INTERNATIONAL JOURNAL ON MANAGEMENT AND EDUCATION HUMAN DEVELOPMENT

J. Management & Education Human Development

ISSN: ISSN: 2775 - 7765
web link: http://www.ijmehd.com

Potential Analysis Financial Distress On Company *Food & Beverage* Registered In Bursa Efek Indonesia

Lisdhayanti Sarphan, Murdjani Kamaluddin, Muh. Nur.

Master of Management Study Program, Sekolah Tinggi Ilmu Ekonomi Enam Enam Kendari, Indonesia

Received: 23/05/2024 Accepted: 21/08/2024 Published: 30/09/2024

Representative e-Mail: *muh.nur363@gmail.com*

ABSTRACT

This study aims to determine the Analysis of Potential Financial Distress in Food & Beverage Companies Listed on the Indonesia Stock Exchange, using financial statement data for the 2019-2023 period. The sample collection technique has been carried out by purposive sampling and 8 companies have been selected as samples. This research is descriptive statistics using the Altman, Springate, and Zmijewski analysis models. The results of this study indicate that the Altman model can predict financial distress, the Springate model can predict financial distress, and the zmijewski model can predict financial distress.

Keywords: *Analysis of Potential, Financial Distress, Food and Beverage, Indonesia Stock Exchange*

I. INTRODUCTION

Modern communications and technical advancements help business owners advertise and sell these goods to the general public. Rapid economic expansion has led to increased competition between businesses, resulting in the emergence of new rival companies.

A company's financial statements are used by external parties as an important source of information that allows understanding the company's performance, financial condition, and financial condition of the company. Therefore, it is important to use analytical tools that integrate various financial ratios when evaluating the company's financial condition.

Hery, (2016) explains that the company's profit is obtained from the total income of the entity that comes from operations minus the funds that have been used during business activities. Business owners will endeavour to earn as much profit as possible so that the company can survive and develop in the future, thus it is hoped that the company management will be able to predict going concern events that can lead the company to a state of financial difficulty which can ultimately lead to bankruptcy.

Bankruptcy is a problem feared by all business people; therefore, companies are required to be able to predict financial difficulties that can lead to bankruptcy as early as possible. Financial distress analysis itself is carried out so that companies can predict as early as possible the initial warning of financial distress so that it can be handled before it occurs. The risk of bankruptcy in a company increases if the company's financial condition decreases (Burhanuddin, Rizky Amalia. 2015). There are several indications that describe a company going bankrupt, one of which is if the company has experienced a decrease in profits in several consecutive years. This indication can be predicted by looking at the company's annual financial statements.

Financial distress is often interpreted as a state of near bankruptcy where there is uncertainty about future profitability. Annual financial analysis, which is carried out by management with tools such as Z-score or discriminant analysis, according to Altman's research (1968) and To produce a purposeful score, five financial ratio variables are used (Hilda, 2012).

According to Bringham (2012) Financial distress is a situation when a financial difficulty befalls a company, which means the difficulty of the company's cash and working capital. Financial distress is a situation when a company can no longer cover its payment obligations (Ramahdani, 2024). When a business faces financial problems, the company needs a lot of money to overcome them. These funds can be obtained from loans made to third parties. Companies also sometimes margerise, besides that there are also companies that choose to close their business or go bankrupt. Company bankruptcy occurs because the company no longer has assets or other valuables that can be used as collateral to third parties to obtain loans.

Financial distress is generally divided into three categories. In the first category, the company is considered to be experiencing low category financial distress, where the company is considered to be experiencing temporary

financial distress caused by various internal and external factors. In the second category, the company is considered to be experiencing moderate financial distress, where the company is considered to be able to survive, but must consider changing the policies and management concepts that have been used so far. In the third category, namely high category financial distress, in this condition the company is considered to be in a dangerous situation, in this category the company is required to implement a realistic policy to protect the company's assets, such as a policy of sorting out which assets will be maintained and which will be sold to help pay for production needs and finance debt, in this category the company's management has to think about a marger or acquisition solution, besides that the most visible impact is usually the company reducing employees with massive layoffs or early retirement to reduce production costs.

As the economy in Indonesia develops in the current era of globalisation, market competition is also getting tougher. Companies must improve quality, efficiency, and innovation to remain competitive in domestic and international markets, and be able to compete with domestic products with Indonesia's involvement in the global market. Therefore, every company must be able to maintain its existence so that the business entity can continue to run.

The occurrence of the Covid-19 pandemic has caused a negative impact on all aspects of life, especially on the world economy, including the Indonesian economy as a developing country. The manufacturing industry plays an important role in a country's economic growth because it contributes greatly to job creation, increasing product added value, and technological advancement. In addition, the industry is also a major driver of exports and investment, which increases a country's economic stability and competitiveness at the global level. In April 2020, the Purchasing Manager's Index (PMI) of manufacturing companies in Indonesia decreased to 27.5 and industrial utilisation decreased by 50%, a situation exacerbated by the increase in the exchange rate to IDR 14,282 and the burden of imported inputs. The food and beverage industry, basic metal industry, and chemicals and products made from chemicals industry are the three main industries that contribute greatly to the overall manufacturing industry, and these three industries play an important role in supporting the overall industry performance. However, due to currency fluctuations and rising import costs, the sector is also facing additional problems.

The COVID-19 pandemic has caused social distancing, decreased consumer purchasing power, and disruptions to global supply chains that affect the operations and profitability of the food and beverage industry in Indonesia. To survive amidst the challenges faced during the pandemic, many companies in the industry have had to quickly adapt by changing their marketing strategies, creating new delivery services, and creating new products, this has required the association of food and beverage entrepreneurs to cut growth projections, which are usually at 7 per cent must drop to 3-4 per cent, this is because household consumption, which comes from the contribution of food and beverage and health care, has decreased by 2.84% (Lukman, 2020).

The financial crisis, according to Platt and Platt (2002:186), is the first phase of a business downturn. At this point, businesses begin to experience significant financial difficulties, which if not handled properly can lead to more severe downturns, such as bankruptcy. Such financial crises are usually characterised by decreased liquidity, increased debt, and decreased profitability, all of which can jeopardise the sustainability of a business. If financial problems can be identified early by looking at the financial position on the balance sheet and income statement, the company is expected to make the right decisions to reduce bankruptcy. If management sees signs of a financial crisis, it can fix their debt, increase operational efficiency, or improve their business plan to reduce the risk of bankruptcy and maintain the company's business.

Table 1.Total operating profit and Total Debt of companies in the Food and Beverage sector for the 2019-2023 Period (in rupiah)

Stock Code	Year	Net Income	Total Debt	Stock Code	Year	Net Income	Total Debt
DLTA	2019	151.715.042.000	123.231.249.000	SKLT	2019	5.976.790.919	91.337.531.247
	2020	213.421.007.000	147.095.322.000		2020	7.962.693.771	120.263.906.808
	2021	270.498.062.000	190.482.809.000		2021	11.440.014.188	162.339.135.063
	2022	288.073.432.000	227.473.881.000		2022	16.480.714.984	178.206.785.017
	2023	191.304.463.000	188.700.435.000		2023	18.202.605.538	225.066.080.248
INDF	2019	5.017.425.000.000	21.975.708.000.000	ICBP	2019	2.064.049.000.000	4.513.084.000.000
	2020	4.871.745.000.000	25.181.533.000.000		2020	2.287.242.000.000	5.766.682.000.000
	2021	4.896.782.000.000	39.719.660.000.000		2021	2.286.639.000.000	8.001.739.000.000
	2022	4.812.618.000.000	44.710.509.000.000		2022	2.522.328.000.000	9.870.264.000.000
	2023	4.867.347.000.000	48.709.933.000.000		2023	3.025.095.000.000	10.173.713.000.000
MYOR	2019	483.826.229.688	4.175.176.240.894	ULTJ	2019	128.449.344.052	828.545.205.120

Stock Code	Year	Net Income	Total Debt	Stock Code	Year	Net Income	Total Debt
	2020	742.836.954.804	5.234.655.914.665		2020	353.431.619.485	744.274.268.607
	2021	1.009.764.111.939	5.816.323.334.823		2021	325.127.420.664	796.474.448.056
	2022	412.354.911.082	6.190.553.036.545		2022	283.360.914.211	651.985.807.625
	2023	1.266.519.320.600	6.148.255.759.034		2023	524.199.537.504	742.490.216.326
ROTI	2019	115.932.533.042	212.695.735.714	CLEO	2019	130.756.461.708	478.844.867.693
	2020	149.149.548.025	538.337.083.673		2020	132,772,234,495	416,194,010,942
	2021	158.015.270.921	1.035.351.397.437		2021	180,711,667,020	346,601,683,606
	2022	188.577.521.074	1.182.771.921.472		2022	192,467,066,577	781,642,680,910
	2023	263.710.727.440	1.517.788.685.162		2023	305,879,961,825	781,642,680,910

Source: Annual Report of Food & Beverage Companies accessed through www.idx.co.id for the period 2019-2023. (data processed, 2024)

There is an imbalance between net income and total debt during the 2019-2023 period, in the face of market challenges, each company shows diverse financial performance. This is shown by the analysis of data from several companies, such as PT Delta Djakarta Tbk (DLTA), PT Indofood Sukses Makmur Tbk (INDF), PT Mayora Indah Tbk (MYOR), PT Nippon Indosari Corpindo Tbk (ROTI), PT Sekar Laut Tbk (SKLT), PT Indofood CBP Sukses Makmur Tbk (ICBP), and PT Ultra Jaya In this analysis, important financial ratios are evaluated. These ratios provide an overview of the company's financial health and ability to sustain growth and reduce the risk of bankruptcy. Business strategy, operational efficiency, and market conditions in the food and beverage industry affect the financial characteristics of each company. Food and beverage companies may experience financial problems due to these fluctuations in net income and debt. A continuous decline in profits may indicate that the business is not making a good profit. Depreciation of total debt that is not followed by an increase in profits may jeopardise the future viability of the business.

II. LITERATURE REVIEW

Previous research on financial distress has been conducted. The following is a summary of research that has been conducted by previous researchers: Wulandari (2020) conducted a study entitled "Comparative Analysis of the Altman, Springate, Ohsol, Fulmer, CA Score, and Zmijewski Models in Predicting Financial Distress (Empirical Study of Food and Beverage Companies Listed on the Indonesia Stock Exchange)". The results showed that the Ohsol model has a significant level of sensitivity to predicting financial distress in five of the twelve companies studied.

Hutauruk and Situru (2021) in their research entitled "Financial Distress in Companies Listed on the Indonesia Stock Exchange" found that Islamic companies in the food and beverage sector listed on the Indonesia Stock Exchange (IDX) have more stable financial conditions, so they experience less financial distress. This study shows that the application of sharia principles can contribute to the financial stability of companies, especially in the face of risks that have the potential to cause financial distress.

Andika, (2020) "Financial Distress Analysis with Springate (S-Score) and Zmijewski Methods in Food and Beverage Companies Listed on the Indonesia Stock Exchange". The purpose of this study is to find and analyse financial problems that may occur in manufacturing companies listed on the Indonesia Stock Exchange (IDX). This was done using the Springate and Zmijewski Methods. In addition, the purpose of this study is to determine which prediction model is most effective for predicting financial distress conditions. This is intended to provide companies and stakeholders with better insights on how to make informed financial decisions. The data required is secondary data, with quantitative data analysis. The results obtained were 21.57% of companies experiencing financial distress with the springrate model, for the Zmijewski model, no companies experiencing financial distress were detected.

Harahap and Sari, (2024) "Comparative Analysis of the Altman (Z-Score) and Springrate Models to Predict Financial Distress in Food and Beverage Sub-Sector Companies Listed on the Indonesia Stock Exchange in 2017-2021". The purpose of this study was to determine and explain the calculation of predicting financial distress and financial performance in Food and Beverage Sub-Sector companies listed on the IDX in 2017-2021 using the model developed by Edward I. (Altman Z-score) and Springrate. (Altman Z-score) and Gordon L.V. (Springrate) which are processed using excel software. The results showed that in the independent sample t test the Asymp Sig (2-tailed) value showed a value of less than 0.05, indicating a significant difference in each model. The accuracy test results show that the Springrate model achieves the highest level of accuracy, which is 70.52%, while the Altman Z-score model reaches 56.84%.

Ruswanti and Fachrur, (2024) "Financial Distress Analysis of Food and Beverage Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange (IDX) 2017-2021 Period". This study resulted in the Altman method finding 32 food and beverage companies experiencing financial distress with an accuracy rate of 54%, the Springate method found 64 food and beverage companies in financial distress with a prediction accuracy rate of 62%.

These results indicate that this method is effective enough to identify possible financial distress conditions in this industry.

III. RESEARCH METHODS

This research followed a quantitative descriptive analysis approach, as described by Arikunto (2010:234). The process began with the collection of financial data from eight entities operating in the food and beverage sector and listed on the Indonesia Stock Exchange. Once the data is collected, the next step is to classify the data based on relevant parameters, such as the type of financial ratios and the period under study. Then, the data is analysed using financial prediction models such as the Altman, Springate, and Zmijewski methods to produce numerical values that reflect the financial condition of these companies. The final step is to interpret the numerical results to understand whether the company is in financial distress or not. These results are then presented in a way that facilitates understanding of the financial state of the companies under study, with the ultimate goal of providing insights that can be used by stakeholders in making informed decisions.

This study incorporates companies that are engaged in the food and beverage industry and are listed on the Indonesia Stock Exchange (IDX). This criterion allows the researcher to examine and draw conclusions about the special financial features of this group of companies. This provides relevant and specialised insights into the industry.

This research using purposive sampling technique was chosen to determine the sample to be used. This technique is based on special considerations made by the researcher, and allows the researcher to select subjects or objects that can best provide relevant information for research purposes. The aim is to ensure that the selected sample accurately describes the phenomenon to be studied, especially to identify important elements of companies in the industry Food and beverage companies listed on the Indonesia Stock Exchange (IDX) (Suhiyono; 85). In this study, the purposive sampling method was used mostly to focus and narrow the scope of the sample. This method is very suitable for application in quantitative research that aims to conduct detailed and specific analysis, not to make generalisations to a larger population. By purposively selecting a sample based on predetermined criteria, the researcher can ensure that the data collected is in line with the objectives and research questions at hand. This method allows researchers to control variables and focus their research on a particular part of the phenomenon under study; in this case, companies in the food and beverage sector listed on the Indonesia Stock Exchange (IDX) (Sugiyono 2016; 85). So that researchers determine certain criteria to narrow the research sample so that the level of research accuracy is greater. The sample in this study included several companies in the Food and Beverage industry listed on the Indonesia Stock Exchange from 2019 to 2023. The selection of this sample allows the research to review and analyse the company's trends, performance and financial condition during this period. The focus over the past five years on Food and Beverage companies on the Indonesia Stock Exchange has the aim of capturing the dynamics of this industry in the midst of Indonesia's current economic development, so that research can produce relevant and forward-looking results, in determining the sample of companies to be used, certain criteria are set to eliminate the sample used as follows:

1. Companies from the food and beverage sector that are listed on the Indonesia Stock Exchange (IDX) but did not publish their financial statements during the 2019-2023 period.
2. Companies in the Food and Beverage industry that are listed on the IDX and that did not manage to generate profits from 2019 to 2023.
3. Companies that did not manage to upload audited financial statements in a row from 2019 to 2023.

The sample selection process resulted in a list of companies from the food and beverage sector that are listed on the Indonesia Stock Exchange (IDX) and fulfil the criteria for the period 2019-2023. This list will be used as research subjects and analysed to understand their financial and operational conditions during the period. The main focus of this research will be on the names of these companies, which will provide the necessary data and knowledge for the analyses conducted:

Table 3.1 Sample of Food and Beverage Companies Listed on the IDX

No	Stock Code	Company Name
1	DLTA	PT Delta Djakarta Tbk
2	INDF	PT Indofood Sukses Makmur Tbk.
3	MYOR	PT Mayora Indah Tbk.
4	ROTI	PT Nippon Indosari Corpindo Tbk.
5	SKLT	PT Sekar Laut Tbk
6	ICBP	PT Indofood CBP Sukses Makmur Tbk. PT Indofood CBP Sukses Makmur Tbk
7	ULTJ	PT Ultrajaya Milk Industry & Trading Company Tbk.
8	CLEO	PT Sariguna Primatirta Tbk

The documentation method is used to collect data to ensure that the data to be used in this research is accurate and reliable. The documentation method is a data collection technique that relies on written sources or documents that have been documented. In this study, this method was carried out by accessing and downloading the financial statements of food and beverage companies listed on the Indonesia Stock Exchange (IDX). This process involves using official databases and the IDX website, where legitimate and verified financial statements are available. This allowed the researcher to have direct access to a credible source of data, which is crucial for objective and in-depth financial analysis in this study.

The author sought to identify, measure, and project the potential financial crisis of eight companies in the food and beverage sector. After the data has been comprehensively collected, the next step is to analyse the data to obtain relevant information. The methods used in this data analysis are the Altman, Springate, and Zmijewski methods. After the data was collected, financial ratio calculations were performed using the Altman, Springate, and Zmijewski methods.

1. The ratios calculated using the Altman method consist of the following components:

a. Ratio of working capital to total assets

A company's net working capital can be calculated by subtracting current liabilities from current assets rather than dividing the two. This ratio shows how much current assets are left after deducting the company's current liabilities. This ratio is also often called *Working capital to total assets* (WCTA ratio).

$$\text{WCTA} = \frac{\text{Working Capital}}{\text{Total Assets}}$$

b. Retained earnings to total assets

This can be done by dividing the company's retained earnings by its total assets. One name for this ratio is *Retained Earnings to Total Assets* (RETA Ratio).

$$\text{RETA} = \frac{\text{Retained Profits}}{\text{Total Assets}}$$

c. Earnings before Interest and Taxes to Total Assets

Earnings before interest and taxes (EBIT) data is shown in the income statement, while the balance sheet shows all company assets. The *earning before interest and taxes to total assets* (EBITTA) ratio can be obtained using the formula:

$$\text{EBITTA} = \frac{\text{Earnings before interest and tax}}{\text{Total Assets.}}$$

d. Book value of equity to book value of total debt

The amount of company equity can be calculated, and the value of company debt can be calculated by combining current and long-term liabilities. *Market value equity to total liabilities* (MVETL) calculation, with the following formula

$$\text{MVETL} = \frac{\text{Value at book of equity}}{\text{Book value of total debt}}$$

e. Sales to Total Assets

All company assets can be seen on the company's balance sheet, and the value of sales can be seen in the income statement. The calculation of the *sales to total assets* (STA) ratio can be calculated using the formula:'

$$\text{STA} = \frac{\text{sales}}{\text{Total Assets}}$$

2. Calculation of financial ratios used in the Springate method

a. Working capital to total assets ratio

A company's net working capital can be calculated by dividing its current liabilities by its current assets. This ratio is also often called *Working capital to total assets* (WCTA ratio).

$$\text{WCTA} = \frac{\text{Working Capital}}{\text{Total Assets}}$$

b. Profit before Interest and Tax to Total Assets

The income statement displays earnings before intearest and taxes (EBIT) data, while the company's balance sheet displays all of its assets. The earning before interest and taxes to total assets (EBITTA) ratio can be obtained using the formula:

$$\text{EBITTA} = \frac{\text{Earnings before interest and tax}}{\text{Total Assets.}}$$

c. Net profit before tax against current liabilities

Current liabilities are listed in the company's balance sheet, and net profit before tax can be found in the income statement. To obtain Net Profit befote taxes to curreny liabilities can be done with the formula

3. Calculation of financial ratios used in the Zmijewski method

a. Ratio of Profit Before Tax to Total Assets

One method of calculating this ratio is to compare the company's net profit value listed in the income statement with the total assets listed in the balance sheet. This ratio is often also called ROA (return on assets) with the formula:

$$\text{ROA} = \frac{\text{Profit after tax.}}{\text{Total Assets.}}$$

b. Ratio of Total Debt to Total Assets

To see the value, it can be seen in the company balance sheet section, then the leverage ratio can be obtained using the formula:

$$Leverage = \frac{\text{Total Debt.}}{\text{Total Assets.}}$$

c. Ratio of Current Assets to Total Assets

To see the value can be seen in the balance sheet section of the company, then calculate it with the formula:

$$\text{Liquidity} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

VI. RESULT AND DISSCUSSION

4.1 Results

4.1.1 Description of Research Variables

In this study, the data that will be used by the author is financial report publication data from several companies engaged in the food and beverage industry listed on the IDX in 2019-2023. The sample selection by purposive sampling refers to several criteria outlined in Table 4.1

Table 4.1 Sample Selection Criteria

Companies that did not publish their financial statements in the 2019-2023 period.	(4)
Companies that have not made consecutive profits in 2019-2023	(9)
Companies that do not publish consecutive audited financial statements 2019-2023	(9)
Sample Quantity	8

Source: Data processed by researchers (2024)

The total number of companies listed on the Indonesia Stock Exchange (IDX) is 825, 84 companies are listed in the food and beverage sector, and 30 of them are listed throughout 2019-2023. To narrow the research sample, the researchers ruled out 4 companies that did not report their financial statements for the 2019-2023 period, 5 companies that did not make a profit in a row in 2019-2023 were also not included in the research sample because the purpose of this study was to see whether companies that earn profits can also potentially experience financial difficulties, besides that the financial statements used in this study are audited annual financial reports so that 9 companies that issue unaudited financial reports are not included in this study.

After selecting the sample, 8 companies were obtained which will be the sample in this study. Details of companies that meet the sample criteria previously described are shown in the following table:

No	Stock Code	Company Name
1	DLTA	PT Delta Djakarta Tbk
2	INDF	PT Indofood Sukses Makmur Tbk.
3	MYOR	PT Mayora Indah Tbk.
4	ROTI	PT Nippon Indosari Corpindo Tbk.
5	SKLT	PT Sekar Laut Tbk
6	ICBP	PT Indofood CBP Sukses Makmur Tbk. PT Indofood CBP Sukses Makmur Tbk
7	ULTJ	PT Ultrajaya Milk Industry & Trading Company Tbk.
8	CLEO	PT Sariguna Primatirta Tbk

Source : Data processed by researchers (2024)

The food sector companies that will be used in this research are PT Delta Djakarta Tbk with company code DLTA, PT Indofood Success Makmur Tbc with business code INDF, PT Mayora Indah Tbq with corporate code MYOR, PT Nippon Indosari Corpindo T bk with ROTI code, PT Sekar Laut T bck with SKLT code, Pt Indofood CBP Success makmur T bgk with ICBP code, pt Ultrajaya Milk Industry & Trading Company T b k with ULTJ company code, and PT Sariguna Primatirta T b c s ULTG company code.

4.1.2 Statistics Descriptive

Descriptive Statistics aims to show the lowest, maximum, average, and standard deviation values of the four models used to predict the cash flow problems of enterprises in the food and mining sector recorded on the Indonesian Stock Exchange (BEI) for the period 2019-2023. Results of statistical analysis descripts for each model included in the table below:

Table 4.2 Data Statistics Descriptive

Descriptive Statistics

	N	Lowest	Maximum	Mean	Std. Deviation
Z_Score	40	2,07295	1516,17816	161,7038772	422,25434925
S_Score	40	,66076	735,20288	76,8409882	202,38046538
X_Score	40	-4,48604	2668,85025	307,3225863	832,81925741
Valid N (listwise)	40				

Source: SPSS Data Processing Results Version 20.

From table 4.2 it can be seen that the Altman model has the lowest Z-score score of 2,07295, i.e. the company Sekar Sea Tbk in 2019 is the worst conditioned company, based on the company model Springate the company with the most poor condition is Nippon Indosari Corpindo Tbc in 2020 with the loweste S-scoring of 0.66076, while for the Zmijewski model the company in the worse condition is the Delta Djakarta TbK in 2019 with a lowest X-score of -4,48604.

Indofood Success Makmur Tbk on the three models had the best condition according to the Altman model Z-score with maximum score of 1516,17816 in 2019, the Springate model with maximum S score of 735,20288 in 2019 and the Zmijewski model with a maximum X score of 2668,85025 in 2020. It shows that companies belong to the healthiest conditions when compared to other companies that are also samples on the research.

The Altman method has a Z-score mean of 161,7038772, and a standard deviation value of 422,25434925, the Springate model has an average S-score value of 76,8409882, and the standard deviations value of 202,38046538, and the Zmijewski model has a X-scored mean of 307,3225863, and the default deviations are 832,81925741.

Average values in non-bankrupt companies indicate a significant deviation standard, which indicates less optimal results as the standard deviation reflects the presence of anomalies and can lead to bias.

4.1.3 Altman Test Results

Below are the results of the ratio-ratio calculation that will be used in the calculation of financial distress using the Altman Z-score method, as follows:

1. The Working Capital to Total Asset ratio (WCTA) is a ratio that describes the extent to which a company can generate working capital from the total assets it owns.
2. The RETA ratio is the ratio which indicates the ability of a company to generate profit held from all assets held by the company.
3. Earnings Before Interest and Tax (EBIT) to Total Asset (EBITA) is a ratio that can indicate whether the company has used its assets and resources effectively in generating operational profits.
4. The market value of equity to book value of debt ratio (MVETL) is a ratio that can provide information about how well the company is in using the funds it owns to increase the profits of shareholders as well as external parties.
5. The Sales to Total Asset Ratio is a ratio that indicates how efficient a company is in using its assets in obtaining sales.

After calculating using the Altman method on the annual financial statements of eight companies in the food and beverage sector for the period 2019-2023, the following results were obtained:

Table 4.2 Altman Method Financial Distress Calculation Results

Company Code	Periode	X1 (WCTA)	X2 (RETA)	X3 (EBITTA)	X4 (MVETL)	X5 (STA)	Z-Score	Category
CLEO	2019	0,00000000000016	0,210	0,139	1,600	0,874	3,297	GA
	2020	0,00000000000015	0,299	0,129	2,150	0,742	4,097	GA
	2021	0,00000000000015	0,381	0,171	2,890	0,819	5,424	NFD
	2022	0,00000000000341	2,339	0,854	2,081	5,702	15,551	NFD
	2023	0,00000000000010	0,424	0,180	1,938	0,910	4,623	GA
ULTJ	2019	0,00000079990653	0,720	0,067	6,550	0,244	9,674	NFD
	2020	0,00000027453996	0,659	0,162	1,204	0,682	4,505	FD
	2021	0,00000042022688	0,832	0,208	2,265	0,893	6,488	FD
	2022	0,00000011618921	0,835	0,175	3,748	1,038	7,832	FD
	2023	0,00000040508780	0,912	0,200	7,989	1,104	12,708	FD
ICBP	2019	0,00000006550606	0,477	0,192	2,216	1,093	5,171	NFD
	2020	0,00000002179408	0,217	0,096	0,945	0,450	2,347	FD

Company Code	Periode	X1 (WCTA)	X2 (RETA)	X3 (EBITTA)	X4 (MVETL)	X5 (STA)	Z-Score	Category
	2021	0,00000001523873	0,228	0,084	0,864	0,481	2,214	FD
	2022	0,00000002685498	0,233	0,065	0,994	0,562	2,242	FD
	2023	0,00000002946503	0,246	0,096	1,086	0,569	2,586	FD
SKLT	2019	0,00000000000163	0,185	0,074	0,927	1,585	2,073	GA
	2020	0,00000000000199	0,223	0,036	1,109	1,620	2,134	GA
	2021	0,00000000000202	0,276	0,090	1,560	1,526	3,142	GA
	2022	0,00000000000158	0,238	0,139	1,335	1,490	3,109	GA
	2023	0,00000000000164	0,226	0,109	1,754	1,399	3,308	GA
DLTA	2019	0,00000000564556	0,824	0,289	5,713	0,580	10,627	NFD
	2020	0,00000000611830	0,801	0,134	4,959	0,446	8,720	NFD
	2021	0,00000000367459	0,742	0,184	3,384	0,521	7,210	NFD
	2022	0,00000000349140	0,743	0,225	3,266	0,596	7,365	NFD
	2023	0,00000000404943	0,797	0,208	3,415	0,610	7,580	NFD
INDF	2019	0,00000777320269	277,187	90,951	1,291	796,196	1516,178	NFD
	2020	0,00000282729891	192,607	76,230	0,956	501,384	1141,165	NFD
	2021	0,00000327507874	206,398	80,638	0,939	554,162	1215,730	NFD
	2022	0,00000350348319	205,070	68,273	1,078	614,245	1128,456	NFD
	2023	0,00000392679640	220,637	83,689	1,167	598,664	1282,891	NFD
MYOR	2019	0,00000000000027	0,483	0,142	1,086	1,315	3,668	NFD
	2020	0,00000000000029	0,532	0,136	1,325	1,238	4,038	NFD
	2021	0,00000000000012	0,534	0,078	1,336	1,401	3,666	NFD
	2022	0,00000000000012	0,477	0,112	1,500	1,377	3,887	NFD
	2023	0,00000000000015	0,508	0,171	1,779	1,319	4,678	NFD
ROTI	2019	0,00000000000036	0,332	0,074	1,946	0,713	3,623	GA
	2020	0,00000000000086	0,360	0,036	2,636	0,721	4,184	GA
	2021	0,00000000000063	0,381	0,090	2,123	0,784	4,074	GA
	2022	0,00000000000051	0,386	0,139	1,850	0,953	4,134	NFD
	2023	0,00000000000044	0,431	0,109	1,544	0,969	3,755	NFD

Source : Data processed by researchers (2024)

Description:

NFD : *Non-Financial Distress*

GA : *Grey Area*

FD : *Financial Distress*

Based on the calculation of financial distress using the Altman method above obtained PT Delta Djakarta Tbk results with the lowest value of 0.00000000349 in 2022 and the highest in 2020 on the WCTA ratio, the RETA ratio with a lowest rating of 0.742 in 2021 and a highest ratio of 0.824 in 2019 on the EBITTA rate with a minimum rating of 0,134 in 2020 and a maximum value of 0,289 in 2019, the MVELT ratio achieved a minimum value of 3.266 in 2022, and a peak value of 5.713 in 2019, and the STA ratio is with a lower value of 0.0446 in 2020, and its highest value is of 0.610 in 2023, from the fifth calculation the ratio obtains a Z-score with the lower score of 0.956 and maximum of 3.415.

PT Indofood Success Makmur Tbk on the WCTA ratio obtained the lowest rating of 2020 of 0.00000282 and the highest rating in 2019 of 0.0000777, on the RETA ratio with a lowest value in 2020 of 192.607 and its highest value of 277.187 in 2019, the EBITTA ratie achieved the lowEST value of 68.273 in 2022 and the maximum value of 90.951 in 2019, on the MVETL ratio achieves the loweste value of 0.939 in 2021 and the top of 1.291 in 2019.

PT Mayora Indah Tbk with a minimum value of 0.00000000000012 in 2021 and a highest value of 0.00000000029 in 2020 on the WCTA ratio, the RETA ratio with the lowest rating of 0.477 in 2022 and the highest ratio of 0.534 in 2021, on the EBITTA ratios with a lowest score of 0.078 in 2021. and the top rating of 0.0171 in 2023, on the MVELT ratio obtained the loweste rating of 1.086 in 2019 and the maximum value of 1.779 in 2023.

PT Nippon Indosari Corpindo Tbk on the WCTA ratio obtained the lowest rating of 2019 of 0.0000000036 and the highest rating in 2020 of 0.00000000086, on the RETA ratio with a lowest value in 2023 of 0.332 and its highest value of 0.431 in 2019, the EBITTA ratie obtains the lower rating of 0.036 in 2020 and a highest score of 0.139 in 2022, on the MVETL ratio achieved the loweste rating of 1.544 in 2023, and the tallest ratio of 2.666 in 2020, the STA ratio reached the minimum rating of 0.713 in 2019 and the greatest point of 0.969 in 2033, from the fifth calculation of the ratio the Z-score is obtained with a minimum value of 3.623 in 2019 with a maximum value of 4.184 in 2022.

PT Indofood CBP Success Makmur Tbk on WCTA ratio obtained the lowest rating in 2021 of 0.000000015 and the highest rating of 0.000000006551 in 2019, at the RETA ratio with the minimum rating of 0.217 in 2020 and its highest value of 0.477 in 2019, the EBITTA ratie obtains the minimum value of 0.065 in 2022 and a highest score of 0.192 in 2019, with the MVETL ratio of 0.864 in 2021 and a peak of 2.216 in 2019, STA ratio achieved the minimum score in 2020 of 0.0450 and the peak in 2019 of 1.093 in 2019, from the calculation of the fifth ratio the Z-score obtained with a lowest value in 2021, of 2.214 and a maximum value in 5,171 in 2019. PT Ultrajaya Milk Industry & Trading Company Tbbk at the ratio WCTA obtaining a minimum value in 2021 is 0.000000116 and the 2022 peak value is 0.00000007 in 2019, in the race of 2020, with the most lowest RETA 2020 ratio at 0.65 in 2020.

PT Sariguna Primatirta Tbk on the WCTA ratio obtained the lowest rating of 0.00000000000010 in 2023 and the highest value of 0.00000000000034 in 2022, on the RETA ratio with a minimum value of 0.210 in 2019 and a maximum value of 2.339 for 2022, the EBITTA ratie obtains a lowest score of 0.129 in 2020 and a highest point of 0.854 in 2022.

4.1.4 Springate Test Results

Following the calculation using springate method on the annual financial reports of 8 companies in the food and beverage sector during the period 2019-2023, the following results were obtained:

Table 4.3 Springate Method Financial Distress Calculation Results

Company Code	Periode	X1 (WCTA)	X2 (ROTA)	X3 (EBTCL)	X4 (TATO)	S-Score	Category
ROTI	2019	0,00000000000040	0,074	0,314	0,713	0,720	FD
	2020	0,00000000000090	0,036	0,396	0,721	0,661	FD
	2021	0,00000000000060	0,090	0,778	0,784	1,103	NFD
	2022	0,00000000000050	0,139	0,935	0,953	1,424	NFD
	2023	0,00000000000040	0,109	0,640	0,969	1,143	NFD
SKLT	2019	0,00000000000160	0,072	0,194	1,585	0,982	NFD
	2020	0,00000000000200	0,072	0,225	1,620	1,018	NFD
	2021	0,00000000000200	0,114	0,421	1,526	1,239	NFD
	2022	0,00000000000160	0,089	0,277	1,490	1,053	NFD
	2023	0,00000000000160	0,076	0,278	1,399	0,975	NFD
ICBP	2019	0,00000006550610	0,192	1,134	1,093	1,776	NFD
	2020	0,00000002179410	0,096	1,085	0,450	1,192	NFD
	2021	0,00000001523870	0,084	0,526	0,481	0,798	FD
	2022	0,00000002685500	0,065	0,750	0,562	0,920	NFD
	2023	0,00000002946500	0,096	1,094	0,569	1,244	NFD
ULTJ	2019	0,00000079990650	0,067	0,598	0,244	0,698	FD
	2020	0,00000027454000	0,162	0,611	0,682	1,174	NFD
	2021	0,00000042022690	0,208	0,991	0,893	1,650	NFD
	2022	0,00000011618920	0,175	0,885	1,038	1,536	NFD
	2023	0,00000040508780	0,200	2,113	1,104	2,451	NFD
CLEO	2019	0,00000000000090	0,139	0,842	0,874	1,331	NFD
	2020	0,00000000000130	0,129	1,145	0,742	1,448	NFD
	2021	0,00000000000110	0,171	1,260	0,819	1,683	NFD
	2022	0,00000000000410	0,854	1,017	5,702	5,575	NFD
	2023	0,00000000000050	0,180	0,934	0,910	1,532	NFD
DLTA	2019	0,00000000564560	0,29	2,57	0,58	2,815	NFD
	2020	0,00000000611830	0,13	1,12	0,45	1,329	NFD

Company Code	Periode	X1 (WCTA)	X2 (ROTA)	X3 (EBTCL)	X4 (TATO)	S-Score	Category
	2021	0,00000000367460	0,18	0,99	0,52	1,424	NFD
	2022	0,00000000349140	0,23	1,15	0,60	1,690	NFD
	2023	0,00000000404940	0,21	1,16	0,61	1,647	NFD
INDF	2019	0,00000777320270	90,95	208,34	796,20	735,203	NFD
	2020	0,00000282729890	76,23	149,07	501,38	532,966	NFD
	2021	0,00000327507870	80,64	156,65	554,16	572,609	NFD
	2022	0,00000350348320	68,27	141,90	614,25	548,954	NFD
	2023	0,00000392679640	83,69	181,31	598,66	616,059	NFD
MYOR	2019	0,000000000000269	0,142	0,728	1,315	1,442	NFD
	2020	0,000000000000288	0,136	0,772	1,238	1,421	NFD
	2021	0,000000000000117	0,078	0,278	1,401	0,983	NFD
	2022	0,000000000000118	0,112	0,445	1,377	1,190	NFD
	2023	0,000000000000154	0,171	1,020	1,319	1,727	NFD

Source : Data processed by researchers (2024)
Description:
NFD : *Non-Financial Distress*
FD : *Financial Distress*

Based on the calculation of financial distress using the Springate method above obtained results from PT Delta Djakarta Tbk on WCTA ratio with the lowest value of 0.000000003491 in 2022 and the highest of 0.000006118 in 2020, the ratio of ROTA with a lowest rating of 0.134 in 2020 and highest in 2019, on the EBTCL ratio, with a minimum value of 0.0986 in 2021 and a maximum value of 2.568 in 2019, on the TATO ratio achieved a minimum score of 0.445 as of 2020 and a highest point of 0.609 in 2023, from the calculations of the fifth ratio received S-score with the lower value of 1.329 in 2020 with a maximum of 2.815 in 2019.

PT Indofood Success Success Tbk on the WCTA ratio with the lowest rating of 0.00000282 in 2020 and the highest ratio of 0,00000777 in 2019, the ROTA ration with the lower rating of 68.273 in 2022 and the top 90,951 in 20219, on the EBTCL ratio, with a lowest score of 141.904 in 2022, and a highest value of 208.339 in 2019, on the TATO ratio obtained the loweste rating of 501.384 in 2020, and the peak value of 796.196 in 2019, from the fifth calculation of the ratio received S-score with a minimum value of 532.966 in 2020. and a maximum of 735.203 in 2019

PT Mayora Indah Tbk on the WCTA ratio with the lowest rating of 0.000000000000117 in 2021 and the highest ratio of 0.0000000000288 in 2020, the ROTA ration with the lower rating of 0.078 in 20 and highest score of 0.171 in 20, on the EBTCL ratio, with the Lowest Rating of 0.278 in 20 years and the Highest Value of 1.020 in 20, on the TATO ratio obtained a lowest value of 1.238 for 2020 and a highest value for 1.401 in 2021, from the calculation of the five ratio received S-score with a minimum value of 0.983 for 2021 and a maximum value of 1.727 in 2032.

PT Nippon Indosari Corpindo Tbk on the WCTA ratio with the lowest value of 0.00000000000036 in 2019 and the highest of 0.000000000287 in 2020, the ratio of the ROTA with the minimum value of 0.036 in 20 and the greatest of 0.139 in 2022, on the EBTCL ratio, with a lowest rating of 0.314 in 2019, and a highest value for 0.935 in 2022.

PT Sekar Sea Tbk on the WCTA ratio with the lowest value of 0.0000000000016 in 2022 and the highest of 0.0000000020 in 2020, the ROTA ratios with a lowest rating of 0.072 in 2010 and a highest ratio of 0.114 in 2021, on the EBTCL ratio, with a minimum rating of 0.194 in 2019 and a maximum value of 0,421 in 2022, on the TATO ratio obtained the loweste rating of 1.399 in 2023 and the maximum rating of 1.620 in 2020.

PT Indofood CBP Success Makmur Tbk on the WCTA ratio with the lowest rating of 0.000000015 in 2021 and the highest ratio of 0.0000000066 in 2019, the ratio ROTA with a lowest value of 0.065 in 2022 and a highest score of 0.192 in 2019, on the EBTCL ratio, with a minimum value of 0.526 in 2021, and a maximum value of 1.134 in 2019, on the TATO ratio obtained a minimum rating of 0.0450 in 2020 and a top rating of 1.093 in 2019, from the calculation of the five ratio received S-score with a lower rating of 0,798 in 2021 and a peak rating of 1.776 in 2019.

PT Ultrajaya Milk Industry & Trading Company Tbk on the WCTA ratio with the lowest rating of 0.00000012 in 2022 and the highest ratio of 0.000000078 in 2019, the ratio ROTA with a lowest value of 0.067 in 2019 and a highest rate of 0.208 in 2021, on the EBTCL ratio, with a minimum value of 0.598 in 2019, and a maximum value of 2.113 in 2023, on the TATO ratio obtained the loweste value of 0.244 in 2019, with the highEST value of 1.104 in 2023.

PT Sariguna Primatirta Tbk on the WCTA ratio with the lowest value of 0.00000000000053 in 2023 and the highest in 0.00000000000041 in 2022, the ROTA ratios with a lowest rating of 0.129 in 2020 and a highest ratio of 0.854 in 2022, on the EBTCL ratio, with a minimum value of 0,842 in 2019 and a maximum value of 1.260 in 2021, on the TATO ratio obtained the loweste rating of 0,742 in 2020, and the maximum rating of 5,702 in 2022.

4.1.5 Zmijewski test results

After calculating using the Zmijewski method on the annual financial statements of eight companies in the food and beverage sector for the period 2019-2023, the results are as follows:

Table 4.4 Zmijewski Method Financial Distress Calculation Results

Company Code	Periode	X1(ROA)	X2 (DAR)	X3 (CR)	X-Score	Category
ULTJ	2019	0,052	0,132	4,683	-3,7978	NFD
	2020	0,127	0,454	2,403	-2,2935	NFD
	2021	0,172	0,306	3,113	-3,3422	NFD
	2022	0,131	0,211	0,857	-3,6918	NFD
	2023	0,158	0,111	3,048	-4,3875	NFD
CLEO	2019	0,105	0,385	1,175	-2,5852	NFD
	2020	0,101	0,317	1,723	-2,953	NFD
	2021	0,134	0,257	1,53	-3,4439	NFD
	2022	0,656	1,979	1,19	4,02763	FD
	2023	0,133	0,34	1,206	-2,964	NFD
DLTA	2019	0,223	0,149	8,050	-4,486	NFD
	2020	0,101	0,168	7,498	-3,8267	NFD
	2021	0,144	0,228	4,809	-3,6653	NFD
	2022	0,176	0,234	4,564	-3,7742	NFD
	2023	0,165	0,227	4,892	-3,772	NFD
INDF	2019	61,360	436,556	0,748	2207,95	FD
	2020	53,690	511,361	0,461	2668,85	FD
	2021	62,495	514,779	0,587	2648,71	FD
	2022	50,947	481,121	0,632	2508,83	FD
	2023	61,600	461,568	0,733	2349,44	FD
MYOR	2019	0,108	0,479	5,125	-2,0731	NFD
	2020	0,106	0,430	5,691	-2,3487	NFD
	2021	0,061	0,430	2,328	-2,1339	NFD
	2022	0,088	0,424	2,621	-2,2926	NFD
	2023	0,136	0,360	3,673	-2,8756	NFD
ROTI	2019	0,051	0,339	1,693	-2,599	NFD
	2020	0,038	0,275	3,83	-2,9181	NFD
	2021	0,067	0,32	2,653	-2,7878	NFD
	2022	0,105	0,351	2,099	-2,7794	NFD
	2023	0,085	0,393	1,741	-2,4468	NFD
SKLT	2019	0,057	0,519	1,29	-1,6025	NFD
	2020	0,055	0,474	1,537	-1,8509	NFD
	2021	0,095	0,391	1,793	-2,5086	NFD
	2022	0,072	0,428	1,63	-2,1914	NFD
	2023	0,061	0,363	2,107	-2,5126	NFD
ICBP	2019	0,138	0,311	2,536	-3,1606	NFD
	2020	0,072	0,514	2,258	-1,7001	NFD
	2021	0,067	0,537	1,799	-1,5503	NFD
	2022	0,05	0,502	3,097	-1,6768	NFD
	2023	0,071	0,479	3,514	-1,9015	NFD

Source : Data processed by researchers (2024)

Description:

NFD : *Non-Financial Distress*

FD : *Financial Distress*

Based on the results of financial distress calculations using the Zmijewski method above obtained results PT Delta Djakarta Tbk on ROA ratio with the lowest value of 0,101 and the highest of 0,223, the ratio of DAR with the least value of 0.149 and the greatest of 0.234, the ration of CR with the minimum value of 4.564 and the maximum value of 8.050, from the fifth calculation of these ratio obtains X-score with a lowest rating of 0.227 and a highest -3,665.

PT Indofood Success Prosperity Tbk on the ROA ratio with the lowest score 50,947 and the highest score 62,495, the ratio of DAR with the lower score 436,556 and highest rating 514,779, on the CR ratios with the minimum score 0.461 and the maximum value 0.748, from the calculation of these five ratios obtained X-score with the least score 2207,947 & highest 2668,850.

PT Mayora Indah Tbk on the ROA ratio with the lowest value of 0.061 and the highest of 0.479, the ratio of DAR with the lower value of 0.360 and the greatest of 0,479, on the ration of CR with the minimum value of 2.328 and the maximum value of 5.691, from the calculation of the five such ratio obtained X-score with the least value of -2.876 and highest -2.073.

PT Nippon Indosari Corpindo Tbk on the ROA ratio with the lowest value of 0,038 and the highest of 0,105, the ratio of DAR with the lower value of 0.275 and the greatest of 0.393, on the ration of CR with the minimum value of 1.693 and the maximum value of 3.830, from the calculation of the five such ratio obtained X-score with the least value of -2,918 and the tallest -2,447.

PT Sekar Sea Tbk at the ROA ratio with the lowest value of 0.055 and the highest of 0.095, the DAR ratio of the lower value of 0.363and the greatest of 0.519, at the CR ratio, with the minimum value of 1.290 and the maximum value of 2.107, from the calculation of the five such ratio obtained X-score with the least value of -2,513 and highest -1,602.

PT Indofood CBP Success Makmur Tbk on the ROA ratio with the lowest value of 0.050 and the highest of 0.138, the ratio of DAR with the lower value of 0.311 and the greatest of 0.537, on the CR ratios with the minimum value of 1.799 and the maximum value of 3.514, from the calculation of the five such ratios obtained X-score with the least value of -3,161 and highest -1.550.

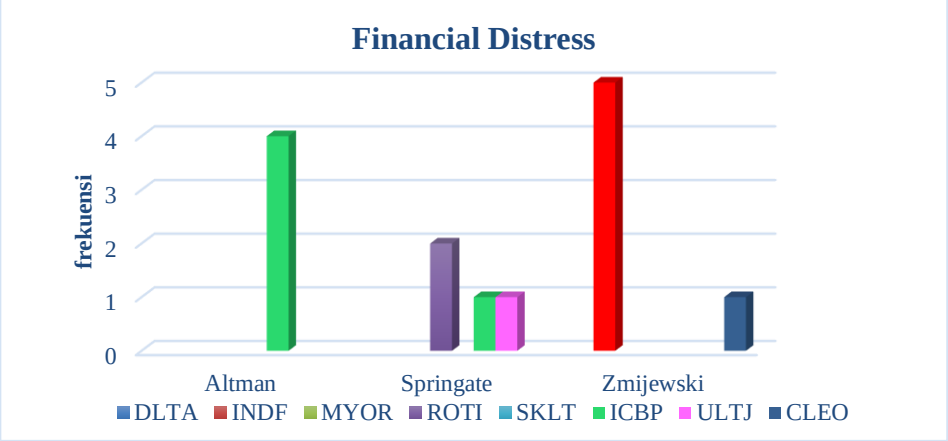
PT Ultrajaya Milk Industry & Trading Company Tbk on the ROA ratio with the lowest value 0.052 and the highest value 0.172, the ratio of DAR with the lower value 0.111 and the maximum value 0.454, on the CR ratios with the minimum value 0.857 and the greatest value 4.683, from the calculation of the five such ratios obtained X-score with the least value -4.383 and highest -2.294.

PT Sariguna Primatirta Tbk on the ROA ratio with the lowest value of 0.101 and the highest of 0.656, the ratio of DAR with a lowest rating of 0.257 and the greatest of 1.979, on the ration of CR with the minimum value of 1.175 and the maximum value of 1.723, from the calculation of the five such ratio obtained X-score with the lower value of -3,444 and the tallest of 4,028.

4.1.6 Comparison of Financial Distress Methods

The results of the calculation using the three models were compared to the research results of food and beverage companies listed on the Indonesian Stock Exchange during the period 2019-2023.

Table 4.5



Source : Data processed by researchers (2024)

Based on the results of the analysis that has been carried out with three methods, namely Altman method, Springate method and Zmijewski method on the food and beverage companies listed in the Indonesia Stock Exchange in the period 2019-2023 it can be known that there are 5 companies that have suffered financial distress, that is yaitu PT. Indofood Sukses Makmur Tbk, PT Nippon Indosari Corpindo Tbk, PT. Sekar Laut Tbk, PT. Indofood CBP Sukses Makmur Tbk, PT. Ultra Jaya Milk Industry & Trading Company Tbk PT Sariguna Primatirta Tbk.

CBP Success Makmur Tbk acquired is in a financial distress condition on calculations with Altman and also Springate methods, this indicates that the company PT Indofood CBP Succes Makmur tbk is in the condition of financial difficulties that must be dealt with immediately in order not to end in bankruptcy.

4.2 Discussions of Research Results

4.2.1 Financial Distress with the Altman Method

CBP Success Makmur Tbk (ICBP) from the year 2020-2023 in a row with an average value of Z-score is 1,385886954 whose value is below the cut of value that is 1,81, which means that during the period the company was in an unstable financial condition, this is achieved by the ratio Net Working Capital to Total Assets (WCTA) which is valued low on average only 0.0000000318, then in the year 2019 to 2020 also experienced a great decline in the amount of 66%, this is due to the imbalance between the total assets owned by the company which has a large amount of working capital while it is small. The low ratio of WCTA that PT owns. Indofood CBP Succes Makmurtbk assets (BICP) shows that the rate of liquidity of the company is low, while the healthy company should have a high level of liability that can meet the operating capital in order to increase the company's sales. This is in line with Lizal's (2002) statement on the basic model of bankruptcy or trinitarian causes of financial difficulties caused by the lack of management in allocating resources (assets) called the Neoclassical model.

Based on the results of research using the Altman method, it is known that as much as 17% of the financial reports of the companies surveyed are in the grey area with a z-score value between 1.81 – 2.675 where it is not possible to determine whether the companies are in financial difficulties or not. The companies in the gray area are PT Nippon Indosari Corpindo Tbk (ROTI) period 2019-2021, PT. Sekar Sea Tbc (SKLT) five consecutive years, PT. Ultra Jaya Milk Industry & Trading Company (ULTJ) period 2020, and PT Sariguna Primatirta T bk (CLEO) periods 2019-2020, and 2023.

Based on 40 financial reports of food and beverage sector companies surveyed during the period 2019-2023 using the Altman method showed that 47% were in non-financial distress conditions. These companies include PT Delta Djakarta Tbk (DLTA) in 2019-2023, PT Indofood Success Makmur Tbc (INDF) in 2019, 2023, PT Mayora Indah Tbq (MYOR) in 2022-2022, PTIndofood CBP Success makmur T bk (ICBP) in 2018, PT Ultrajaya Milk Industry & Trading Company Tbck (ULTJ) in 2019. 2021-2023. PT Sariguna Primatirta Tbg (CLEO) in 2021-2022 where the Z-score calculations show the figures of the ratio used in the calculation of the Altman method did not touch a negative value and the value was greater than the cut off value of 2,675 This indicates that during the third research period the company was in a stable financial condition. This is in line with the statement (Yudyawati, 2020) that sales as well as net profit that tends to be stable or even increasing can be a benchmark for a company having good income and being in a stable financial condition.

4.2.2 Financial Distress with the Altman Method

Based on the results of the calculation with the Springate method, there are 3 out of 8 companies undergoing financial distress, namely PT Nippon Indosari Corpindo Tbk (ROTI) in 2019-2020, this resulted in profits before taxes obtained by the company is not comparable or not yet able to cover the company's debt to be paid in less than 1 year can be seen on the EBTCL ratio.

The company that also belongs in the financial distress is PT. Indofood CBP Success Makmur Tbk (ICBP) in 2021 this is due to working capital PT.Indofood CPP Succes Makmur tbk in 2021 is the smallest in the last 5 years, there is a decrease of 20.3% from the previous year is 2,257,612,549 to 1,799,184,891, this affects the value of the decline of the WCTA ratio, the lower then the ability of the company to earn profits and its liquidity decreases.

The company PT. Ultra Jaya Milk Industry & Trading Company Tbk (ULTJ) also suffered financial distress in the period 2019, this is due to low profits before interest and taxes that influence the value of the ROTA ratio, the low ratio of ROTA indicates that the business activities of PT. ultra Jaya milk industry & trading company has not actually run effectively in generating profits, besides the sale in 2019 is also worth at least for five years of research that influences the low value of TATO ratio.

Testing with springate method showed that as much as 77.5% of the financial reports of the companies surveyed were in non-financial distress conditions: PT Delta Djakarta Tbk (DLTA), PT Indofood Success Makmur Tbc (INDF), PT Mayora Indah Tbq (MYOR), PT Sekar Sea Tbg (SKLT), and the company PT Sariguna Primatirta TBk (CLEO) for five consecutive years, this indicates that the companies are in a good and stable financial condition.

4.2.3 Financial Distress with Zmijewski

Based on the calculations with the Zmijewski method, two companies were obtained in financial distress. P.T. Indofood Successful Makmur Tbk (INDF) for five consecutive years 2019-2023, when the company's debt position exceeded the amount of assets held during the survey period, the occurrence of a capital imbalance held by the company with the debt held meant that part of the assets of the funding company came from debt. This resulted in the company having to borrow from a third party to cover the company's operating costs, so the company was categorized as being in a state of serious financial problems and can lead to bankruptcy if the management of the company did not deal with the problem immediately, this is consistent with the statement Platt and Platt (2002) which stated the financial distress condition depicted of the negative working capital in which the company is unable to finance the entire operating cost due to the lack of a fund to pay due obligations.

PT. Sariguna Primatirta Tbk (CLEO) suffered financial distress in 2022, can be seen from the high Debt to Asset Ratio (DAR) ratio due to the increase in the total debt held by PT. Saraguna Primetirta T bk by 40.36% from the previous year, which is 346,601,683,606 to 581,132,890,435 this shows that the corporation has more debt in funding assets. PT. Sarigunda Primaterta Tbc (CLeo) obtained the current ratio rate is 1 this indicates that the company

has a total sound assets equivalent to the total sound debt, which means the firm has sufficient sound asset to cover all sound liabilities, but does not have an additional capital buffer that serves as a guarantor when losses occur in the crisis period, so the company is at high risk.

Zmijewski calculated that 75% of other companies did not experience financial distress during the research period, namely PT Nippon Indosari Corpindo Tbk (ROTI) in 2019-2020, PT Indofood CBP Success Makmur Tbc (ICBP) in 2021, and PT Ultra Jaya Milk Industry & Trading Company (ULTJ), PT Delta Djakarta TBk (DLTA), PT Mayora Indah TBK (MYOR), and PT Sekar Laut TBk(SKLT), this indicates that the six companies are in excellent financial condition.

V. CONCLUSION

Based on the results of the research that has been carried out on the analysis of potential financial distress in food & beverage companies listed in the Indonesian stock exchange, it can be concluded that:

1. The analysis of eight food and beverage subsector companies studied using the Altman method shows that there is one company that has been in financial distress for four consecutive years, namely PT. Indofood Success Makmur Tbk. This is due to the low value of Net Working Capital to Total Assets (WCTA), as well as the imbalance in the sales to total assets ratio. (STA).
2. The analysis of eight food and beverage subsector companies surveyed using the Springate method shows that there are three companies that are in financial distress, namely PT Nippon Indosari Corpindo Tbk (ROTI) receiving net profit before taxes to Current liabilities (EBTCL).
3. The results of the analysis of eight food and beverage subsector companies studied by the Zmijewski method obtained the company PT. Indofood Success Makmur Tbk successively for 5 years was in a financial distress condition seen from the high ratio of DAR and the company of PT Sariguna Primatirta TBK (CLEO) had a high rate of DAR.

REFERENCES

Andika, H..S. (2017) "*Analisi Financial Distress Dengan Metode Springate (S-Score) Dan Zmijewski Pada Perusahaan Food And Beverage Yang Terdaftar Di Bursa Efek Inonesia*. Surakarta: Universitas Muhammadiyah Surakarta. Skripsi.

Arikunto, Suharsimi. 2010. Prosedur Penelitian, Edisi Revisi. Yogyakarta: Rineka Cipta

Bernstein, Leopold A, John J. Wild, *Financial Statement Analysis : Theory, Aplication, And Interpretation, 6th Edition*, Mc Grow-Hill, 1983.

Burhanuddin, Rizki Amalia. 2015. "*Analisis penggunaan metode altman z-score dan metode springate untuk mengetahui potensi terjadinya financial distress pada perusahaan manufaktur sektor industri dasar dan kimia sub sektor semen periode 2009-2013"*. Skripsi: Fakultas Ekonomi dan Bisnis Universitas Hasanuddin.

Brigham dan Houston, 2012, *Dasar-dasar Manajemen Keuangan, Buku 1*, Salemba Empat Jakarta.

Foster, George, 1986, *Financial Statement Analysis*, Second Edition, Singapore: Prenticel-hall.

Harahap, Sofyan Syafi. 2007. *Analisis Kritis atas Laporan Keuangan*. Jakarta: PT. Raja Grafindo Persyada.

Harahap, Sofyan Syafi. 2010. *Analisis Kritis atas Laporan Keuangan*. Jakarta: PT. Raja Grafindo Persyada.

Harahap, Sofyan Syafri. 2010. *Analisis Kritis atas Laporan Keuangan*. Jakarta: PT. Raja Grafindo Persada

Harahap, N. A., & Sari, E. P. (2024). *Analisis Perbandingan Model Altman (Z-Score) Dan Springrate Untuk Memprediksi Financial Distress Pada Perusahaan Sub Sektor Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia Tahun 2017-2021*. Management, Accounting, Islamic Banking and Islamic Economic Journal, 2(1), 76-88.

Hilda, 2012. "*Analisis Penilaian Financial Distress Menggunakan Model Altman (Z-Score) Pada Perusahaan Kosmetik Yang Tercatat Di Bursa Efek Indonesia".* Universitas Negeri Surabaya

Hery. 2016. *Analisis Laporan Keuangan*. Jakarta: Bumi Aksara

Hutauruk, M. R., Mansyur, M., Rinaldi, M., & Situru, Y. R. (2021). *Financial Distress Pada Perusahaan Yang Terdaftar Di Bursa Efek Indonesia*. JPS (Jurnal Perbankan Syariah), 2(2), 237-246.

Ikatan Akuntan Indonesia. 2009. *Standar Akuntansi Keuangan*. Jakarta: Salemba Empat.

Lizal, Lubomir. 2002. "*Determinants of Financial Distress: What Drives Bankcrupty in a Transition Economy? The Czech Republic Case"*, (Januari 2002), No.541

Mamduh M. Hanafi dan Abdul Halim. 2012. *Analisis Laporan Keuangan*. Yogyakarta: AMP-YKPN

Mas' ud, M., & Budiandriani, B. (2024). *Analisis Perbandingan Z-Score, Springate, Grover dan Zmijewski sebagai alat untuk memprediksi Financial Distress Pada Perusahaan Sektor Asuransi Yang Terdaftar Di Bursa Efek Indonesia* (BEI). Movere Journal, 6(1), 120-132.

Munawir. S. 2002. *Akuntansi Keuangan dan Manajemen*. Edisi Revisi. Penerbit BPFE: Yogyakarta.

Nirmalasari, L. (2018). *Analisis Financial Distress Pada Perusahaan Sektor Property, Real Estate Dan Konstruksi Bangunan Yang Terdaftar Di Bursa Efek Indonesia*. Jurnal Manajemen Bisnis Indonesia (JMBI), 7(1), 46-61.

Peter dan Yoseph. 2001. *Analisis Kebangkrutan Dengan Metode Z-Score Altman, Springate, dan Zmijewski Pada PT Indofood Sukses Makmur Tbk Periode 2005-2009*. Jurnal Ilmiah Akuntansi Nomor 04 Tahun Ke-2 Januari-April 2011. Universitas Kristen Maranatha

Platt, Harlan D dan Platt, Marjorie B.2002. *Predicting Corporate Financial Distress: Reflections on Choice-Based Sample Bias*. Journal of Economics and Finance

Pramuditya, Andhika Yudha. 2014. *Analisis Pengaruh Mekanisme Corporate Governance Terhadap Kemungkinan Perusahaan Mengalami Kondisi Financial Distress (Studi Empiris Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Tahun 2010-2012).* Skripsi. Semarang: Program Sarjana (S1) Fakultas Ekonomika dan Bisnis Universitas Diponegoro

Ramadhani & Niki Lukviarman. 2009. *Perbandingan Analisis Prediksi Kebangkrutan Menggunakan Model Altman Pertama, Altman Revisi, dan Altman Modifikasi dengan Ukuran dan Umur Perusahaan Sebagai Variabel Penjelas (Studi pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia)*. Jurnal Siasat Bisnis, Vol.13, No.1:15-28.

Riduwan. 2015. Metode. dan Teknik Menyusun Proposal Penelitian. Bandung : Alfabeta.

Ruswanti, I., & Fachrur, M. M. (2024). *Analisis Financial Distress Pada Perusahaan Manufaktur Sub Sektor Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia (BEI) Periode 2017-2021*. Journal Paper Competition Accounting Festival, 1, 1-14.

Sari, Enny Wahyu Puspita. 2014. *Penggunaan Model Zmijewski, Springate, Altman Z-Score dan Grover Dalam Memprediksi Kepailitan Pada Perusahaan Transportasi Yang Terdaftar Di Bursa Efek Indonesia*. Fakultas ekonomi dan Bisnis Universitas Dian Nuswantoro

Sugiyono. 2012. *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta

Sugiyono. (2018). *Metode Penelitian Kuantitatif*. Bandung: Alfabeta.

Wulandari, V. (2020). *Analisis Perbandingan Model Altman, Springate, Ohlson, Fulmer, CA-Score dan Zmijewski Dalam Memprediksi Financial Distress (studi empiris pada Perusahaan Food and Beverages yang Terdaftar di Bursa Efek Indonesia Periode 2010-2012)* (Doctoral dissertation, Riau University).