assess the collective impact to determine the collective impact of independent variables on the dependent variable, the F statistical test, also referred to as the simultaneous test, is utilized by researchers. Ghozali (2018) states that specific criteria guide the interpretation of F test results: when the significance value falls below 0.05, this signifies that all independent variables together exert influence on the dependent variable. Alternatively, if the significance value exceeds 0.05, this suggests that the independent variables do not collectively affect the study variables. The following table presents the F test results showing how the variables of company size, sales growth, and leverage jointly influence the financial distress variable:

			ANOVA <sup>a</sup>			
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	927.894	3	309.298	93.063	<.001 <sup>b</sup>
	Residual	159.530	48	3.324		
	Total	1087.424	51			
		1087.424				

a. Dependent Variable: FINANCIAL DISTRESS

b. Predictors: (Constant), LEVERAGE, PERTUMBUHAN PENJUALAN , UKURAN PERUSAHAAN

With reference to the table presented, the simultaneous influence of leverage, company size, and sales growth on financial distress is statistically significant, as demonstrated by the F-test results. The obtained F-value of 93.063 is greater than the critical F-table value of 2.80 (df1 = 3, df2 = 52-3-1 = 48), while the significance level of 0.001 falls below 0.05. (**H**<sub>1</sub> **accepted**)

# Statistical Test t

		Coefficients <sup>a</sup>					
		Unstandardize	d Coefficients	Standardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	-1.406	4.481		314	.755	
	UKURAN PERUSAHAAN	.426	.163	.157	2.611	.012	
	PERTUMBUHAN PENJUALAN	1.071	.106	.599	10.150	<.001	
	LEVERAGE	-12.619	1.154	640	-10.932	<.001	

a. Dependent Variable: FINANCIAL DISTRESS

According to Ghozali (2018), the t test, as a statistical method, is employed to assess how individual independent variables impact the dependent variable. The table below demonstrates the t test outcomes showing how company size, leverage, and sales growth variables affect financial distress:

According to the statistical analysis presented in the preceding table, the t-test findings demonstrate the following relationship between the independent and dependent variables:

- value of the company size variable proxied by total assets against *financial distress* is 2.611 with a significance value of 0.012 <0.05, indicating that the company size variable has a positive effect on *financial distress*. Based on the results of this hypothesis testing, it can be concluded that H2 is accepted
- The t-value of the sales growth variable on *financial distress* is 10.150 with a significance value of 0.001 <0.05, indicating that the sales growth variable has a positive effect on *financial distress*. Based on the results of this hypothesis testing, it can be concluded that H3 is accepted
- 3. The t-value of the *leverage variable* on *financial distress* is -10.932 with a significance value of 0.001 <0.05, indicating that the *leverage variable* has a negative effect on *financial distress*. Based on the results of this hypothesis testing, it can be concluded that **H4** is **accepted**.

# **Coefficient of Determination Test**

The adjusted R-squared ( $R^2$ ) in a multiple regression analysis indicates the extent to which the independent variables (X1, X2,...Xn) collectively influence the dependent variable (Y). This statistical measure demonstrates the model's explanatory power by showing how much variance in the dependent variable can be attributed to the independent variables under consideration (Ghozali, 2018). Table 4.10 presents the coefficient of determination results:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.924 <sup>a</sup>	.853	.844	1.82306	1.558

Model Summary<sup>b</sup>

a. Predictors: (Constant), LEVERAGE, PERTUMBUHAN PENJUALAN , UKURAN PERUSAHAAN

b. Dependent Variable: FINANCIAL DISTRESS

Based on the coefficient of determination analysis shown in table 4.10, the Adjusted R<sup>2</sup> value is calculated at 0.844, equivalent to 84.4%. This indicates that the variation in financial distress (dependent variable) can be explained by the three independent variables - company size, sales growth, and leverage - to the extent of 84.4%. The remaining 15.6% of the variance is attributable to other variables not included in this regression model.

### Discussion

### The Effect of Company Size, Sales Growth and Leverage on Financial Distress

The statistical analysis revealed that Fcount exceeded Ftable (93.063 > 2.80; df1 = 3, df2 = 48) with a p-value of 0.001, which falls below the threshold of 0.05. These findings confirm that financial distress is collectively influenced by firm size, sales growth, and leverage, supporting the acceptance of H1. This collective relationship demonstrates how these three variables work in concert to shape a company's financial health. While substantial organizational size and robust sales growth typically generate favorable market signals, high leverage levels can alter stakeholders' perceptions of financial sustainability, particularly when debt obligations become challenging to fulfill.

According to signaling theory, sales expansion serves as a favorable indicator of corporate prospects to investors. However, when this growth is coupled with unsustainable debt accumulation, both investors and creditors typically exercise increased caution due to elevated default risks. On the other hand, agency theory states that the larger the company and the higher the use of leverage, the greater the potential for a conflict of interest between management and shareholders. This conflict can have a negative impact on financial decision-making, thereby increasing the risk of *financial distress*. Therefore, companies need to manage size, sales, and leverage in a balanced manner to avoid a potential financial crisis.

## The Effect of Company Size on Financial Distress

Analysis of firm size, measured through total assets, yielded a p-value of 0.012 (p < 0.05). This statistical significance supports the second hypothesis (H2), confirming the impact of organizational size on financial distress. Organizations with substantial asset bases typically demonstrate enhanced capabilities in risk diversification, management, and debt servicing. This observation aligns with signaling theory's premise that larger enterprises command greater credibility among stakeholders due to their revenue-generating capacity and financial resilience (Ross, 1977; Rachmawati & Retnani, 2020). In addition, from an agency theory perspective, large companies tend to receive stricter supervision from stakeholders, thus encouraging management to be more careful and responsible in decision making (Faldiansyah et al., 2020).

Large company size generally provides various advantages such as operational efficiency, business diversification, ease of obtaining financing, and resilience to economic turmoil. This study is supported by the findings of Setyowati & Sari Nanda (2019) which state that large-scale companies generally have a strong capital structure and the ability to generate greater profits. High total assets give a positive signal to creditors and investors, increasing

their confidence in providing financial support. Therefore, large companies tend to have a lower risk of *financial distress*. However, the results of this study contradict the findings of Efendi et al. (2023), Suryani (2020), and Susanti (2021), which state that company size has no effect on *financial distress*, indicating that the size of assets does not always reflect the level of financial difficulties faced by the company.

# The Effect of Sales Growth on Financial Distress

Regarding sales growth analysis, results indicated a p-value of 0.001 (p < 0.05), supporting the third hypothesis (H3) and confirming its influence on financial distress. Sales growth serves as a crucial metric for assessing a company's revenue enhancement capabilities across time periods, reflecting the success of commercial strategies. Enhanced sales growth correlates with increased profit potential, ultimately contributing to stronger financial stability.

From the perspective of signaling theory, high sales growth provides a positive signal to investors and creditors regarding the company's business prospects (Handayani et al., 2019). This makes it easier for companies to obtain external financing because they are considered capable of meeting their financial obligations. Meanwhile, according to agency theory, increased sales growth indicates that managers have carried out their functions management properly, thus creating added value for the company (Utami & Taqwa, 2023). The results of this study also show that companies with consistently positive sales growth reflect good and stable operational performance, which has an impact on the company's ability to avoid short-term and long-term financial pressures. Therefore, the higher the sales growth, the less likely the company is to experience financial distress. However, these results differ from the findings of Suryani (2020) and Utami & Taqwa (2023) which state that sales growth does not have a significant effect on financial distress.

# The Effect of Leverage on Financial Distress

With a significance value of 0.001, which is below the threshold of 0.05, the leverage variable test shows statistical significance. This allows us to conclude that leverage has a meaningful effect on financial distress. The fourth hypothesis (H4), stating that leverage influences financial distress, is therefore supported by the data. As a financial metric, leverage measures the relative proportion of debt that a company employs to fund its operations (Faldiansyah et al., 2020). High debt levels can increase the company's interest burden and financial obligations, which in the long term can worsen financial conditions and trigger *financial distress*. A high leverage ratio also indicates that the company is more dependent on external funding, which increases the risk in the event of a decline in revenue or economic pressure.

From a signaling theory perspective, high leverage indicates a negative signal to external parties because it reflects the company's dependence on debt financing. This can reduce the trust of investors and creditors, making it difficult for the company to obtain additional capital (Rangga et al., 2025). Meanwhile, based on agency theory, managerial decisions that lead to excessive debt structures can create conflicts of interest between managers and owners, and increase the risk of financial failure (Suryani Putri & NR, 2020). When a company's debt exceeds its assets, the potential for difficulty in paying obligations

becomes greater. A high leverage ratio will also make the company less trusted by external parties, such as creditors, because the level of protection for refunds is low (Agustini & Wirawati, 2019). These results are in line with the findings of Utami & Taqwa (2023) and Rangga et al. (2025), but contradict the research of Faldiansyah et al. (2020) which states that leverage has no significant effect on *financial distress*.

### Conclusion

The research endeavors to establish empirical evidence regarding the influence of three key factors - leverage, firm size, and sales expansion - on financial hardship among technology-focused enterprises registered with the Indonesia Stock Exchange during 2021-2023. The findings revealed that when analyzed collectively, these three variables demonstrated a significant impact on financial distress. Individual analysis further confirmed that each component - leverage, firm size, and sales growth - independently affected financial distress conditions. Nevertheless, several constraints were identified in this research, specifically: the reliance on secondary data sources with potential accuracy limitations, the restricted sample size encompassing only 20 companies within the technology sector, and the confined number of variables incorporated in the analysis. Given these limitations, recommendations for subsequent researchers, it is advisable to expand the sample coverage not only to the technology sector and consider other variables such as profitability, liquidity, and good corporate governance; for companies, it is important to manage size, sales growth, and leverage optimally to avoid the risk of financial distress; and for investors, it is advisable to pay attention to these three indicators in making investment decisions, because they have an influence on the company's financial health.

## References

- Abdu, E. (2022). Financial distress situation of financial sectors in Ethiopia: A review paper. In *Cogent Economics and Finance* (Vol. 10, Issue 1). https://doi.org/10.1080/23322039.2021.1996020
- Agustini, NW, & Wirawati, NGP (2019). The influence of financial ratios on financial distress of retail companies listed on the 499Indonesia Stock Exchange (IDX). *E-Journal of Accounting*, 26 (1), 251-280.
- Alshahrani, F., Eulaiwi, B., Duong, L., & Taylor, G. (2023). Climate change performance and financial distress. *Business Strategy and the Environment*, 32(6). https://doi.org/10.1002/bse.3298
- Amanda, Y., & Tasman, A. (2019). The Effect of Liquidity, Leverage, Sales Growth and Company Size on Financial Distress in Manufacturing Companies Listed on the Indonesia Stock Exchange (IDX) Period 2. *EcoGen*, 2(number 3), 453–462.
- Ariff, A., Wan Ismail, W. A., Kamarudin, K. A., & Mohd Suffian, M. T. (2023). Financial distress and tax avoidance: the moderating effect of the COVID-19 pandemic. *Asian Journal of Accounting Research*, 8(3). https://doi.org/10.1108/AJAR-10-2022-0347

- Baros, F., Ayem, S., & Prastyatini, S. L. Y. (2022). Pengaruh Likuiditas, Profitabilitas Dan Ukuran Perusahaan Terhadap Risiko Financial Distress Pada Perusahaan Manufaktur. *AKURAT : Jurnal Ilmiah Akuntansi*, *13*(2), 87–105.
- Faldiansyah, AK, Arrokhman, DBK, & Shobri, N. (2020). Analysis of the Effect of Leverage, Company Size, and Cash Flow on Financial Distress. *Bisnis-Net Journal of Economics* and Business, 3 (2), 90-102.
- Farooq, M., Hunjra, A. I., Ullah, S., & Al-Faryan, M. A. S. (2023). The determinants of financial distress cost: A case of emerging market. *Cogent Economics and Finance*, 11(1). https://doi.org/10.1080/23322039.2023.2186038
- Ghozali, Imam (2018). "Application of Multivariate Analysis with IBM SPSS 25 Program." Diponegoro University Publishing Agency: Semarang.
- Handayani, RD, Widiasmara, A., & Amah, N. (2019, September). The effect of operating capacity and sales growth on financial distress with profitability as a moderating variable. In SIMBA: Seminar on Management, Business, and Accounting Innovation (Vol. 1).
- Isayas, Y. N. (2021). Financial distress and its determinants: Evidence from insurance companies in Ethiopia. Cogent Business and Management, 8(1). https://doi.org/10.1080/23311975.2021.1951110
- Kalbuana, N., Taqi, M., Uzliawati, L., & Ramdhani, D. (2022). The Effect of Profitability, Board Size, Woman on Boards, and Political Connection on Financial Distress Conditions. Cogent Business and Management, 9(1). https://doi.org/10.1080/23311975.2022.2142997
- Nuswantara, D. A., Fachruzzaman, D. A., Prameswari, R. D., Suyanto, R. D., Rusdiyanto, R., & Hendrati, I. M. (2023). The role of political connection to moderate board size, woman on boards on financial distress. *Cogent Business and Management*, 10(1). https://doi.org/10.1080/23311975.2022.2156704
- Park, H. J., & Choi, J. (2023). Financial Distress and Audit Report Lags: An Empirical Study in Korea. *Gadjah Mada International Journal of Business*, 25(3). https://doi.org/10.22146/gamaijb.72251
- Putri, N., & Mulyani, E. (2019). Pengaruh Rasio Hutang, Profit Margin Dan Ukuran Perusahaan Terhadap Financial Distress. Jurnal Eksplorasi Akuntansi, 1(4), 1968– 1983. https://doi.org/10.24036/jea.v1i4.189
- Rachmawati, A. J., & Suprihhadi, H. (2021). Pengaruh Likuiditas, Leverage, Dan Sales Growth Terhadap Financial Distress Pada Perusahaan Tekstil Dan Garmen Yang Terdaftar di BEI 2013-2019. Jurnal Ilmu Dan Riset Manajemen, 10(4), 1–17.
- Rachmawati, L., & Retnani, ED (2020). The Effect of Financial Performance and Managerial Ownership on Financial Distress. Journal of Accounting Science and Research (JIRA), 9(3).
- Rangga, TD, Hapsari, I., Santoso, SB, & Santoso, SEB (2025). The Effect of Leverage and Liquidity on Financial Distress with Profitability as a Moderation Perspective. *Al-Muamalat: Journal of Islamic Law and Economics*, 10 (1), 29-48.
- Sekaran, Uma., & Bougie, Roger. (2017). *Research Methods for Business* (6th Edition, Book 1). Salemba Empat: Jakarta.

- Setyowati, W., & Sari, NRN (2019). The Effect of Liquidity, Operating Capacity, Company Size and Sales Growth on Financial Distress (Study on Manufacturing Companies Listed on the IDX in 2016-2017). *Magisma: Scientific Journal of Economics and Business*, 7 (2), 73-84.
- Suryani Putri, D., & NR, E. (2020). The Influence of Financial Ratios, Company Size and Agency Costs on Financial Distress. *Journal of Accounting Exploration*, 2 (1), 2083–2098.
- Suryani. (2020). The Effect of Profitability, Leverage, Sales Growth and Company Size on Financial Distress. *Online Journal of Accountants*, 5 (2), 229-244.
- Susanti, MD (2021). The Effect of Financial Liquidity, Inventory Turnover and Company Size on Financial Distress (Empirical Study on the Chemical Sub-Sector Industry Sector 2018-2020). Journal of Business Economics, Management and Accounting (JEBMA), 1(3), 212-221.
- Utami, YZ & Taqwa, Salma. (2023). The Effect of Leverage, Company Size, Sales Growth, Managerial Ownership and Institutional Ownership on Financial Distress. *Journal of Accounting Exploration (JEA)*, 5(2), 539-552.
- Yusnaini. (2023). The Impact of Tech Winter Era on PT. Goto Gojek Tokopedia Tbk. And Predictive Analysis of Financial Distress Using the Ohlson and Zavgren Models. *Dewantara Accounting*, 7 (2): 130 – 138.