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Effect Of Current Ratio, Debt-To-Equity Ratio, Return On Assets, And Company Size On The Risk Of Business Failure (Empirical Study Of Food And Beverage Companies Listed On The Indonesia Stock Exchange In 2019-2021)

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Abstract

The global impact of the Covid-19 pandemic has led to market crises, investor losses, and business closures. Understanding a company's financial health is crucial, particularly during economic uncertainty. This study uses signal theory to identify factors that indicate business failure or bankruptcy. Specifically, it examines the risk of business failure in food and beverage companies listed on the Indonesia Stock Exchange and identifies the associated risk factors. Multiple linear regression analyses the relationships between variables, including the risk of business failure (proxied by Z Score), current ratio, debt to equity ratio, return on assets, and company size. The study encompasses 156 companies in the food and beverage subsector from 2019-2021 and utilizes secondary data from the Indonesian Stock Exchange's annual financial reports. The findings demonstrate that the variables current ratio, debt-to-equity ratio, return on assets, and firm size simultaneously influences the risk of business failure significantly. However, when examined partially, the current ratio and company size did not significantly impact. In contrast, the debt-to-equity ratio and return on assets are significant risk factors for business failure in the food and beverage subsector listed on the Indonesia Stock Exchange between 2019-2021.

Keywords: *Risk of Business Failure, Current Ratio, Debt to Equity Ratio, Return on Assets, Company Size.*

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INTRODUCTION

The global financial center's landscape has been greatly influenced by the profound consequences due to the COVID-19 pandemic, affecting all countries with sudden macroeconomic shifts caused by pandemic-related developments. This has led to market crises, higher investor losses, and temporary business closures (YEC, 2022). Due to operational costs and economic risks, companies face challenges when optimizing their workforce. As a result, effective risk management is crucial, including identifying risks, preparing contingency plans, and implementing agile strategies. Staying informed about market trends, seeking expert advice, and making informed decisions is also crucial in times of uncertainty.

Indonesia's economic growth recorded 5.02 percent in 2019 (BPS, 2020). In 2021, the country experienced a 3.69 percent growth, an improvement compared to the 2.07 percent contraction in 2020 (BPS, 2022). Research conducted by the (ILO, 2020: 1), Ninety percent of surveyed companies encountered cash flow difficulties.

Most companies negotiated with banks, suppliers, and employees, prioritizing deferrals of payments and seeking government assistance.

Indonesia's food and beverage (F&B) industry has experienced significant revenue declines as people choose to eat at home, according to data from payment gateways (The Jakarta Post, 2020). A survey by the Central Statistics Agency (BPS, 2020: 9) confirmed that accommodation and F&B businesses experienced the largest income decreases (92.47%). However, some studies suggest that the F&B sector did not face significant effects during COVID-19 (Agustina.R, 2021: 2).

PT Prashida Aneka Niaga (PSDN), a coffee processing company, faces the potential for business failure, which can be seen from its financial performance. In 2019, PSDN experienced a decrease in sales of 8.24% compared to the previous year, mainly due to the impact of international commodity price pressures due to the trade war between America and China. Even though PSDN managed to record an operating profit of Rp. 33 billion after significant growth in other operating income, still experiencing a loss of Rp. 47.35 billion for this year, despite efforts to increase profitability (investasi.kontan.co.id).

Likewise, in the first quarter of 2021, PSDN again faced business challenges. While the growth in net sales of 12.11% may seem positive, it also increased the cost of goods sold, which rose by 16.52%. This expense increase, combined with a decrease in gross profit of 18.02% and a decrease in equity, indicates a continuing financial struggle. Even though they have tried to reduce operating expenses by 61.11%, PSDN's losses this year remain at IDR 21.78 billion in the first quarter of 2021 (investasi.kontan.co.id).

Signaling theory, discussed in book (Brigham & Ehrhardt, 2019: 614;615), highlights the importance of providing accurate financial information to investors and creditors to avoid potential business failures. Risk management is crucial in protecting businesses from financial difficulties, such as insufficient capital, high obligations and interest rates, and losses (Agustina.R, 2021: 4). Managing debt and equity ratios is essential, as high leverage can increase the risk of bankruptcy (Wijayanti, 2020: 6).

Financial difficulties arise when a company faces liquidity problems and cannot meet its financial obligations, leading to the risk of bankruptcy (Hendi & Jessica, 2021: 203). The domino effect of business failure impacts stakeholders, including investors, bankers, government agencies, auditors, creditors, and employees (Bunyaminu et al., 2019).

An organization's current ratio determines its short-term liquidity and capability to meet its current liabilities. Research shows a significant positive correlation between current ratios on business failure risk (Nasution & Junaidi, 2022: 179). However, other studies suggest that the current ratio does not possess a significant impact on the risk of business failure (Agustin & Trisnawati, 2023: 201).

The debt-to-equity ratio provides insights into the financial well-being aspect of a firm and the capacity to repay debt. Studies indicate that this ratio affects the risk of business failure (Saraswati & Njotoprajitno, 2022: 164). Conversely, some studies find that the debt-to-equity ratio does not have a partial effect on the risk of business failure (Oktaviani & Yanthi, 2022: 4193).

Return on assets helps assess a company's financial performance and profitability. While some studies indicate that return on assets affects the risk of

business failure (Agustina.R, 2021: 59), others find no significant impact of return on assets on the risk of business failure (Nurhayati et al., 2021).

Company size plays a role in determining the risk of business failure. Large companies are often more reliable due to their greater resources and commercial diversity (Pradana, 2020: 95). However, other studies suggest that company size does not have a significant influence on the risk of a business failure (Hafiizh & Winarso, 2022: 1; Juhaeriah et al., 2021).

To attain a more comprehensive insight into the risk of business failure within the food and beverage sector, the study's objective is to investigate the influence of the current ratio, debt-to-equity ratio, return on assets, and company size on the risk of business failure for food and beverage-listed companies in IDX from 2019 to 2021.

CONCEPTS AND THEORIES

Signaling Theory

The use of signaling theory by management is a tactic for informing investors about the company's prospects. (Brigham & Ehrhardt, 2019: 614;615), Asymmetric information, where managers have more in-depth knowledge than external investors, significantly affects the optimization of capital structure. The quality of information presented by the company can affect investors' decisions, and signaling theory helps reduce information asymmetry.

Risk Management

According to (Rejda & Mcnamara, 2017: 66), risk management is the act of identifying an organization's loss exposure and choosing the most effective way to handle that exposure. Risk management is evaluating and mitigating risks that may arise during the implementation of organizational plans. It involves assessing risks' likelihood and potential impact, establishing preventive and response actions, and regularly reviewing the risk management plan. Effective risk management helps companies avoid losses, remain profitable, and improve long-term stability.

Business Failure or Bankruptcy (Z-Score)

According to (Mccormack et al., 2016), bankruptcy refers to a company ceasing to operate when it cannot pay its debts. It may deter individuals from starting new businesses or trying again after a previous failure because bankruptcy carries a stigma and fear of the consequences.

By identifying weak points in a company's finances, the Z-Score can help businesses stay afloat. A higher Z-Score indicates a healthy business, whereas a lower number indicates the company is on the verge of bankruptcy (Maria et al., 2022). The dependent variable reflects business failure (Z-score). Business failure (Z-score) according to Distinguin et al, in research (Danisman & Tarazi, 2021:8; Pradana, 2020: 97; Nasution & Junaidi, 2022: 182; Maria et al., 2022: 129), can be formulated as follows:

$$Z_{Score} = \frac{(ROA + EQTA)}{SDROA}$$

Current Ratio

Investors and analysts use this ratio to evaluate if a company is able to meet its short-term financial responsibilities. As they fall due, which is critical to

financial stability. According to (Wahlen et al., 2015), a large current ratio shows many current assets available to pay obligations that will mature, while a small ratio indicates that current assets may be inadequate to pay short-term liabilities. These steps are used for calculating the current ratio:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liability}}$$

Debt to Equity Ratio

This ratio is a tool to assess the firm's financial well-being, quantifying the quantity of debt it holds relative to its total equity capital, encompassing both shareholder equity and retained earnings. According to (Robinson et al., 2015), a rise in the debt-to-equity ratio demonstrates that the company's solvency has deteriorated, whereas a drop in the debt-to-equity ratio and financial leverage suggests that the company's solvency has improved. The calculation of the debt-to-equity ratio involves using the subsequent equation:

$$\text{Debt to Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Total Equity}}$$

Return on Assets

This ratio assesses the performance of a company by comparing its profits to its total assets. It can be utilized to assess the performance efficiency of a company and profitability and compare it to industry competitors. According to (Agustina.R, 2021: 18), a rise in the return on assets indicates good company financial performance, while a decrease in return on assets indicates poor company financial performance. To calculate the return on assets, utilize the subsequent equation:

$$\text{Return on Assets} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

Company size

Company size is another factor that influences the risk of business failure. According to (Irawan et al., 2022), the expression company size describes the amount expressed in certain units to measure the scale of a business, such as total assets, total sales, market capitalization, total revenue, and total sales. According to (Yana & Purwanto, 2022), large company size provides greater commercial diversity than small company size, and the probability of failure is much lower. Large corporations will invest in any type of business, so that if one fails, the others can continue to function. This study uses natural logarithms to simplify measurement of company size without affecting actual assets. To calculate company size, the formula is:

$$\text{Firm Size} = \text{Ln (Total Assets)}$$

RESEARCH PARADIGM

Effect of Current Ratio on the Risk of Business Failure (Z-Score)

Understanding the current ratio can help investors make the right decision about whether to invest in a company or not. A healthy current ratio can show investors that a company is financially stable and more likely to be able to repay

the money invested in it. On the other hand, if a company has an unhealthy current ratio, it can be a sign of financial difficulties, resulting in business failure.

The research conducted (Nasution & Junaidi, 2022: 179) shows that, both partially and simultaneously, the current ratio shows a significant positive correlation with the risk of business failure. Meanwhile, the results of research conducted by (Agustin & Trisnawati, 2023: 201) demonstrate that the current ratio, which represents liquidity, has no meaningful impact on the possible risk of business failure.

Effect of Debt-to-Equity Ratio on the Risk of Business Failure (Z-Score)

When a business's debt-to-equity ratio is high, it may take on too much debt or have limited access to equity financing. Creditors can take legal action against a company if it has trouble repaying its debts. Conversely, a low ratio demonstrates that the business has enough internal capital to cover its expenses. This shows that the company is in a solid financial position and can manage financial matters more effectively.

(Saraswati & Njotoprajitno, 2022: 164) According to the mentioned source, the debt-to-equity ratio used for calculating solvency affects the possible risk of business failure. Meanwhile, research by (Oktaviani & Yanthi, 2022: 4193) shows the result that the leverage variable measured using the ratio of debt to equity has no partial effect on the possible risk of business failure.

Effect of Return on Assets on the Risk of Business Failure (Z-Score)

In some industries, companies with higher returns on assets may be better managed or have more attractive products. Suppose the company's return on assets is low. In that case, it may mean it is not using its resources effectively, or its products are not competitive with those of other companies, which increases its chances of failure.

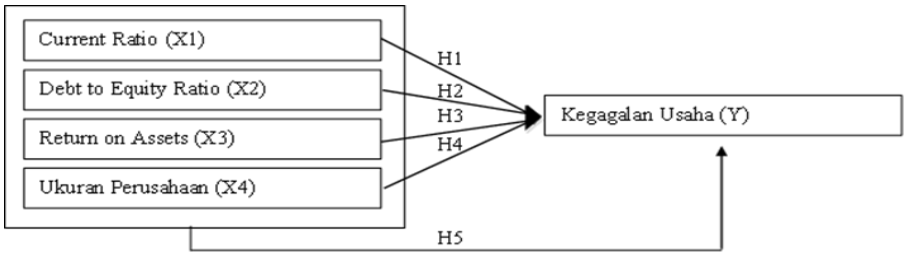
Research carried out by (Agustina.R, 2021: 59) demonstrates that return on assets affects the possible risk of business failure. Meanwhile, the findings of research done by (Nurhayati et al., 2021) show the opposite, the probability represented by return on assets does not influence the potential risk of a business failure.

The Effect of Company Size on the Risk of Business Failure (Z-Score)

Large company size provides greater commercial diversity than small company size, and the probability of failure is much lower. Large corporations will invest in any type of business, so that if one fails, the others can continue to function (Yana & Purwanto, 2022). Larger companies are usually more reliable because they have more resources to draw upon.

Research conducted by (Pradana, 2020: 95) indicates that company size affects the risk of business failure. As opposed to that, research conducted by (Hafiizh & Winarso, 2022: 1) produced findings demonstrating that variable company size does not have an impact on the possible risk of business failure. Studies (Juhaeriah et al., 2021) back up this finding, stating that company size does not affect the possibility of business failure risk.

Figure 1: Research paradigm



Processed Data, 2023

RESEARCH HYPOTHESIS

This research aims to look at the impact each independent variable (partial) has on the risk of business failure. The hypothesis for this partial test can be written as follows:

Hypothesis 1

H_0: There is no significant connection between the current ratio on the risk of business failure.

Ha: There is a significant connection between the current ratio on the risk of business failure.

Hypothesis 2

H0: There is no exists significant relationship between the debt-to-equity ratio on the risk of business failure.

Ha: There exists a significant connection between the debt-to-equity ratio on the risk of business failure.

Hypothesis 3

H0: There is no exists significant relationship between return on assets on the risk of business failure.

Ha: There exists a significant connection between return on assets on the risk of business failure.

Hypothesis 4

H0: There is no significant effect between company size on the risk of business failure.

Ha: There is a significant influence between company size on the risk of business failure.

Furthermore, the independent variables CR, DER, ROA, and company size will also be tested simultaneously in this study. The hypothesis for this test is as follows:

Hypothesis 5

H0: There is no correlation across the current ratio (CR), debt-to-equity ratio (DER), return on assets (ROA), and company size on the risk of business failure.

Ha: There is a correlation across the current ratio (CR), debt-to-equity ratio (DER), return on assets (ROA), and company size on the risk of business failure.

RESEARCH METHODOLOGY

Access to the IDX website was used to gather financial information about food and beverage companies that are publicly for 2019-2021. The study population

comprised 72 companies listed on the IDX in 2019-2021. As an outcome of determining several criteria pertinent to the study objectives, IDX listed food and beverage companies, companies presenting annual reports (annual reports) in 2019-2021, and companies using the rupiah currency were included. From 2019 to 2021, 52 food and beverage subsectors were included in the research sample. This study collected 156 company data points from 2019 to 2021, but some did not pass the classical normality test. Accordingly, 86 sample firms were retained for analysis after removing 70 extreme outlier data points.

RESULTS AND DISCUSSION

Descriptive statistics serve as tools to outline the research data, making it easier to understand and interpret the research findings.

Figure 2: Descriptive Statistic

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Current Ratio (X1)	86	,37	3,83	1,7517	,72701
Debt to Equity Ratio (X2)	86	,29	2,30	1,0222	,51328
Return on Assets (X3)	86	-,06	,23	,0630	,06134
Ukuran Perusahaan (X4)	86	25,40	32,82	29,1508	1,73193
Kegagalan Usaha (Y)	86	6,49	79,39	31,8778	17,46681
Valid N (listwise)	86				

Processed Data (2023)

Figure 2 displays the minimum, maximum, mean, and standard deviation values for the following variables: current ratio (CR), debt-to-equity ratio (DER), return on assets (ROA), company size, and the risk of business failure. There are 86 data points for each variable.

1. The current ratio ranges from 0.37 to 3.83, with a mean of 1.7517 and a standard deviation of 0.72701. The minimum value is associated with Bumi Teknoculture Unggul Tbk company in 2021, and the maximum value is linked to Nippon Indosari Corpindo Tbk company in 2020.
2. The debt-to-equity ratio ranges from 0.29 to 2.30, with an average of 1.0222 and a standard deviation of 0.51328. The lowest value is from Siantar Top Tbk company in 2020, and the highest value is from Tunas Baru Lampung Tbk company in 2020.
3. Return on assets varies from -0.06 to 0.23, with an average of 0.0630 and a standard deviation of 0.06134. The lowest value is attributed to Palma Serasih Tbk company in 2021, and the highest value is linked to Multi Bintang Indonesia Tbk company in 2021.
4. Company size ranges from 25.40 to 32.82, with an average of 29.1508 and a standard deviation of 1.73193. The smallest value is from Wahana Pronatural Tbk company in 2019, and the largest value is from Indofood Sukses Makmur Tbk company in 2021.
5. The risk of business failure ranges from 6.49 to 79.39, with a mean of 31.8778 and a standard deviation of 17.46681. The lowest value is associated with Mahkota Group Tbk company in 2021, and the highest value is linked to Asia Sejahtera Mina Tbk company in 2020.

Whenever the sig (2-tailed) value exceeds 0.05, a Monte Carlo test confirms a normal distribution for the Kolmogorov-Smirnov test. The normalcy test's findings are outlined below.

Figure 3: Kolmogorov-Smirnov test before and after outliers

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual (Before Outlier)	Unstandardized Residual (After Outlier)
N			156	86
Normal Parameters[a,b]	Mean		,0000000	,0000000
	Std. Deviation		71,77562796	13,11696036
Most Extreme Differences	Absolute		,193	,140
	Positive		,193	,120
	Negative		-,174	-,140
Test Statistic			,193	,140
Asymp. Sig. (2-tailed)			,000[c]	,000[c]
Monte Carlo Sig. (2-tailed)	Sig.		,000[d]	,059[d]
	99% Confidence Interval	Lower Bound	,000	,053
		Upper Bound	,000	,065

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Based on 10000 sampled tables with starting seed 2000000.

Processed Data (2023)

As stated in Figure 3, the residual data deviates from a normal distribution before the Monte Carlo sig (2-tailed) outlier. However, the residual data showed a significant increase following the outlier analysis, showing a normal distribution with 0.059 Monte Carlo (2-tailed) significance.

Multicollinearity testing was carried out with the aim of evaluating the level of relationship among independent variables and identifying which variables might have a negative impact on the stability and accuracy of the regression model.

Figure 4: Multicollinearity Test

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Current Ratio (X1)	,663	1,508
	Debt to Equity Ratio (X2)	,644	1,552
	Return on Assets (X3)	,659	1,516
	Ukuran Perusahaan (X4)	,906	1,104

a. Dependent Variable: Kegagalan Usaha (Y)

Processed Data (2023)

Figure 4 shows that all independent variables of the regression model showed more than 0.10 tolerance value and lower than 10 VIF value. This ensures there are no issues with multicollinearity in the regression model.

(Kusumah, 2016: 52) argues, the autocorrelation test is a regression model test that uses the Durbin-Watson statistical test to determine the correlation between errors that occurred in a certain period and errors that occurred in the previous period.

Figure 5: Autocorrelation Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,660[a]	,436	,408	13,43693	1,811

a. Predictors: (Constant), Ukuran Perusahaan (X4), Current Ratio (X1), Return on Assets (X3), Debt to Equity Ratio (X2)

b. Dependent Variable: Kegagalan Usaha (Y)

Processed Data (2023)

As can be observed from the SPSS outcome, the Durbin Watson (DW) result is 1.811. Using a significance level of 5%, a DU value of 1.7478 is found, so that we obtain (4 – DU = 4 – 1.7478 = 2.2522). The criterion for determining the absence of autocorrelation is dU < d-count < (4 - dU). In this case, the range is 1.7478 < 1.811 < 2.2522, which indicates that there is no indication or symptom of autocorrelation in the data.

Spearman's rho test is used to assess the presence of heteroscedasticity. In case the significance value of the correlation between the independent variables and the residual is higher than 0.05, it indicates the absence of heteroscedasticity.

Figure 6: Heteroscedasticity Test

Correlations

			Current Ratio (X1)	Debt to Equity Ratio (X2)	Return on Assets (X3)	Ukuran Perusahaan (X4)	Unstandardized Residual
Spearman's rho	Current Ratio (X1)	Correlation Coefficient	1,000	-,524**	,554**	-,006	-,055
		Sig. (2-tailed)	.	,000	,000	,956	,615
		N	86	86	86	86	86
	Debt to Equity Ratio (X2)	Correlation Coefficient	-,524**	1,000	-,496**	,244*	,048
		Sig. (2-tailed)	,000	.	,000	,023	,664
		N	86	86	86	86	86
	Return on Assets (X3)	Correlation Coefficient	,554**	-,496**	1,000	,110	-,144
		Sig. (2-tailed)	,000	,000	.	,312	,186
		N	86	86	86	86	86
	Ukuran Perusahaan (X4)	Correlation Coefficient	-,006	,244*	,110	1,000	,011
		Sig. (2-tailed)	,956	,023	,312	.	,921
		N	86	86	86	86	86
	Unstandardized Residual	Correlation Coefficient	-,055	,048	-,144	,011	1,000
		Sig. (2-tailed)	,615	,664	,186	,921	.
		N	86	86	86	86	86

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Processed Data (2023)

The information presented in Figure 6 indicates that all of the variables show greater significance than 0.05 (current ratio: 0.615, debt to equity ratio: 0.664, return on assets : 0.186, firm size: 0.921). Therefore, no heteroscedasticity can be observed for any of the variables.

The model of multiple linear regression analysis serves as a statistical instrument employed for the examination of data and test the relationship between

variables. This study applies multiple regression analysis techniques which are then described below.

Figure 7: Multiple Regression Analysis

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	54,232	25,083		2,162	,034
	Current Ratio (X1)	2,539	2,462	,106	1,031	,305
	Debt to Equity Ratio (X2)	-8,976	3,537	-,264	-2,538	,013
	Return on Assets (X3)	-219,857	29,259	-,772	-7,514	,000
	Ukuran Perusahaan (X4)	-,129	,884	-,013	-,146	,884

a. Dependent Variable: Kegagalan Usaha (Y)

Processed Data (2023)

Referring to Figure 7, it is evident that the research model in multiple linear regression analysis is as follows:

Z-Score = 54.232 + 2.539 CR - 8.976 DER - 219.857 ROA - 0.129 SIZE

1. The constant value of 54.232 states if the values of current ratio (X1), debt to equity ratio (X2), return on assets (X3), and company size (X4) are at zero, then the risk of business failure is 54.232.
2. The regression analysis reveals a coefficient of 2.539 for the current ratio (CR), implying that a one-unit increase in the current ratio leads to a 2.539-unit increase in the Z-Score, with other variables held constant.
3. The coefficient of regression for the debt-to-equity ratio (DER) is -8.976, indicating that a one-unit increase in the debt-to-equity ratio results in an 8.976-unit decrease in the Z-Score, with other variables held constant.
4. Return on assets (ROA) shows a regression coefficient of -219.857, suggesting that a one-unit increase in return on assets leads to a decrease of 219.857 units in the Z-Score, assuming other variables remain constant.
5. Firm size (SIZE) exhibits a regression coefficient of -0.129, implying that a one-unit increase in firm size contributes to a 0.129-unit decrease in the Z-Score, holding other variables constant.

Figure 8: Coefficient of determination

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,660[a]	,436	,408	13,43693	1,811

a. Predictors: (Constant), Ukuran Perusahaan (X4), Current Ratio (X1), Return on Assets (X3), Debt to Equity Ratio (X2)

b. Dependent Variable: Kegagalan Usaha (Y)

Processed Data (2023)

The adjusted R square value for this study was 0.408, indicating that approximately 40.8% of the variation in business failure can be elucidated by independent variables. This indicates that the current ratio, debt-to-equity ratio, return on assets, and firm size contributes 40.8% in explaining the variations in

business failures. Other factors not incorporated in this model or not considered in this analysis account for about 59.2% of the variation in business failure.

Simultaneous testing, also known as the F-test, this test is utilized to ascertain if the independent variables collectively exert a significant influence on the variable being studied.

Figure 9: Simultaneous testing

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11307,952	4	2826,988	15,658	,000[b]
	Residual	14624,645	81	180,551		
	Total	25932,598	85			

a. Dependent Variable: Kegagalan Usaha (Y)

b. Predictors: (Constant), Ukuran Perusahaan (X4), Current Ratio (X1), Return on Assets (X3), Debt to Equity Ratio (X2)

Processed Data (2023)

With a significance value of 0.000 < 0.05, this suggests a simultaneous there was a significant connection across the independent and dependent variables in the linear regression framework. Furthermore, by comparing the calculated F value (15.658) with F table (2.48). If F count exceeds F table, this indicates that the independent variables together have a significant influence on the dependent variable in the linear regression model. In this case, F count (15.658) is much larger than F table (2.48), so that the null hypothesis can be ignored and the alternative hypothesis accepted.

Researchers use partial testing (T-test) to assess the effect of each separate independent variable on research results by testing and assessing their impact.

Figure 10: T-Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	54,232	25,083		2,162	,034
	Current Ratio (X1)	2,539	2,462	,106	1,031	,305
	Debt to Equity Ratio (X2)	-8,976	3,537	-,264	-2,538	,013
	Return on Assets (X3)	-219,857	29,259	-,772	-7,514	,000
	Ukuran Perusahaan (X4)	-,129	,884	-,013	-,146	,884

a. Dependent Variable: Kegagalan Usaha (Y)

Processed Data (2023)

With reference to the test findings in figure 10, the impact of the variables current ratio (X1), debt to equity ratio (X2), return on assets (X3), company size (X4), on the risk of business failure (Y) based on partial hypothesis testing (T-test) can be described as follows:

1. There is an index of significance (sig) of 0.305 > 0.05 with a Tcount of 1.031 and a Ttable of 1.98969 for the previous stock price variable (X1), then Tcount

<Ttable (1.031 <1.98969). This way, the research hypothesis 1 H0 is accepted, and the hypothesis Ha is rejected. Therefore, this indicates that the partial data analysis shows no significant effect between the current ratio (X1) and the risk of business failure (Y).

2. There is a sig value of 0.013 <0.05, with a Tcount of -2.538 and a Ttable value of 1.98969 for the variable debt-to-equity ratio (X2). Therefore, research hypothesis 2 H0 is rejected, and Ha is accepted. This finding means that the partial analysis shows a negative and significant effect of the debt-to-equity ratio (X2) on the risk of business failure (Y).
3. There is a sig value of 0.000 <0.05 with a Tcount value of -7.514 and a Ttable value of 1.98969 for the variable return on assets (X3). As a result, study hypothesis 3 H0 is confirmed, whereas hypothesis Ha is rejected. These findings indicate that the risk of business failure is negatively and significantly affected by the return on assets, as observed in the partial analysis.
4. There is a sig value of 0.884 > 0.05 with a Tcount of -0.146 and a Ttable of 1.98969 for the company size variable (X4) and a Tcount <Ttable (-0.146 <1.98969). Therefore, research hypothesis 4 H0 is accepted, and hypothesis Ha is rejected. According to this study's findings, the partial effect of firm size (X4) on the risk of business failure (Y) has no significant statistical impact.

Effect of Current Ratio on the Risk of Business Failure

The test results indicate no significant relationship between the current ratio and the risk of business failure. Statistical evidence supports this conclusion, with a sig value of 0.305 > 0.05 and a T-count value of 1.031 < 1.98969. The significance level and T-count with T-table comparison support the acceptance of the H0 hypothesis and rejection of the Ha hypothesis. Therefore, the analysis shows that the current ratio (X1) does not significantly impact the risk of business failure (Y). These findings align with previous research, particularly the study by Agustin & Trisnawati in 2023. In conclusion, this study concludes that the current ratio does not significantly affect the risk of business failure.

Signaling theory suggests that financial ratios like the current ratio convey information about a company's financial health. However, for companies operating on the Indonesian Stock Exchange in the food and beverage sub-sector (2019-2021), the current ratio's signalling is not a robust indicator of business failure risk. This sub-sector commonly uses long-term debt strategically due to its capital-intensive nature and extended production cycle. By prioritizing long-term debt, firms optimize their capital structure for stability, reducing the relevance of short-term debt, a key CR element, in predicting default risk. This strategy signals the sub-sectors focus on long-term stability, diminishing CR's predictive role. Industry-specific dynamics further complicate the CR-risk relationship. Different industries have distinct models, capital needs, and risk profiles. Thus, CR's predictive power varies. For example, capital-intensive sectors may face risk despite a good CR due to factors beyond liquidity.

In essence, the absence of CR's impact on business failure risk in the food and beverage sub-sector reflects its unique financial strategy and complex operations. Signal theory illustrates how strategic debt management and intricate dynamics reshape CR's predictive relationship. This context underscores nuanced

signals, revealing that CR alone does not comprehensively predict business failure in the sub-sectors dynamics.

Effect of Debt to Equity Ratio on the Risk of Business Failure

Based on this research's outcomes, the debt-to-equity ratio negatively and partially significantly affects the risk of business failure. These results differ from the findings of Oktaviani & Yanthi in 2022, which reveal that the debt-to-equity ratio has no partial effect on the risk of business failure. However, these findings align with earlier studies carried out by Saraswati & Njotoprajitno in 2022. In conclusion, this study determines that the debt-to-equity ratio significantly affects the risk of business failure. Therefore, it accepts the alternative hypothesis (Ha) while rejecting the null hypothesis (H0).

An elevated debt-to-equity ratio signifies heightened financial risk as companies rely more on debt financing. This makes companies more vulnerable to economic downturns, interest rate fluctuations, and cash flow disruptions, increasing the likelihood of business failure. A high debt-to-equity ratio means a large portion of revenue is dedicated to servicing debt, limiting a company's ability to invest in growth opportunities or handle unforeseen financial challenges. This can hamper company operations and increase the risk of business failure. A high debt-to-equity ratio can erode creditors' confidence in a business's capacity to pay off its responsibilities. This leads to higher borrowing costs, more stringent loan terms, or drawdowns on credit facilities. These negative perceptions further increase the risk of business failure.

Investors and stakeholders closely monitor a company's financial ratios, including its debt-to-equity ratio, to assess its financial health and growth prospects. A higher debt-to-equity ratio can signal a higher level of risk and uncertainty, decreasing investor confidence and potential divestments. This negative market perception can affect the company's share price, access to capital markets, and overall business continuity. Companies must manage their debt levels carefully and maintain a healthy balance between debt and equity to ensure continued growth and success. Consistent with the fundamentals of signal theory, the debt-to-equity ratio serves as an essential signal of a company's financial well-being and viability. Greater financial risk is indicated by a larger debt-to-equity ratio, increased debt servicing costs, a potential loss of creditor and investor confidence, and a higher probability of business failure.

Effect of Return on Assets on the Risk of Business Failure

The research findings demonstrate that the return on assets negatively and partially significantly affects the risk of business failure. Therefore, the findings of this study contradict Nurhayati's findings in 2021 which state that there is no partial impact of return on assets on the possible risk of business failure. The findings of this research corroborate the results of earlier studies done by Agustina. R in 2021. This result supports that the null hypothesis is disproven, as well as the alternative hypothesis (Ha) is accepted based on the findings.

A significant negative impact of return on assets (ROA) indicates that higher ROA corresponds to lower business failure risk. Companies employ ROA, a potent financial indicator, to signal health and prospects to stakeholders, influencing perceptions of risk. ROA serves as a robust signal of efficient profit generation from assets. High ROA reflects effective asset utilization and robust financial

performance, reducing perceived failure risk—conversely, low ROA signals potential difficulties, heightening risk perception. Higher ROA signifies resilient profitability and the capacity to withstand economic challenges, reducing failure risk. Strong ROA ensures sufficient cash flow to cover costs and debts, boosting financial stability. Favourable ROA attracts financing, aiding growth and risk reduction. Efficient resource management through strong ROA enhances profitability, cost control, and risk management, lowering business failure risk. Effective ROA-driven operations optimize resources, bolstering resilience against potential risks.

The significant negative impact of return on assets (ROA) on business failure risk aligns with the signalling theory. Elevated ROA reflects improved financial health, cash flow, and resource management, reducing failure risk perception. Stakeholders rely on ROA signals for insights into profitability and financial prospects, guiding investment and credit decisions.

Effect of Company Size on the Risk of Business Failure

This result contradicts the outcomes of Pradana (2020), which suggests that there is a partial effect of company size on the risk of business failure. This study confirms the outcomes of previous studies conducted by Hafiizh and Winarso (2022) and Juhaeriah (2021). According to the research findings, it can validate the acceptance of the H0 hypothesis and the rejection of the Ha hypothesis.

Larger companies may have more resources, but these resources do not inherently insulate them from the risk of failure. Misallocation of resources, inefficient operations, or strategic missteps can undermine size advantage. Signal theory underscores that stakeholders interpret financial metrics in the context of broader signals, such as operational efficiency and strategic alignment. A larger company size may not be a sure sign of its ability to overcome the complex challenges pertaining to the food and beverage segment.

Signaling theory emphasizes the role of information dissemination and interpretation in shaping stakeholder perceptions. Larger companies may face higher stakeholder expectations because of their size, making them more vulnerable to negative market reactions if performance deviates from those expectations. In contrast, a small company might focus on building market confidence by meeting certain targets or demonstrating innovation. This dynamic interaction between signal transmission and perception can negate the predictive power of firm size.

CONCLUSIONS AND SUGGESTIONS

According to the study's outcomes, the variables of current ratio, debt-to-equity ratio, return on assets, and company size collectively exert a significant influence on the business failure risk. Nevertheless, the current ratio and company size exhibit no significant partial impact on the risk of business failure. Conversely, the debt-to-equity ratio and return on assets show a significant negative correlation with business failure among food and beverage subsector companies listed on the IDX from 2019 to 2021.

Overall, companies operating in the food and beverage segment are expected must pay close attention to their financial ratios, particularly the ratio of debt to equity and return on assets, because these factors significantly affect the risk of business failure. Companies can increase their resilience and chances of long-

term success by managing debt prudently, optimizing asset utilization, and maintaining financial stability. This research provides valuable insights and practical information about the factors for business failure. Investors and the general public will benefit from these findings by understanding the complexities surrounding business risk. This knowledge can serve as a valuable guide for making informed investment decisions and addressing the challenges associated with the risk of business failure. Likewise, the subsequent study builds on this research by exploring additional variables that might impact the correlation among the variables under investigation. By studying additional variables and conducting similar studies across different industries or sectors, we can better understand what factors influence the risk of business failure. This leads to more insightful results and contributes to our thorough knowledge of how a company's financial data behaves when assessing the impact of business failure risks.

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