

## Factors Affecting Financial Distress of the Companies in Consumer Cyclical Sector

Indri Sindia Hantika<sup>1</sup>, Cindy Henciana<sup>2</sup>, Tika Septiani<sup>3</sup>

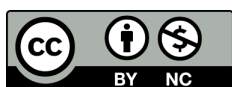
**Abstract.** *If a company cannot face business competition, it will eventually experience losses. Later, this can potentially cause some business entities to face solvency problems. When a business has difficulty making ends meet, it is called financial distress. Previous studies have provided quite mixed results regarding the factors affecting financial distress. For this reason, based on a quantitative approach, this study aimed to determine how liquidity (proxied by the current ratio), leverage (proxied by the debt-to-asset ratio), and company size influence the financial distress of companies in the consumer cyclical sector. This study utilizes secondary data, including annual reports and financial statements obtained from the official website of the Indonesia Stock Exchange (IDX) ([www.idx.com](http://www.idx.com)). The study covers a three-year period, focusing on the financial performance of companies in the consumer cyclical sector. Researchers apply liquidity ratio, leverage ratio, and company size as independent variables and financial distress as the dependent variable. Data processing used regression analysis implemented through IBM SPSS Statistics software version 21, including descriptive statistical tests, classical assumption tests, multiple linear regression analysis, and hypothesis testing. The results of the data analysis show that the liquidity proxied by the current ratio is not related to financial distress. There is no negative correlation between financial distress and the leverage proxied by the debt-to-asset ratio. However, financial distress has a negative correlation with company size. Although this study's results did not confirm two of the three hypotheses identified by the researchers, the financial ratios considered in the work have essential significance for assessing the company's financial condition.*

**Keywords:** *financial distress, liquidity, leverage, company size, consumer cyclicals.*

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<sup>1</sup> **Indri Sindia Hantika**, Faculty of Economics and Business, Swadaya Gunung Jati University, Cirebon, Indonesia. ORCID 0009-0003-0125-1338

<sup>2</sup> **Cindy Henciana**, Faculty of Economics and Business, Swadaya Gunung Jati University, Cirebon, Indonesia. ORCID 0009-0000-4268-1658

<sup>3</sup> **Tika Septiani**, Faculty of Economics and Business, Swadaya Gunung Jati University, Cirebon, Indonesia. ORCID 0009-0003-0688-1208

E-mail: [tikapramana@gmail.com](mailto:tikapramana@gmail.com) (*Corresponding author*)

## Фактори, що впливають на фінансові труднощі компаній у споживчому циклічному секторі

Інді Сіндія Хантіка<sup>1</sup>, Сінді Хенчіана<sup>1</sup>, Тіка Септіані<sup>1</sup>

<sup>1</sup> Університет Свадая Гунунг Джаті, м. Чиребон, Індонезія

**Анотація.** Якщо компанія не здатна впоратися з ринковою конкуренцією, вона зрештою зазнає збитків. Згодом це може призвести до проблем із платоспроможністю. Фінансові труднощі бізнесу – це стан, коли компанія має проблеми з доходами, розрахунками, погашенням боргу, або коли фінансова ситуація стає нестійкою. Попередні дослідження надали досить неоднозначні результати щодо факторів, які впливають на фінансові труднощі. Тому, ґрунтуючись на кількісному підході, це дослідження мало на меті визначити, як ліквідність (виражена коефіцієнтом поточної ліквідності), леверидж (виражений коефіцієнтом боргу до активів) та розмір компанії впливають на фінансові труднощі компаній у споживчому циклічному секторі. У цьому дослідженні використовуються вторинні дані, включаючи річні звіти та фінансову звітність, отримані з офіційного веб-сайту Індонезійської фондової біржі (IDX) ([www.idx.com](http://www.idx.com)). Дослідження охоплює трирічний період, зосереджуючись на фінансових показниках компаній у споживчому циклічному секторі. Дослідники застосовують ліквідність, леверидж та розмір компанії як незалежні змінні, а фінансові труднощі – як залежну змінну. Для обробки даних використовувався регресійний аналіз, реалізований за допомогою програмного забезпечення IBM SPSS Statistics версії 21, включаючи описові статистичні тести, класичні тести припущень, множинний лінійний регресійний аналіз та перевірку гіпотез. Результати аналізу даних показують, що ліквідність, виражена коефіцієнтом поточної ліквідності, не пов'язана з фінансовими труднощами. Немає негативної кореляції між фінансовими труднощами та левериджем, вираженим коефіцієнтом боргу до активів. Однак, фінансові труднощі мають негативну кореляцію із розміром компанії. Хоча результати цього дослідження не підтвердили дві з трьох гіпотез, визначених дослідниками, фінансові коефіцієнти, що розглядаються в цій роботі, мають важливе значення для оцінки фінансового стану компаній.

**Ключові слова:** фінансові труднощі, ліквідність, леверидж, розмір компанії, споживчі циклічні акції.

### INTRODUCTION

The growth in the number of companies every year triggers fierce competition and encourages product innovation to maintain the company's image and operations and experience sustainable profits. However, if a company cannot face business competition, it will eventually experience losses. Later, this can potentially cause some business entities to face solvency problems. When a business has difficulty making ends meet, it is called financial distress.

Creditors and investors need information about the company's financial distress to protect their money because they can gauge a company's solvency using financial distress data. No one wants to invest their money into a company in financial trouble because they feel the company cannot repay their loans or effectively manage investments. Investors use financial ratios calculated based on financial reporting data to assess a company's financial health. Financial statements detail monetary transactions and provide an overall picture of a business's financial health over time. In addition, financial statements are used to make decisions and estimate a company's performance. By examining the company's finances, managers can assess and reduce the likelihood of bankruptcy (Wijaya & Suhendah, 2023).

First, it is worth paying attention to liquidity, which reflects the company's capacity to settle short-term obligations and support its operations. Strong liquidity

reduces a company's likelihood of facing financial distress (Idawati & Wardhana, 2021).

The second important indicator is leverage, which measures a company's level of debt by comparing its debt to its assets. A high leverage ratio in companies is associated with much debt and may cause difficulty paying it back, which puts them at risk of bankruptcy (Isuari & Nurcahyo, 2020). As a result, organizations may find it difficult to manage their debt repayments properly.

Lastly, the company's total assets are a reliable measure of the business's size. Due to increased asset holdings, people tend to see larger companies as more stable and less prone to financial difficulties (Desiana & Diem, 2021).

Companies should check for financial difficulties based on the above-mentioned circumstances, especially if financial statements show a decline in performance. Businesses can prevent any volatility by closely monitoring financial circumstances and acting quickly if necessary.

Since previous studies (Syahputra & Purwanto (2022), Ningrum & Sholihah (2023), Rinaima (2022), and Hidayat et al. (2024)) have shown mixed results, the aim of this study was to determine how such indicators as current ratio, debt to asset ratio and company's size influence financial distress of the companies in consumer cyclical sector.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

In 1973, Michael Spence was the first to introduce signalling theory. According to this hypothesis, businesses often share information with outsiders to enhance their reputation and attract investors who value transparency about the organization's history, current state and projected future performance (Altan & Şimşek, 2023).

The basic idea behind signalling theory is that a company should inform external stakeholders about its financial status. The message can be either favourable or negative news. Bad news can be company losses or a large amount of debt, increasing the likelihood of bankruptcy and financial distress; good news can be strong financial performance, profit announcements, or dividend payments. Companies give positive signals when their financial situation is stable and negative signals when they have losses; this represents the connection between signalling theory and financial crises.

### Financial distress

Septiani et al. (2022) state that when a company has financial challenges due to inadequate working capital management, delays in consumer credit payments, and persistent operating losses, the organization is considered to be experiencing financial difficulties. More broadly, financial strain happens when a business's financial situation is unstable, making it challenging to manage properly. As a result, performance declines, and the company's financial stability deteriorates.

The Springate Model, developed by Gordon Springate in 1978, is a financial analysis tool used to predict the likelihood of corporate bankruptcy. It uses a formula based on four key financial ratios to calculate a "Springate Score," which helps determine if a company is financially healthy or at risk of distress. A Springate Score of below 0.862 indicates financial distress for the organization, while above 0.862 indicates financial stability.

$$\text{Springate or } S - \text{score} = 1,03 x1 + 3,07 x2 + 0,66 x3 + 0,4 x4$$

Where:

- x1= working capital/total assets;
- x2= net profit before interest and taxes/total assets;
- x3= net profit before taxes/current liability;
- x4= sales/total assets.

### Liquidity

The liquidity ratio reflects the capacity of a company to fulfil its immediate financial commitments, especially current obligations (Septiani et al., 2021). Current, quick, and cash ratios are several ratios used to measure the company's liquidity capabilities. A crucial indicator of a business's financial state is the current ratio, which shows how well its current assets are sufficient to settle short-term liabilities. A higher current ratio indicates sound financial health and a lower chance of financial hardship. A lower ratio suggests a greater risk of financial instability due to problems in meeting short-term payments. In order to measure liquidity, this analysis

applies the following formula, which is a proxy for the current ratio (CR).

$$CR = \frac{\text{Current Assets}}{\text{Current Liabilities}} \times 100\%$$

Ningsih & Asandimitra (2023) state that liquidity is how a business can pay off its obligations using available assets. The liquidity ratio is a good metric if a business wants to know how healthy its finances are and whether it can pay its short-term bills. External parties can be warned of possible financial difficulties if the liquidity ratio is low or declining, indicating problems with financial performance. A low liquidity ratio also increases the likelihood of future financial instability and greater debt levels. According to Marsenne et al. (2024), a greater liquidity ratio enhances the capacity to meet financial commitments.

**H1:** Thus, it is assumed that the liquidity ratio affects financial distress.

### Leverage

The leverage ratio indicates the proportion of debt funding utilized to fund the company's activities relative to its equity performance (Muzharoatiningsih & Hartono, 2022). In other words, the leverage ratio shows how effectively the business can meet its liabilities to its total assets. In a healthy financial situation, the money available to the company should exceed its total debt. Several financial ratios are relevant in estimating an organization's leverage, including debt-to-equity and debt-to-assets ratios. A smaller ratio value indicates less likelihood of financial distress, while a larger ratio value indicates greater likelihood of financial difficulty. In this study, we will use the debt-to-asset ratio (DAR), which is calculated using the following formula.

$$DAR = \frac{\text{Total debt}}{\text{Total assets}} \times 100\%$$

A growing debt burden can increase the company's vulnerability to financial problems, especially if debt obligations cannot be met at maturity. Previous research (Fitri & Syamwil (2020), Sari and Murtanto (2024), and Regita et al. (2024)) indicate a close relationship between leverage and financial distress.

**H2:** Thus, it is assumed that the leverage ratio affects financial distress.

### Company size

Total asset data often has a large nominal value, so to ensure it follows a normal distribution, the quantity is converted to a smaller value using the natural logarithm (Mas'ud & Srengga, 2022). Factors such as asset value, stock value, and other quantitative indications that add to the total value of a business are influenced by the company size, which is the scale or standard of the company. A company's ability to meet its future commitments is inversely proportional to the size of its total assets; smaller companies are at greater risk of encountering financial problems. We will use the following equation to determine the company size, which is operationalized as a variable of this research.

$$\text{Company size (SIZE)} = \ln \text{Total assets}$$

Hadi (2022) argues that company size indicates the amount of money and assets used to fund its operations. Consistent with signalling theory, which determines a company's financial health based on the size of its assets, there is a correlation between corporate size and financial distress. Financial distress may be more or less favourable relative to the company's size, capital, and

liquidity. Pratiwi et al. (2023) state that larger firms are less likely to face financial difficulties.

**H3:** Thus, it is assumed that the company size affects financial distress.

Thus, this research applies liquidity ratio, leverage ratio, and company size as independent variables and financial distress as the dependent variable (Figure 1).

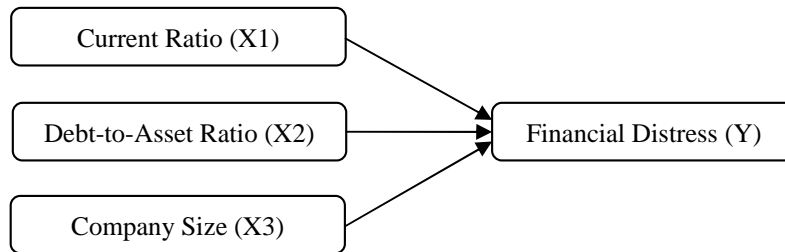


Figure 1. Research theoretical framework

**RESEARCH METHOD**

This study, based on a quantitative approach, aimed to determine how the current ratio, debt-to-asset ratio, and company size influence the financial distress of companies in the consumer cyclical sector. This study utilizes secondary data, including annual reports and financial statements obtained from the official website of the Indonesia Stock Exchange (IDX) (www.idx.com).

The data related to companies in the consumer cyclical sector listed on the IDX from 2021 to 2023 fulfilled specific sampling criteria. Thus, the study covers a three-year period, focusing on the financial performance of companies in the consumer cyclical sector. Table 1 presents the criteria for selecting companies for the purposes of this study.

Table 1. Research sample criteria

No.	Criteria	Does not meet the criteria	Amount
	All companies in the consumer cyclical sector during 2021-2023		154
1.	Companies in the consumer cyclical sector listed on the Indonesian Stock Exchange (IDX) in 2021-2023	(3)	151
2.	Companies in the consumer cyclical sector that have complete data related to the variables studied (data on net profit before tax)	(77)	74
3.	Companies in the consumer cyclical sector that report complete financial statements during 2021-2023	(22)	52
	Total companies that meet the criteria as a sample		52
	Year of research		3
	Total sample data (three years x total companies)		156

Source: www.idx.com Data Processed (2025).

This research applies regression analysis implemented through IBM SPSS Statistics software version 21, including descriptive statistical tests, classical assumption tests, multiple linear regression analysis, and hypothesis testing. Regression analysis calculates the likelihood of factors under study and uses their significance levels to evaluate their impact.

**RESULTS AND DISCUSSION**

**Descriptive statistics**

A statistical approach known as descriptive statistics examines the collected data and then presents it in a way that facilitates processing, understanding, and interpretation. This approach summarizes the factors under study.

Descriptive statistical tests yielded findings from 156 data points taken from the whole study sample, as shown in Table 2.

**Table 2. Descriptive statistics test results**

	N	Lowest	Highest	Average	Std. Deviation
CR	156	.227	24.887	3.48783	3.631804
DAR	156	.038	.842	.34997	.197622
SIZE	156	15.168	31.212	26.60966	3.820066
FD	156	.030	5.173	1.19686	.823488
Valid N (Listwise)	156				

Source: SPSS Output Data Processed (2025).

The current ratio (CR), a measure of liquidity, ranges from 0.227 at the lower bound to 24.887 at the upper bound, with 3.48783 as the mean and 3.63184 as the standard deviation. The Debt-to-Asset Ratio (DAR), a measure of leverage, ranges from 0.038 at the lower bound to 0.842 at the upper bound, with a mean of 0.34997 and a standard deviation of 0.197622. Finally, the Size variable, which measures the company size, ranges from 15.168 to 31.212 with a mean of 26.60966 and a standard deviation of 3.820066. Financial distress (FD) ranges from a low of 0.030 to a high of 5.173 with a mean of 1.19686 and a standard deviation of 0.823488, according to a descriptive statistical test run on 156 data points. Since a financial distress rating higher than 0 results in the company being in financial distress, this data implies the average company included in this study is in financial distress.

**Classical assumption test**

According to Ghozali (2018), the classical assumption test guarantees that regression coefficients are consistent, impartial, and calculated appropriately. To obtain a valid and accurate regression equation, it is necessary to check whether the regression model meets the basic assumptions. This study uses a standard set of tests for classical assumptions, such as normality, multicollinearity, heteroscedasticity, and autocorrelation.

Data normality in Table 3 was tested through the non-parametric One-Sample Kolmogorov-Smirnov Test. Data is declared normally distributed if the significance value (Sig.) exceeds 0.05. Conversely, a value of Sig. <0,05 indicates that the data is not normal. Table 3 shows the value of Asymp. Sig. (2-tailed) 0.126. So, the data is normally distributed because 0.126 > 0.05.

**Table 3. Normality test results**  
**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		156
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	.78953463
Most Extreme Differences	Absolute	.094
	Positive	.094
	Negative	-.061
Kolmogorov-Smirnov Z		1.175
Asymp. Sig. (2-tailed)		.126

a. Test distribution is Normal.

b. Calculated from data.

Source: SPSS Output Data Processed (2025).

**Multicollinearity Test**

As part of classical assumption testing, multicollinearity is tested to discover a substantial correlation among independent variables in the regression model. Multicollinearity conditions are considered not to occur if the Variance Inflation Factor (VIF) value is below 10 or the tolerance value is above 0.01, and vice versa.

**Table 4. Multicollinearity test results**  
Coefficients<sup>a</sup>

Model		Collinearity Statistics	
		Tolerance	VIF
1	CR	.666	1.503
	DAR	.667	1.498
	SIZE	.996	1.004

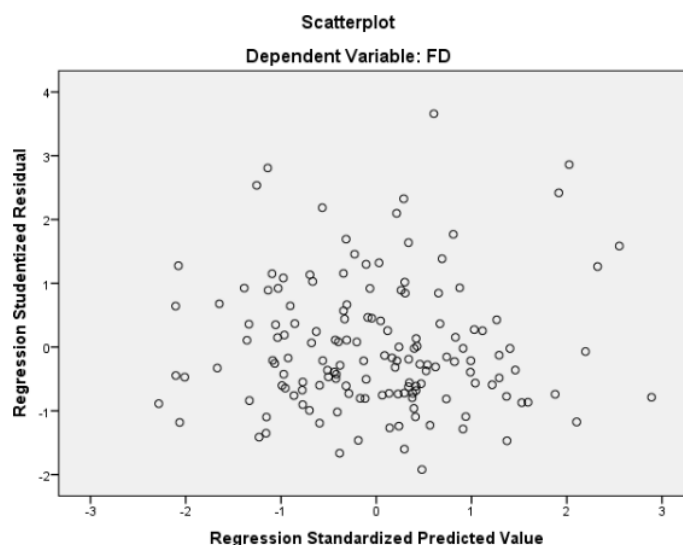
a. Dependent Variable: FD

Source: SPSS Output Data Processed (2025).

Table 4 shows the results of the multicollinearity test, which shows the following values for the variance inflation factor (VIF) for the three research variables: the VIF values for current ratio (CR), debt-to-asset ratio (DAR), and company size (SIZE) are 1.503, 1.498, and 1.004, respectively. The VIFs of all four variables are below 10, which indicates the absence of multicollinearity according to these values. Furthermore, when looking at the tolerance values for these four variables, we find that CR, DAR, and SIZE all have values of 0.666, 0.667, and 0.996. This study does not experience multicollinearity because all tolerance values are >0.01.

**Heteroscedasticity test**

Classical assumption testing includes the heteroscedasticity test, which looks for evidence of heteroscedasticity conditions that can jeopardize the reliability of linear regression model results or constant residual variances. The scatter plot test was used to evaluate heteroscedasticity in this study. Assuming the data points are randomly distributed above <0 on the Y-axis, then the scatter plot reveals no discernible pattern; the null hypothesis (H<sub>0</sub>) indicates heteroscedasticity's absence. In a unique and organized pattern, the dots create a wave-like or elongated and then narrowed pattern, which is visible in the scatter plot, indicating heteroscedasticity according to the alternative hypothesis (H<sub>1</sub>).



**Figure 2. Heteroscedasticity test results**

Source: SPSS Output Data Processed (2025).

The scatter graph displays data points that are randomly scattered on either side around the zero line on the Y-axis without exhibiting any specific pattern formation (Figure 2). This indicates the absence of heteroscedasticity in the relationship between this study's dependent and independent variables. Therefore, the alternative hypothesis (H<sub>1</sub>) is not supported, confirming the null hypothesis (H<sub>0</sub>).

**Autocorrelation test**

As a component of the classic assumption test, the autocorrelation test determines whether there is a significant relationship between successive data points

that have been collected. This test is designed to identify cases of autocorrelation in the research regression model data. It is indicated that there is no autocorrelation if the upper limit value (dU) is smaller than Durbin-Watson (DW) is smaller than 4 minus the upper limit (4 - dU). The presence of Positive autocorrelation occurs when the autocorrelation coefficient is greater than zero and the DW value is lower than the lower bound (dL). Negative autocorrelation is detected when the Durbin-Watson (DW) value lies between 4 and (4 - dL), in other words, greater than or equal to 4 but less than (4 - dL). However, the test results become inconclusive if the DW value is between (4 - dU) and (4 - dL).

**Table 5. Autocorrelation test results**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.284 <sup>a</sup>	.081	.063	.797288	1.809

a. Predictors: (Constant), SIZE, DAR, CR

b. Dependent Variable: FD

Source: SPSS Output Data Processed (2025).

## Finance & Taxation

With a total of 156 data points, this study used three variables. The Durbin-Watson autocorrelation test findings show an upper limit (dU) of 1.7776 and a value of 2.2224 when 4 - dU is subtracted. In Table 5, we can see that the Durbin-Watson test yields a value of 1.809. Thus, the Durbin-Watson (DW) test is in the range of  $1.7776 < 1.809 < 2.2224$  (4 - DU), which indicates the absence of autocorrelation in this study.

### T-test

We used partial testing (T-test) to test the individual effect of each independent variable on financial distress

as the dependent variable. According to Table 6, the liquidity ratio (CR) shows a t-value of 1.477 with a significance of 0.142 ( $p > 0.05$ ). This indicates that the liquidity ratio partially does not correlate with financial distress. The leverage ratio (DAR) shows a t-value of -1.082 with a significance level of 0.281 ( $p > 0.05$ ), which means that the leverage ratio partially does not correlate with financial distress. Finally, company size (SIZE), with a t-value of -2.525 and a significance level of 0.013 ( $p < 0.05$ ), partially contributes negatively, or there is a correlation between company size and financial distress.

**Table 6. Hypothesis test results and multiple linear regressions tests**

Model		Unstandardized Coefficients <sup>a</sup>		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	2.364	.487		4.852	.000
	CR	.032	.022	.141	1.477	.142
	DAR	-.429	.397	-.103	-	.281
	SIZE	-.042	.017	-.197	-	.013
					1.082	
					2.525	

a. Dependent Variable: FD

Source: SPSS Output Data Processed (2025).

### The impact of the liquidity ratio on financial distress

We used the current ratio (CR) to measure the liquidity. Its significance level is 0.142, then  $>0.05$ . There is a risk of financial distress of 3.2% regardless of the current ratio, according to the B coefficient value of 0.032. Since the results show that financial distress is unrelated to the current ratio, Hypothesis 1 is false. The relationship is not statistically significant if the two data sets do not directly correlate.

Favourable effects result in a better financial state. However, a lower probability of financial distress is associated with a greater liquidity ratio, which signifies that the company has adequate cash reserves. Ningsih and Asandimitra (2023) found that while the liquidity ratio positively influences financial distress, it does not significantly affect it. Instead, according to Saputra and Kuang (2022), the liquidity ratio has no effect on financial distress.

### The impact of the leverage ratio on financial distress

The debt-to-asset ratio (DAR) was applied to measure the leverage ratio. According to SPSS output statistics for the debt-to-asset ratio variable, the significance level is 0.281 statistically, then  $>0.05$ . There is a risk of financial distress of -42.9% regardless of the current ratio, according to the coefficient B value of -0.429. Since the results show that financial distress is not related to the liquidity ratio, Hypothesis 2 is false, too.

A high leverage ratio raises concerns about the company's financial health, indicating the business has a lot of debt. Setiyawan and Musdholifah (2020) found that

the leverage ratio positively affects financial distress. At the same time, Akbar et al. (2024) argue that these variables have no significant relationship. Other results were obtained by Anisa et al. (2023) and show that the leverage ratio negatively affects financial distress.

### The impact of the company size on financial distress

According to SPSS output statistics, the size variable has a significance value of 0.013, which is less than the significance level of 0.05. We find that the probability of financial distress is negatively correlated with company size, with a chance of financial distress of -4.2% (coefficient B= -0.042). Since the results show that company size affect financial distress, this study supports Hypothesis 3.

According to previous studies, larger businesses are less likely to go bankrupt. When a company is large, its overall asset value is high, which gives it more trust from investors and other outsiders and makes it more able to fulfil its future commitments. This conclusion is confirmed by Hikmawati (2022) and Pratiwi and Fauzan (2025), who state that larger companies tend to have a lower probability of financial distress. However, Kamilah and Indira (2025) found that financial distress has no relationship with company size.

### CONCLUSION

This study used a sample of 52 companies in the consumer cyclical sector during 2021-2023 with 156 data points to assess the impact of the current ratio, debt-to-asset ratio, and company size on financial distress. The results of the data analysis show that the liquidity

ratio proxied by the current ratio is not related to financial distress. There is no negative correlation between financial distress and the leverage ratio proxied by the debt-to-asset ratio. However, financial distress has a negative correlation with company size.

Although this study's results did not confirm two of the three hypotheses identified by the researchers, the financial ratios considered in the work have important

significance for assessing the company's financial condition. So, thorough and accurate budgeting, prudent debt management, emergency funds for unforeseen circumstances, increased sales to maximize profits, and improved current ratio through timely payment of short-term liabilities are all proactive steps businesses can take to avoid financial distress.

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