



The effect of return on assets and sales growth on financial distress in food and beverage companies listed on the indonesia stock exchange in 2019 – 2021

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ABSTRACT

The purpose of this study is to determine the effect of Return on Assets (ROA), and sales growth in food and beverage sector companies for 3 (three) years, namely the 2019-2021 period. The population of this study is food and beverage sector companies that remain listed on the Indonesia Stock Exchange from 2019 to 2021 totaling 47 companies. Sampling was carried out by purposive sampling consisting of 21 companies. Using the SPSS program, research data were analyzed using a logistic regression analysis approach. This analysis shows that the ROA variable has a positive and significant effect on financial distress. Meanwhile, sales growth (SG) does not have a significant effect on financial distress.

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1. INTRODUCTION

Food and Beverage Company is a company engaged in the food and beverage industry. In Indonesia, food and beverage companies are growing rapidly, this can be seen from the number of companies listed on the Indonesia Stock Exchange from period to period increasing. However, from 2020 to 2021 there was a Covid-19 pandemic in the world, especially in Indonesia, which resulted in a slowdown in sales, non-current payment bills, and declining company revenue. Various ways are done by companies to survive and increase profits. (Yonggara et al., 2021) Increased profit represents the Company's financial performance. Financial performance is reflected in the financial statements. According to (Subekti, 2023) Financial performance is an analysis conducted to see the extent to which a company has implemented using financial implementation rules properly and correctly. Financial performance can be shown through financial ratios, namely Return On Assets and Sales Growth (Apriliani & Nuryatno, 2022).

Return On Assets is a ratio that shows how much assets contribute to creating net income. In other words, this ratio is used to measure how much net profit will be generated from each dollar of funds embedded in total assets (Juliani & Muslihat, 2021). Sales Growth is a ratio that describes the company's ability to maintain its economic position amid economic growth and its business sector (Endri et al., 2020).

The phenomenon of financial difficulties has occurred in many companies since the world was hit by the Covid 19 pandemic. (Pratiwi et al., 2021) *Financial Distress* in Indonesia many companies have experienced since 2001. Financial difficulties are caused by poor financial performance. Financial difficulties are a situation when a company is unable to fulfill its obligations. This happens as an early sign before the worst thing will happen, namely bankruptcy. Financial distress not only damages the company's financial system, but also the organization as a whole. The loss of the company's financial resources and human resources can cause the company to be liquidated (Sirait et al., 2021).

Financial Distress It is a situation where the company faces depreciation in financial condition, it occurs before bankruptcy (Christine et al., 2019) . According to (Fahrurrozi et al., 2019), there are three financial conditions that are the reason for the company's experience: Financial Distress Includes lack of capital, the amount of interest expenses, and experiencing losses. The company was forced to stop some or all of its activities. Therefore, a balance of these two aspects is needed to minimize the possibility of the company experiencing financial distress. Average variable return on asset, sales growth and financial distress at the food and beverage company in 2019 – 2021 are financial distress in year of 2019 is 6,03, 2020 is 5,68 and 2021 is 5,73. Return on assets in year of 2019 is 0,10, 2020 is 0,06 and 2021 is 0,08 and the last saales growth in year of 2019 is 0,09, 2020 is -0,08 and 2021 is 0,17. So it is known that return on assets In 2019-2020, the company experienced financial difficulties due to a decrease in profits. To Return On Assets (ROA) in year 2020-2021 resulted in no financial difficulties for the company due to an increase in profits. This can mean that companies tend to experience *Financial Distress* due to a decrease in the company's profits.

Meanwhile, Sales Growth experienced a decline in 2019-2020, resulting in a decrease in sales growth in the company. Conversely, in 2020-2021 Sales Growth increased which resulted in increased sales growth in the company. This is what makes the author interested in conducting Financial Distress research, because he wants to know how the effect of Return On Assets and Sales Growth on financial distress.

Yogi Ginanjar and Melia Wida Rahmayani (2020) in their Journal had used Liquidity, Solvency and Profitability as their Variables on Financial Distress in Manufacturing Companies in the Consumer Goods Industry Sector Listed on the Indonesia Stock Exchange (BEI) Period 2015-2019. Based on The reseachs is Liquidity Does Not Have a Significant Influence on Financial Distress, Solvency Does Not Have a Significant Influence on Financial Distress, Profitability has a significant influence on financial distress.

This is also almost the same as what was stated by Muzharoatiningsih (2021) in their Journal that entitled the Influence of Financial Ratios, Sales Growth, and Company Size on Financial Distress In the Descriptive Profitability has a Negative Influence on Financial Distress. Current Ratio Has No Effect on Financial Distress DAR Has No Effect.

Ni Luh Putu Ari Dewi, I Dewa Made Endiana, Dan I Putu Edy Arizona (2018) explained that entitled the Influence of Liquidity Ratios, Leverage Ratios and Profitability Ratios on Financial Distress in Manufacturing Companies Liquidity Has a Negative Influence on Financial Distress Leverage Positive Influence on Financial Distress.

Based on previous research, the research gap above relating to financial distress shows several inconsistent results by several studies, namely that there are differences variables have no influence on financial distress.

2. RESEARCH METHOD

This study used a descriptive method. According to (Handayani, 2023) Descriptive statistics are statistics used to analyze data in a descriptive way or describe the data that has been collected as it is without the intention of making generalized conclusions or

generalizations. The type of data used in this study is secondary data and is quantitative, namely data expressed in the form of numbers. This research was conducted based on the Annual financial statements of Indonesia Stock Exchange companies. The total population in this study was 47 companies. Data collection was carried out by purposive sampling method. *purposive sampling* is a sampling technique with certain considerations (Citra Puspitasari, Fauziah Aprilia, Mentarie, 2021). So that there are 21 samples in this study listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period.

3. RESULTS AND DISCUSSIONS

3.1 Descriptive Statistics

The following descriptive statistical analysis explains the amount of data used (N), lowest value (minimum), highest value (maximum), average value (mean) and standard deviation in this study. A detailed description of the data for each variable can be seen in the following table:

Table 1. Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Financial Distress	63	0	1	.84	.368
Return On Assets	63	-13.00	42.00	8.1270	8.18041
Sales Growth	63	-47.00	57.00	6.0159	20.06079
Valid N (listwise)	63				

Source : SPSSV.26 Data Management Output

Based on Table 2 showing descriptive statistical results that the number of observations is 63 which consists of 21 samples with 3 years of financial statements, it can be explained that:

a. Financial Distress

Financial Distress (Y) Food and Beverage companies listed on the IDX in 2019-2021 have a minimum value of 0 and a maximum value of 1, an average value of 0.84 and a deviation value of 0.368.

b. Return On Assets

Return On Assets (X1) of Food and Beverage Companies listed on the IDX in 2019-2021 has a minimum value of -13.00 and a maximum value of 42.00, an average value of 8.1270 and a standard deviation value of 8.18041.

c. Sales Growth

Sales Growth (X2) of Food and Beverage companies listed on the IDX in 2019-2021 has a minimum value of -47.00 and a maximum value of 57.00, an average value of 6.0159 and a deviation value of 20.06079.

3.2 Assessing the Overall Model (Overall Model Fit)

This test is carried out by looking at the results of -2 Log Likelihood on the results of the fit test 1 with the results of -2 Log Likelihood on the results of the fit test 2. If there is a decrease in the value of the results of the fit test 1 with the fit test 2, it can be concluded that the research model is fit with data. Here are the results of the fit model test in this study:

Table 2. Fit 1 test

Iteration History ^{a,b,c}	CoefficientsConstant
55.957	-1.365
55.138	-1.641
55.132	-1.667
55.132	-1.668

a.Constant is included in the model.

b.Initial -2 Log Likelihood: 55.132

c.Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Table 3. Fit 2 test

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	35.788a	.264	.453

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Source : SPSSV.26 Data Management Output

Table 3 and 4 above shows the comparison between the value of the first -2LL block and the second -2LL block. From the comparison of the -2LL value, it can be seen that the value of the Fit 1 Test Results is 55.132 and the value of - 2LL of the Fit 2 Test Results is 35.788, where the initial -2LL block value is greater than the value of the second -2LL block. With these results, it can be concluded that the regression model in this study is good, this is concluded from the decrease in value from the first block to the second block.

3.3 Testing the Feasibility of Regression Models (*Hosmer and Lemeshow's Goodness of Fit Test*)

The feasibility of the regression model will be assessed using Hosmer and Lomeshow's Goodness of Fit Test, if the value is greater than 0.05 then the null hypothesis is accepted. That is, the model is acceptable. The results of Hosmer and Lomeshow's Goodness of Fit Test can be seen in the following table:

Tabel 4. Hosmer and lemeshow test

Step	Chi-square	Df	Say.
1	3.186	8	.922

Source : SPSSV.26 Data Management Output

Table 5 shows the results of the Hosmer and Lomeshow Test. From the test results in the table above, a Chi-square of 3.186 was obtained with a significance value of 0.922 and df 8. The table shows significance values of $0.922 > 0.05$ (greater than alpha values of 0.05). Based on this significance value, it can be concluded that the model is feasible to be used in continuing research testing.

3.4 Koefisien determinasi (*Nagelkerke's R Square*)

The summary model in logistic regression is the same as the R2 test in a linear regression model. The purpose of the Summary model is to find out how much the combination of independent variables namely *Return On Assets* and *Sales Growth* can explain *Financial Distress*. The results of the Summary model can be seen in the following table:

Table 5. Test R2 result

Model Summary			
Step-2	Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	35.788a	.264	.453

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Source : SPSSV.26 Data Management Output

From the results of the data processing above, the coefficient of determination seen from the Nagelkerke R Square is 0.453 or 45.3%. That is, the independent variables namely Return On Assets and Sales Growth were able to explain the dependent variable, namely Financial Distress by 45.3%, while the remaining 54.7% was explained by other factors not explained in this study.

3.5 Logistic Regression Test

The logistic regression test in this study can be seen in the table as follows:

Table 6. Logistic regression test

Variables in the Equation		B	H.E	Forest	Df	Say.	Exp(B)
Step 1a	TWO PEOPLE	-32.791	11.473	8.169	1	.004	.000
	SG	1.626	1.907	.726	1	.394	5.081
	Constant	-.309	.579	.284	1	.594	.734

a. Variable(s) entered on step 1: ROA, SG.

Source : SPSSV.26 Data Management Output

Based on Table 6 above, the logistic regression model obtained is as follows:

$$Y = -0,309 -32,791 (X1) + 1,626 (X2) + e$$

The value of the Return On Assets (X1) regression coefficient of -32.791 (negative value) in this study can be interpreted that the variable Return On Assets (X1) negatively affects Financial Distress (Y). The value of the Sales Growth (X2) regression coefficient of 1.626 (positive value) in the study can be interpreted that the Sales Growth variable (X2) has a positive effect on physical distress (Y).

3.6 Wald Test (Parsial)

Hypothesis testing of this study was carried out using logistic regression analysis using the SPSS program. The results of logistic regression of this study are described in the table below:

Table 7. Partial test

Variables in the Equation		B	H.E	Forest	Df	Say.	Exp(B)
Step 1a	TWO PEOPLE	-32.791	11.473	8.169	1	.004	.000
	SG	1.626	1.907	.726	1	.394	5.081
	Constant	-.309	.579	.284	1	.594	.734

a. Variable(s) entered on step 1: ROA, SG.

Source : SPSSV.25 Data Management Output

The test results from table 7 above on research hypotheses are as follows: (a) Based on the table above, showing Return On Assets has a regression coefficient value of -32.791 which means the direction of this coefficient indicates a negative direction. The significance value of Return On Assets is $0.004 < \alpha (0.05)$, so Return On Assets has a correlation / effect on Financial Distress and has a negative relationship. (b) Based on the table above, it shows Sales Growth has a regression coefficient value of 1.626 which means the direction of this coefficient shows a positive direction. The significance value of Sales Growth is $0.394 > \alpha (0.05)$, so Sales Growth has no correlation / effect on

Financial Distress.

3.7 *Omnibus Test* (Simultaneous or G Test)

This test is conducted to test whether the variables Company size, Profitability, Operating Cash Flow, and Capital intensity simultaneously affect Financial Distress. The results of the Omnibus Test of Model Coefficient can be seen in the following table:

Tabel 8. Omnibus tests of model coefficients

		Chi-square	Df	Sig.
Step 1	Step	19.345	2	.000
	Block	19.345	2	.000
	Model	19.345	2	.000

Source : SPSSV.26 Data Management Output

Based on Table 8 above shows that simultaneously Return On Assets and Sales Growth simultaneously affect Financial Distress. This can be seen from the Chi-Square result of 19.345 with df of 2 and significance of 0.000 which is a value smaller than 0.05. This shows that Return On Assets and Sales Growth have an effect on Financial Distress.

The Effect Return On Assets (X1) Of Financial Distress

According to (Jaya & Aruan, 2021) Return On Assets is a ratio that shows how much assets contribute to creating net income. In other words, this ratio is used to measure how much net profit will be generated from each dollar of funds embedded in total assets. From the results of this test, it can be concluded that the variable value of Return On Assets obtained is -32.791 with a significance level of 0.004 < from the alpha significance level set at 0.05. Thus, the first hypothesis (H1) shows that Return On Assets has an effect on Financial Distress. This result is evidenced by previous research conducted by Dita Agustin (2022) stating that Return On Assets has a positive and significant effect on Financial Distress conditions. However, unlike research conducted by (Mahardian, 2008) Return On Assets does not have a significant effect on Financial Distress.

The Effect Sales Growth (X2) Of Financial Distress

According to (Muzharoatiningsih & Hartono, 2022) Sales Growth is a ratio that describes the company's ability to maintain its economic position amid economic growth and its business sector. From the results of this test, it can be concluded that the value of the Sales Growth variable obtained is 1.626 with a significance level of 0.394 > from the alpha significance level set at 0.05. Thus showing that Sales Growth has no effect on Financial Distress. This result is proven by previous research conducted by (Muzharoatiningsih & Hartono, 2022) Sales Growth has no effect on Financial Distress. But it is different from the research conducted (H. A. Kusuma et al., 2022) that Sales Growth has a positive effect on Financial Distress. According to (I. A. Kusuma & Trisnawati, n.d.) the reason why there is no influence of Sales Growth on Financial Distress is due to the ups and downs in the value of Sales Growth has not been able to be followed by the company's profit gain. The large burden of the company is the cause of the profit obtained is not enough to support financial conditions.

The Effect Return On Assets (X1) and Sales Growth (X2) Of Financial Distress

From the description above, it can be ascertained that Return On Assets and Sales Growth on Financial Distress have a significant effect.

4. CONCLUSION

This study examines whether *Return On Assets*, *Current Ratio*, and *Sales Growth to Financial Distress* in *Food and Beverage* companies listed on the Indonesia Stock Exchange from annual financial statement data in the form of income statements and audited statements of financial position for 2019-2021. Based on the results of the research conducted along with the results of the data studied, the conclusions that can be drawn are the *Return On Assets* test partially have a positive and significant effect on *Financial Distress* in *Food and Beverage* companies listed on the Indonesia Stock Exchange, the second the results of the *Current Ratio* test partially have a positive and significant effect on *Financial Distress* in *Food and Beverage* companies listed on the Indonesia Stock Exchange. The third results of the *Sales Growth* test partially have a negative and insignificant effect on *Financial Distress* in *Food and Beverage* companies listed on the Indonesia Stock Exchange. And The last test results simultaneously show a positive and significant influence between the variables *Return On Assets*, *Current Ratio*, and *Sales Growth* on *Financial Distress* in *Food and Beverage* companies listed on the Indonesia Stock Exchange.

Contribution of this research Investors before investing in Food and Beverage companies should first pay attention to the company's financial performance such as Return On Assets and Sales Growth because based on this research these ratios have an influence on Financial Distress. Companies should maximize the management of current assets such as cash and inventory, debt and equity because this will affect the profits they will generate.

Meanwhile, the limitations of this research are Future researchers are advised to use other financial ratios or add research variables, as well as test other factors that might influence Financial Distress. Apart from that, it is hoped that the research period will be longer and use the latest year to provide the most up-to-date picture.

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