EFFECT OF CAPITAL STRUCTURE, LEVERAGE, PROBITABILITY AND COMPANY SIZE ON FINANCIAL DISTRESS IN COMPANIES FOOD AND BEVERAGE MANUFACTURING

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Abstract

The author conducted this research to understand the effect of capital structure, leverage, profitability and company size with financial distress through the Altman Z-Score model for food and beverage manufacturing companies listed on the IDX 2019-2021. This study uses secondary data and the sampling technique used is purposive sampling method in order to obtain 20 sample companies. The data will be analyzed using the binary logistic regression analysis test method with the SPSS 25 test tool. Based on the analysis conducted, the research results show that simultaneously the variables capital structure (DER), leverage (DAR), profitability (ROA) and company size have a significant impact on financial distress . While partially the variable capital structure (DER) and company size have a negative impact on financial distress . Leverage (DAR) and profitability (ROA) variables have a positive impact on financial distress.

Keywords: Capital Structure (DER), Leverage (DAR), Profitability (ROA), Company Size, and Financial Distress (Altman Z-Score).
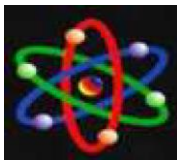
INTRODUCTION

Entrepreneurs consider food and beverages to be assets that are most resistant to financial and economic crises because food is a primary need besides shelter. Indonesia's growth increases hunger. Indonesia has many new food and beverage companies due to the increasing demand for ready-to-eat food. IDX more in trading so that the company's competition continues increase.

Competition hinders company growth and change. Experienced difficulties company seen on policy monetary company . The annual report assesses the bankruptcy of companies. Analysis of financial statements shows the age of the company. Owners can avoid bankruptcy by predicting the company's success. Monetary instability has always been a major problem for the company's sustainability.

| NAMA PERUSAHAAN	Tahun	TOTAL EKUITAS (MODAL)	TOTAL UTANG	TOTAL ASET	LABA BERSIH SETELAH PAJAK
PT Wilmar Cahaya Indonesia Tbk. (CEKA)	2019	935.392.483.850	122.136.752.135	1.393.079.542.074	215.459.200.242
	2020	961.711.929.702	125.161.736.939	1.566.673.828.068	181.812.593.992
	2021	1.022.814.971.132	124.445.640.572	1.697.387.196.209	187.066.990.085
PT Sekar Laut Tbk (SKLT)	2019	380.381.947.966	410.463.595.860	790.845.543.826	44.988.552.441
	2020	406.954.570.727	366.908.471.713	773.863.042.440	42.521.324.247
	2021	541.837.229.228	347.288.021.564	889.125.250.792	84.524.776.901
PT Buyung Poetra Sembada Tbk (HOKI)	2019	641.567.444.819	207.108.590.481	848.676.035.300	103.723.228.652
	2020	662.560.916.609	244.363.297.557	906.924.214.166	37.443.209.341
	2021	668.660.599.446	320.458.715.888	989.119.315.334	16.048.849.628

Figure 1. Phenomena

in year 2021, PT Wilmar Cahaya Indonesia Tbk's stock and profit after tax will increase by approx 6% and 3 %. It can be concluded that capital and profit have increased simultaneously while basically capital has increased along with a decrease in profit after tax.PT Sekar Laut Tbk cut debt by around 11% and profit after tax by around 5% in 2020. This can be concluded that debt and profit after tax have decreased simultaneously while basically profit has decreased as total debt has increased.

In 2021, the assets of PT Buyung Poetra Sembada Tbk increased by around 9%, but profit after tax decreased by 57%. The results show growth in total assets and profits inversely proportionally while in effect inversely.

The capital structure compares total debt (foreign capital) and total shares (Abdul Halim 2015: 81). The debt to equity ratio shows the capital structure (DER). High levels of debt can hurt a company's earnings because it can't pay all of its bills. Leverage shows debt to a company. Because of the difficulty in paying back, high leverage can put a company at risk. (Irham, 2015: 127). Financial companies with more debt than assets run the risk of payment problems. Thus, greater debt increases the likelihood of financial problems . Sourced from Mahaningrum & Merkusiwati (2020), entitled " The Impact of Financial Ratios on Financial Distress " shows that leverage in companies in the industrial and chemical sectors is aware that it has a positive impact on financial distress according to IDX data for 2016-2018.

Debt to asset ratio (DAR), which is a proxy for leverage, has a negative impact on predicting financial distress, through Septiani and Ni Made Inten Dana's research (2019), " The Influence of Liquidity, Leverage, and Institutional Ownership on Financial Distress in Property and Real Estate Companies".

Kasmir (2016: 196) the income ratio measures the company's income. This ratio shows the company's net profit based on asset value. Thus, large corporate profits reduce debt, reducing the risk of corporate financial distress . Sourced from Alfinda
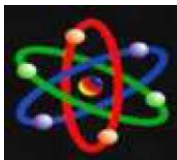
Rohmadini (2018), "The Influence of Profitability, Liquidity and Leverage on Financial Distress" assesses profitability in food and beverage companies that has a negative effect on financial distress according to IDX data for 2013-2016.

Riyanto (2013) The company's success in paying off future debt increases with its total assets, avoiding financial distress .Sanny Nafilla Salim and Vaya (2021) found that company size has an impact on Financial Distress . As the company grows, there are fewer financial problems. According to Dani Sopian and Wiwin Putri Rahayu's research published in 2017 entitled " The Impact of Financial Ratios and Company Size on Financial Distress " shows that company size in food and beverage manufacturing companies between 2011 and 2013 had a negative impact on financial distress.

RESEARCH METHODS

This research is organized by company food and beverage listed on the IDX. Financial reports of period companies 2019-2021 is used as research data for the period 2022 – 2024. Sampling method aims to determine the sample to be used. (Sugiono 2016: 81).This research involved 30 food and beverage companies from source IDX 2019–2022. Method purposive sampling used on research.

No	Years issue	mop
1.	Issuers that are still listed as Food and Beverage Companies for the 2019 – 2021 period	30
2.	Financial reports reported regularly by Food and Beverage companies from 2019 – 2021	(1 0)
3.	Fri. it's S Sam mop	2 0
4.	Total al Obser vasi Da ta = 20 x 3 know un	60

Table 1. purposive sampling

Food and beverage manufacturing companies , according to data on the IDX 2019–2021, they are used as secondary data for documentation studies and supporting data from scientific journals related to this z research. Secondary data is data collected from other people or paper . (Sugiyono, 2016: 225). Quantitative data is collected from IDX, IDX, and other library sources.

N o	v Varia bell	d Definition i	P Measurement	S Scale
1.	S Stru structure mo dal l	An example of a company's financial amount is the initial capital owned from long-term debt and owner's equity, funding facilities. (Irham Fahmi, 2017: 179)	DER = $\dfrac{\text{Total Utang}}{\text{Total Ekuitas}}$	Ratio
2.	leverage	Companies with fixed costs use assets and sources of money from loans because interest is a fixed burden to increase shareholder income (Sjahrian in Satriana, 2017: 23).	DAR = $\dfrac{\text{Total Hutang}}{\text{Total Aset}}$	Ratio
3.	Profability y	Profitability demonstrates managerial success. Sales and financial benefits demonstrate this (Prihadi 2020: 166).	ROA = $\dfrac{\text{Laba Bersih Setelah Pajak}}{\text{Total Aktiva}}$	Ratio
4.	Size n Company	Total assets/exponenti al value of total assets can measure the company. This element is measured by measuring the	Company Size = LN (Total Assets)	Ratio

		total value (Hartono, 2015: 282)		
5.	Financial Distress	Company assets do not meet liabilities (Dewi Utari, et al 2014: 273)	Altman Z-Score = 1.2 y X_1 + 1.4 y X_2 + 3.3 Y X_3 + 0.6 Y X_4 + 1.0 Y X_5	Nominal Dummy 0 = Non-Financial Distress Dummy 1 = Financial Distress

Table 2. Operational Definition

Binary logistic regression analyzes dichotomous/binary answer variables and independent factors of intervals and/or categories. Binary logistic regression is multiple regression with a dummy variable as the dependent variable (0 and 1). Qualitative data is categorized using dummy variable nominal scale . This dummy variable can assess and measure abstract variables in research. (Ghozali, 2013). For example, how do financial ratios impact delays in financial reports. The dependent variable is 0 if it is late and 1 otherwise. Logistic regression can filter out discrepancies without an assumption of normality. Equation formula :

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \ (\alpha=0.05)$$

Information :

Y = Financial Distress
α = Constant (5% = 0.05)
$\beta_1, \beta_2, \beta_3, \beta_4$ = Regression coefficient
X_1 = Capital Structure (%)
X_2 = Leverage (%)
X_3 = Profitability (%)

X_4 = Size Company (%)
ε = Coefficient Error

RESULTS AND DISCUSSION

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
STRUKTUR MODAL	60	-212.73	229.97	71.9323	65.38233
LEVERAGE	60	.25	188.70	38.7787	26.52879
PROFITABILITAS	60	.23	182.25	14.3148	25.09442
UKURAN PERUSAHAAN	60	26.57	32.82	28.8440	1.49979
Valid N (listwise)	60				

Figure 2. Descriptive Analysis

X1 has 60 entities. The lowest variable value is found in PT. FKS Food Si Tbk. (AISA) around -212.73 in 2019 and highest score by PT Tu nas Baru La mp ung Tbk. (TBLA) as es ar 229.97 in n 2020. Value variable 71.93 with 65.38 standard variation dar. X2 is 60 entities. The lowest variable value is found in PT. Akasha Wira International Tbk (ADES) around 0.25 in 2021 and the highest score by PT. FKS Food Sejahtera Tbk (AISA) of 188.70 in 2019. The mean is r 38.77 with 26.52 standard. The mean value of the variable value is 14.31 with 25.09 var.
X4 has 60 entities. The lowest variable value found in PT. Siantar Top Tbk. (STTP) of around 26.57 in 2020 and the highest score is occupied by PT. Indofood Sukses Makmur Tbk . (INDF) has around 32.82 in 2021. The mean variable value is 28.84 and the standard variation is r 1.49.

Homer and Lemeshow Goodness of Fit Test (GoF) decide whether the research model is feasible. Accepting H0 and carrying out this test is shown to be 0.508 > 0.05.

Iteration		-2 Log likelihood	Coefficients Constant
Step 0	1	81.503	-.333
	2	81.503	-.336
	3	81.503	-.336

Step 1	1	54.231	-3.834
	2	48.184	-3.482
	3	46.631	-2.756
	4	46.566	-2.606
	5	46.566	-2.599
	6	46.566	-2.599

Figure 3. Model Fit Test

Likelihood -2 The .likeliihood log is 46,566 in the model fit test chart. At step 0, -2 The .likeliihood log is 81.503; in step 1 is 46566. This reduction of -2 Log Likelihood demonstrates the feasibility of using this regression model.

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	46.566ᵃ	.441	.594

Figure 4. Determination test

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	34.937	4	.000
	Block	34.937	4	.000
	Model	34.937	4	.000

Figure 5. Simultaneous Test

The X4 value is 34,937 > X4 table on DF 4 which is 9.287 with a significance of 0.000 (<0.05) which shows a significant effect simultaneously on the independent variable on the dependent variable.

|		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1ᵃ	STRUKTUR MODAL	.014	.008	3.046	1	.081	1.014
	LEVERAGE	.080	.024	10.720	1	.001	1.083
	PROFITABILITAS	-.089	.039	5.186	1	.023	.915
	UKURAN PERUSAHAAN	-.038	.244	.024	1	.876	.963
	Constant	-2.599	6.885	.142	1	.706	.074

Figure 6. Uji Parsial

The capital structure variable (X1) has a significance > 0.05 of 0.081, a wald value of 3.046 and a regression coefficient of 0.014. Capital structure has no impact on financial distress, it can be concluded that H0 is approved and Ha is rejected. The

leverage variable (X2) is significant > 0.05 by 0.001 with the nizlai wzalbd by 10.720 and the regression coefficient by 0.080. H0 is rejected and Ha is approved, showing that leverage has an impact on financial distress. The economic variable (X3) is significant > 0.05 to 0.023 with nilzai wazlbd being z5.186 and a regression coefficient of -0.89. Profitability has an influence on financial distress, so that H0 is rejected and Ha is approved. The firm size variable (X4) has a significance > 0.05 of 0.876, the walbd value is 0.024, and the regression coefficient is -0.038. The size of the company does not have the effect of financial distress, so H0 is approved and Ha is rejected.

The findings of the leverage variable test are statistically significant at α = 0.05, namely 0.081 (0.081 > 0.05), so that Ho is approved and Ha is rejected. This shows that the company's capital structure has a negative influence in predicting financial problems. Even if a company with large debts is not necessarily in financial trouble, it will have a positive impact if it has high income and good management. The conclusions of this study are not in accordance with the conclusions of Frizka Fadilla and Vaya Juliana Dillak (2019), who found that the use of DER proxies in the financial structure has a positive impact on financial distress.

The leverage variable is statistically significant at α = 0.05, namely 0.001 (0.001 <0.05), so that HZA is approved and HZO is rejected. Leverage has a significant impact on the financial kdistzress for industrial companies that are listed on the BZEI for 2019-2021. The company's leverage demonstrates its power to finance assets with debt. (Princess, 2020). Companies with more
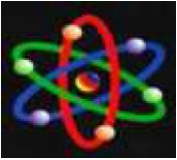
debt than assets will have more payment problems in the future. This scenario can exacerbate financial distress if not managed properly. This study confirms Mahaningrum & Merkusiwati (2020) that leverage has a limited influence on pos.iztif. zap financial distress.

Ha is approved and Ho is rejected when the profitability variable reaches a statistically significant level at $\alpha = 0.05$, or 0.023 (0.023 <0.05). Financial difficulties in industrial companies according to data on the IDX for 2019–2021 are heavily influenced by profitability. If a company has a high ratio value, its assets are managed more effectively. Net profit helps companies avoid financial problems and attracts investors. Alfinda Rohmadini (2018) found that profitability has a negative impact on financial distress, which is contrary to the findings of this study.

The company size variable is statistically insignificant at $\alpha = 0.05z$, so that Ha ditozlak and Ho are agreed. Hzal Inzi shows that company size does not impact financial distress on industrial companies according to data on the IDX for 2019-2021. The bigger the company in signaling, the bigger its market power. Outsiders can base decisions on the size of the company. Total assets, sales, revenue, tax expenses, and others reflect the size of the company. Due to economic risks, companies with large assets cannot be isolated from financial problems. (Princess, 2020). Economic risks are external factors such as inflation, nilzai tuzkar rupziah, and interest rates. Thus, the large assets owned by the company may still face financial problems. This research supports Dani Sopian and Wiwin Putri Rahzayu (2017), who found that company

size has a negative impact on financial distress.
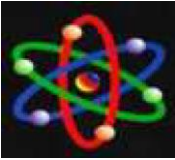
CONCLUSION

A company in financial distress loses money and may experience large losses resulting in bankruptcy for the company. To avoid bankruptcy, companies must predict financial distress by analyzing the company's obsolete records to find out financial problems. Financial distress in industrial companies listed on the IDX in 2019–2021 is predicted by the company size financial ratio. In financial ratios, the authors use capital structure, leverage, profitability. The author concludes from the SPSS 25 program trial through Binary Logistics:

1. Capital Structure (DER) and Company Size (LN) partially have a negative impact on the financial distress of food and beverage companies listed on the IDX 2019 - 2021. z

2. Leverage (DAR) and Profitability (ROA) partially have a significant positive impact on the financial distress of food and beverage companies listed on the IDX 2019 - 2021.

3. Capital structure, leverage, profitability and company size simultaneously have a significant impact on the financial distress of food and beverage companies listed on BZEI 2019-2021.

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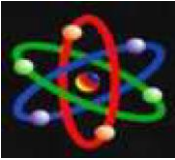
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