# **Financial Distress Analysis Using Altman Z-Score Method in** Trading, Service and Investment Companies in the Restaurant, Hotel and Tourism Sub-Sectors in Indonesia

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Abstract	(12pt)
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<i>Keywords:</i> Financial Distress; Altman Z"-Score;	Hotel, Restaurant and Tourism Industry is one of the potential industries in Indonesia for the country's economic progress and can be a source of regional income. World Health Organization (WHO) established a global emergency status for the Covid-19 virus outbreak in 2020. This has a potential to bring down the industrial companies. They have an opportunity to fall into a prone condition to the financial distress which will lead to bankruptcy. To prevent it, a prediction model can be used to assess the financial ratios, thus the company's financial condition can be known. One of the prediction models is by using the Altman Z-Score method. This study aimed to determine the financial distress analysis using the Altman Z "-Score method in Trading, Service and Investment Companies in the Restaurant, Hotel and Tourism Sub-Sectors in Indonesia.
	This research was a descriptive study using the quantitative methods. The prediction model used was the Altman Z "-Score method, which was a modification of the Z-Score development that was not used for manufacturing companies. This model used the Z "-Score formula, "Z-Score = $6,56 X_1 + 3,26 X_2 + 6,27 X_3 + 1,05 X_4$ .
	The results showed that three companies in the restaurant, hotel and tourism sector experienced financial distress and were predicted to go bankrupt based on the distress zone category or financial difficulties, they were Bukit Uluwatu Villa for three years (2017-2019), Saraswati Griya Lestari for three years(2017-2019) and Intikeramik Alamasri Industri for one year (2019).
	These three companies had problems with the financial ratios, which showed that their financial performance was not healthy and they did not have any improvement for the last three years. The management of the companies which are prone to bankruptcy can take some corrective actions to overcome the financial problems by adopting the benchmarks in this study indicating the negative ratios of the companies
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# 1. Introduction (12pt)

Basically a company has a goal to seek profits from the results of its production either in the form of services or goods having a positive impact on the continuity of the company. The company then uses the profits earned to develop and maintain the company. The profits earned will be used to measure the success of the management in running the business. This means that the company will continue to run the business and will not get a bankruptcy. However, this does not always happen, many companies which have been

operating for a certain period of time fail to survive or go bankrupt due to the financial difficulties or financial distress leading to bankruptcy.

Hotel, Restaurant and Tourism industry is one of the potential industries in Indonesia for the country's economic progress and can be a source of regional income. According to the pocket book of the Ministry of Tourism (2019), the Indonesian tourism industry has become one of the fast growing economic sectors in recent years. In 2015, the tourism industry contributed USD12.23 billion of foreign exchange or equivalent to Rp169 trillion and it was the fourth largest contributor after oil and gas, palm oil and coal. In 2018, the foreign exchange contributed by the tourism sector rose to USD17.6 billion with the number of foreign tourist arrivals reaching to 15.8 million.

The occupancy rate of the star hotel rooms nationally throughout April 2019 increased, even though foreign tourist visits decreased. The increase of foreign tourist visits to Bali is one of the increase aspects in the rate of room occupancy for the star hotels in Indonesia. Based on the data from Central Bureau of Statistics, the room occupancy rate of the star hotels in April 2019 increased 1.02% to 53.9% from 52.88% in the previous month. Meanwhile, the number of foreign tourists in the same month fell 2.74% to 1.3 million visits. North Sulawesi is listed as the province with the highest star hotel occupancy rate, reaching 65.7%.

This number beats the room occupancy rate for star hotels in Yogyakarta (62.75%), Lampung (62.75%), Bali (60.33%), DKI Jakarta 58.92%, and it is even above the national room occupancy rate. This proves that the hotel industry plays a major role for the tourism in Indonesia. (*databoks.katadata.co.id*). The development of the restaurant industry is still one of the important sectors in increasing the national income. This can be seen from the consistency and the number of the new restaurants and hotels openings throughout Indonesia. According to the data from the Ministry of Industry, the restaurant industry contributed 34.95% in 2017 to the Gross Domestic Product (GDP) of the non-oil and gas industry. It increased 4% from 2016 and would certainly continue to increase in 2018. The characteristics and uniqueness of the various local culinary delights in the regions of Indonesia make the restaurant business as an attraction for local and foreign tourists.

However, with the good growth of the industry, it is undeniable that the companies in this industry can be at risk of experiencing financial difficulties and causing bankruptcy. World Health Organization (WHO) has declared a global emergency status for the Co-Vid 2019 virus. The world becomes aware of this virus, not only alert to the spread of the disease, but also alert to the possible impact on the world economy. According to IMF Managing Director, Kristalina Georgieva, with the Covid-19 virus, it is estimated that in the short term there will be a global economic slowdown (katadata.co.id). This virus forces all individuals both local and foreign to limit themselves in carrying out their activities. This causes many important fields such as social, political, educational and even economic field experience a negative change for the country's growth. Likewise in the tourism sector, the number of tourist arrivals continues to decline. The Central Bureau of Statistics recorded that the number of foreign tourist arrivals in January-February 2020 was only 2.16 million people, a decrease of 11.8% compared to the same period last year. The visits throughout February on an annual basis even fell to 28.85%. At the same time, the average occupancy rate for star-class hotel rooms was only 49.2% (kontan.co.id). With this crisis, it will have the potential to bring down the hotel, restaurant and tourism industries.

Bankruptcy means the company can no longer run its business. It is a condition for a company which is no longer able to pay off its obligations. The company's difficulties that can cause bankruptcy are broadly caused by two factors, they are difficulties caused by the internal and external factors (Darsono dan Ashari, 2010). The internal factors can be seen in terms of the company's financial, which are the difficulties occur when the company is no longer able to pay all its debts and fulfill its obligations, thus it is unable to finance its operational activities. Meanwhile, the external factors such as the difficulties in raw materials, company resources or even natural disasters making the company lose the opportunity to operate and generate profits.

This condition does not generally happen in the company. If the financial statements are analyzed more carefully, the early signs of the company's bankruptcy can be identified earlier. Financial ratios can be used as an indication of bankruptcy in a company (Toto, 2011: 332). The analysis carried out is an analysis related to the bankruptcy of the company. By conducting this analysis, it is very beneficial for the company to alert its condition and to take the necessary precautions.

Financial distress is the stage of declining financial condition which occurs before bankruptcy or liquidation. Early information about the company's financial difficulties can provide an opportunity for the managers, owners, investors, regulators, and company stakeholders to take the preventive measures. By using the early warning system model as a tool to identify the early symptoms of financial distress situations, they can make further efforts to remedy the situation before a crisis or bankruptcy occurs.

One of the models that can predict bankruptcy is the Altman Z-Score Model. This model was first introduced by Edward I. Altman in 1968. He was a professor at New York University. And this is the most frequently used bankruptcy prediction model. This model uses financial ratios as predictors to determine the company's

financial health. This model initially has an accuracy rate of 72% but the accuracy continues to increase as the development of the model which is carried out from time to time until the accuracy rate reaches 82%-92%.

All companies have the opportunity to fall into the financial difficulties. Especially because of the Covid-19 outbreak which makes restaurant, hotel and tourism sector companies experience the difficulties due to the lack of tourists who are their source of income. To determine the state of the company in the future, a prediction model is used to assess the financial ratios, thus the company's financial condition can be known. One of the prediction models which can be used to predict the conditions and situations which can bring a company into bankruptcy is Altman Z-Score method.

Based on the background of this problem, the researcher conducted a study entitled: Financial Distress Analysis Using Altman Z-Score Method in Trading, Service and Investment Companies in the Restaurant, Hotel and Tourism Sub-Sectors in Indonesia.

# **Formulation of the Problem**

- 1. What is the average value of the financial ratios used as the Z-Score analysis for Trading, Service and Investment Companies in the Restaurant, Hotel and Tourism Sub-Sectors in Indonesia?
- 2. How is the prediction of bankruptcy seen from the Z-Score for Trading, Service and Investment Companies in the Restaurant, Hotel and Tourism Sub-Sectors in Indonesia?
- 3. How is the development of the trend (tendency) of the Z-Score value in Trading, Service and Investment Companies in the Restaurant, Hotel and Tourism Sub-Sectors in Indonesia?

#### LITERATURE REVIEW

Fadhlillah, M.R. (2019), with the title "Estimating Bankruptcy in Retail Companies in Indonesia Using the Altman Z Score Model", has the first result that the Z-Score value based on the calculations is able to represent the bankruptcy estimates for each company according to their cut off points, and the second result is that the prediction of bankruptcy based on the analysis of the Altman Z-Score model shows that there are 8 retail companies listed on the Indonesia Stock Exchange during 2013-2017 which experienced bankruptcy.

Sugesti, A. R. (2017), entitled "Financial Distress Analysis Using the Altman Z Score Method to Predict Bankruptcy in Companies (Study on Telecommunication companies listed on the Indonesia Stock Exchange for the period 2008-2012)", has the results showing that in 2008 there were 3 companies which had the bankruptcy potential and 1 company in gray area condition. In 2009 it was reduced to 2 companies which had the potential to go bankrupt and increased 1 company in gray area condition. In 2010-2012 it was reduced to 1 company having the potential to go bankrupt and 2 companies entering the gray area.

Ondang, R. Ch. S. (2017), with the title "Financial Distress Analysis Using the Altman Z-Score Method to Predict Bankruptcy in Companies (Study of Telecommunication Companies Listed on the Indonesia Stock Exchange for the Period 2008-2012)", has the result showing that there are five companies having negative working capital problems or liquidity problems, while for both BTEL and Smartfren companies apart from working capital problems, these two companies have negative average values of  $X_2$  and  $X_3$  which are related to the problem of the company's average profit in the five years period. This shows that liquidity problems in telecommunication companies can have an impact on financial difficulties where there are four companies out of five companies in each year including in a distress zone, thus the four companies can predict bankruptcy. This shows that not all companies in distress zone which do not make improvements or changes to get out of this condition. It is proven that companies experiencing an uptrend or fluctuating problem, for example XL and Indosat can get out of this condition. This shows that every year the companies try to improve the financial performance and can avoid the financial difficulties which can lead to bankruptcy.

In this financial distress analysis for restaurant, hotel and tourism companies, the writer used the data contained in the financial statements, they were the income statements and balance sheets for each company in which there were ratios needed to predict bankruptcy. The Altman Z-Score method used was the third method or modification of the Z-Score development which was not used for manufacturing companies. In this case they were restaurant, hotel and tourism companies. The results of this method would show the value of each Z"-Score ratio having a negative value and could also show the condition of the company whether the company was in the safe zone (not bankrupt), gray zone (prone to bankruptcy) and distress zone (bankrupt). Furthermore, from the results of these values, it could be seen the trend of the Z"-Score value from 2017 to 2019 whether each company improved, decreased or did not experience any change.

# 2. Research Method (12pt)

# **Population**

The research population used in this study was all restaurant, hotel and tourism companies on the Indonesia Stock Exchange (IDX), totaling 40 companies.

# Sample

The research sample used in this study was the hotel, restaurant and tourism sub-sector companies which were included in the service trade and investment sector listed on the Indonesia Stock Exchange (IDX). There were 40 companies in the hotel, restaurant and tourism sectors which were listed as public companies or issuers on the Indonesia Stock Exchange. There were 19 companies obtained using the purposive sampling technique based on the sample selection process carried out by the writer.

# **Operational Definition**

The operational definition of the research was an explanation of each ratio used in the study. The four ratios in this study included:

1. Working Capital to Total Assets

 $X_1$  = Working Capital to Total Assets

Here was the formula for calculating the variable  $X_1$ :

$$X_1 = \frac{Working \ Capital}{Total \ Assets}$$

**Total Assets** 

2. Retained Earning to Total Assets

 $X_2$  = Retained Earning to Total Assets

Here was the formula for calculating the variable  $X_2$ :

 $X_2 = \frac{Retained Earning}{-}$ 

Total Assets Earning Before Interest and Tax to Total Assets 3.

 $X_3$  = Earning Before Interest and Taxes to Total Assets Here was the formula for calculating the variable  $X_3$ :

EBIT

 $X_3 = \frac{22}{Total Assets}$ 

4. Book Value of Equity to Total Liabilities  $X_4 = Book Value of Equity to Total Liabilities$ 

Here was the formula for calculating the variable  $X_4$ :

 $X_4 = \frac{Book \, Value \, of \, Equity}{-}$ Total Liabilities

After calculating each ratio for each company, the next step was to calculate the Z-Score value for each

company. The sample in this study was a public company engaged in services. Then the Z-Score formula used was as follow:

Z"-Score = 6,56  $X_1$  + 3,26  $X_2$  + 6,27  $X_3$  + 1,05  $X_4$ 

After calculating the Z"-Score, the next step was to determine the category of the scores obtained. The limit values in the Z"-Score model were:

No	Cut Off Values	Prediction
1	Z > 2,60	Not Bankrupt
2	1, 1 < Z < 2,60	Gray area
3	Z < 1,1	Bankrupt

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Companies	2017	2018	2019	Average
ARTA	0.211	0.143	0.166	0.173
BAYU	0.302	0.334	0.380	0.338
BUVA	-0.171	-0.171	-0.235	-0.192
FAST	0.215	0.216	0.163	0.198
HOTL	0.064	0.122	-0.058	0.042
IKAI	-1.007	-0.078	-0.022	-0.369
INPP	-0.032	0.003	0.063	0.011
JIHD	-0.019	-0.013	-0.039	-0.024
JSPT	0.106	0.138	0.110	0.118
KPIG	0.215	0.174	0.101	0.163
MAPB	0.128	0.019	-0.008	0.046
MINA	0.231	0.248	0.424	0.301
NASA	0.150	0.160	0.150	0.153
PANR	0.165	0.057	0.110	0.111
PJAA	0.007	-0.055	0.004	-0.014
PNSE	0.091	0.002	0.031	0.041
PSKT	0.063	0.031	0.074	0.056
SHID	0.108	0.132	0.138	0.126
SONA	0.399	0.486	0.623	0.503

#### **RESEARCH RESULTS and DISCUSSION** Financial Ratio Results in Z"-Score

a. Working Capital to Total Assets

# Source: Processed Data

Based on the calculation of Working Capital to Total Assets above, it shows fluctuating results every year. The companies which have a negative  $X_1$  result indicate that they have larger current liabilities than current assets causing the current assets cannot fulfill the company's obligations. Conversely, if  $X_1$  is positive, then it indicates that the companies have more current assets, thus they are able to cover their liabilities (Anita, 2017).

Companies		Avorage		
Companies	2017	2018	2019	Average
ARTA	0.248	0.239	0.242	0.243
BAYU	0.120	0.164	0.215	0.166
BUVA	-0.011	0.046	0.032	0.022
FAST	0.392	0.443	0.423	0.419
HOTL	-0.003	-0.011	-0.015	-0.010
IKAI	-2.182	-0.329	-0.374	-0.961
INPP	0.090	0.096	0.336	0.174
JIHD	0.211	0.215	0.209	0.212
JSPT	0.302	0.298	0.282	0.294
KPIG	0.273	0.274	0.177	0.241
MAPB	0.109	0.163	0.215	0.162
MINA	-0.021	-0.005	0.001	-0.008
NASA	-0.013	-0.012	-0.012	-0.012
PANR	0.060	0.136	0.093	0.096
РЈАА	0.367	0.347	0.402	0.372
PNSE	0.226	0.233	0.186	0.215
PSKT	-0.466	-0.525	-0.562	-0.518
SHID	0.022	0.023	0.015	0.020
SONA	0.351	0.420	0.536	0.436

# b. Retained Earning to Total Assets

Source: Processed Data

Based on the calculation of Retained Earning to Total Assets above, it shows fluctuating results every year. The companies which have a negative  $X_2$  result indicate that they generate retained earnings from total assets showing negative results, which means that their total losses exceed the retained earnings. Conversely, if  $X_2$  is positive, then it indicates that the companies generate retained earnings from total assets, showing positive results (Anita, 2017).

Companies		<b>A</b>		
	2017	2018	2019	Average
ARTA	0.038	0.024	0.007	0.023
BAYU	0.055	0.063	0.072	0.06
BUVA	0.047	0.005	-0.028	0.008
FAST	0.059	0.093	0.090	0.081
HOTL	0.038	-0.009	-0.005	0.007
IKAI	-0.231	0.052	-0.052	-0.077
INPP	0.017	0.018	0.260	0.098
JIHD	0.034	0.029	0.025	0.029
JSPT	0.058	0.103	0.029	0.063
KPIG	0.085	0.039	0.009	0.045
MAPB	0.090	0.100	0.111	0.100
MINA	0.005	0.014	0.001	0.007
NASA	-0.015	0.0002	-0.0004	-0.005
PANR	0.022	-0.010	-0.008	0.001
PJAA	0.092	0.082	0.090	0.088
PNSE	0.057	-0.016	-0.025	0.005
PSKT	-0.024	-0.044	-0.025	-0.031
SHID	0.001	0.001	-0.008	-0.001
SONA	0.060	0.130	0.093	0.094

C.	Earning	Before	Interest	and '	Taxes	to	Total	Assets
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Source: Processed Data

Based on the calculation of Earning Before Interest and Taxes to Total Assets above, it shows fluctuating results every year. The companies which have a negative  $X_3$  result indicate that they suffered losses and their total assets cannot generate profits from their operational activities. Conversely, if  $X_3$  is positive, then it indicates that the companies are able to generate profits before interest and taxes (Anita, 2017).

Componing		A			
Companies	2017	2018	2019	Average	
ARTA	4.783	5.754	5.621	5.386	
BAYU	1.145	1.268	1.160	1.191	
BUVA	1.085	1.297	1.135	3.518	
FAST	0.888	1.062	0.950	0.967	
HOTL	0.555	0.459	0.378	0.464	
IKAI	-0.314	1.462	2.078	1.075	
INPP	1.740	1.670	3.818	2.409	
JIHD	2.898	3.110	2.690	2.899	
JSPT	2.086	1.786	1.444	1.772	
KPIG	4.172	2.823	4.201	3.732	
MAPB	1.889	1.662	1.485	1.679	
MINA	41.695	49.379	29.831	40.302	
NASA	4.873	12.857	18.082	11.937	
PANR	0.837	0.847	0.813	0.832	
PJAA	1.132	0.950	1.105	1.062	
PNSE	1.326	1.613	1.334	1.424	
PSKT	8.090	7.193	6.017	7.100	
SHID	1.655	1.707	1.730	1.697	
SONA	1.262	1.559	3.004	1.942	

d. Book Value of Equity to Total Liabilities

Source: Processed Data

Based on the calculation of the Book Value of Equity to Total Liabilities above, it shows fluctuating results every year. The companies which have a negative  $X_4$  result indicate that they use more debt than their capital. Conversely, if  $X_4$  is positive, then it indicates that the companies are able to pay their debts from the book value of the company's equity (Anita, 2017).

**Z**"-Score Calculation Results and Categories

**Z"-Score Calculation Results** 

No	Code	Calculation Results			Aver-	Categories		
INO		2017	2018	2019	age	2017	2018	2019
1	ARTA	7.47	7.92	7.83	7.74	T.BK	T.BK	T.BK
2	BAYU	3.95	4.48	4.90	4.44	T.BK	T.BK	T.BK
3	BUVA	0.29	0.42	-0.43	0.09	BK	BK	BK
4	FAST	4.02	4.60	4.06	3.17	T.BK	T.BK	T.BK
5	HOTL	1.25	1.18	-0.07	0.78	G.A	G.A	BK
6	IKAI	-15.61	0.30	0.45	-4.95	BK	BK	BK
7	INPP	2.03	2.21	7.27	2.87	G.A	G.A	T.BK
8	JIHD	3.83	4.07	3.42	3.77	T.BK	T.BK	T.BK
9	JSPT	4.26	4.45	3.35	4.02	T.BK	T.BK	T.BK
10	KPIG	7.26	5.27	5.71	6.08	T.BK	T.BK	T.BK
11	MAPB	3.79	3.07	2.95	3.27	T.BK	T.BK	T.BK
12	MINA	45.26	53.55	34.12	33.23	T.BK	T.BK	T.BK
13	NASA	5.95	14.51	19.92	13.46	T.BK	T.BK	T.BK
14	PANR	2.31	1.64	1.82	1.92	G.A	G.A	G.A
15	PJAA	3.06	2.31	3.10	2.82	T.BK	G.A	T.BK
16	PNSE	3.11	2.36	2.04	1.88	T.BK	G.A	G.A
17	PSKT	7.22	5.74	4.80	5.92	T.BK	T.BK	T.BK
18	SHID	2.53	2.74	2.72	2.66	G.A	T.BK	T.BK
19	SONA	5.49	7.07	9.62	7.39	T.BK	T.BK	T.BK

**Source: Processed Data** 

Information:

T.BK : Not Bankrupt

G.A : Gray Area / Prone to Bankruptcy

BK : Bankrupt

Based on the calculation results above, there are eleven dominant companies and remain in the nonbankrupt zone or safe zone for three years. There is only one company in the gray area for three years and there are two companies in the bankruptcy zone for three years. Meanwhile, the remaining five companies are in the fluctuating zones or moving in the existing zones.

## 3. Results and Analysis (10pt)

Based on the results obtained from the Altman Z"-Score Method in Trading, Service and Investment Companies in the Restaurant, Hotel and Tourism sub-sectors in Indonesia. It showed that there were eleven companies which were in the not bankrupt category, they were PT. Arthavest, PT. Bayu Buana, PT. Fast Food Indonesia, PT. Jakarta International Hotels & Development, PT. Jakarta Setiabudi International, PT. MAP Boga Adiperkasa, PT. MNC Land, PT. Sanurhasta Mitra, Ayana Land International, PT. Red Planet Indonesia and PT. Sona Topas Tourism Industry. The only one company in the gray area was PT. Panorama

Sentrawisata and there were two companies which were in the bankruptcy zone, they were PT. Bukit Uluwatu Villa and PT. Intikeramik Alamasri Industri. Meanwhile the remaining companies included in the fluctuating zones or move in the existing zones were PT. Saraswati Griya Lestari, PT. Indonesian Paradise Properties, PT. Jaya Ancol Development, PT. Pudjiadi & Sons and PT. Hotel Sahid Jaya International.

There were four companies having a poor financial performance within three years, they were PT. Bukit Uluwatu Villa, PT. Saraswati Griya Lestari, PT. Intikeramik Alamasri Industri, and PT. Pudjiadi & Sons. These four companies had a trend which tended not to improve or did not have a significant improvement and showed a decreasing trend every year. This showed that these companies experienced financial distress or financial difficulties which could lead to bankruptcy, and this was caused by various factors. The  $X_1$  ratio in the PT. Bukit Uluwatu Villa was negative for three years, this showed that the company got a difficulty in paying off its short-term obligations. The  $X_2$  ratio of the company in 2017 was negative, which indicated that its retained earnings were relatively low. However, in 2018-2019 the  $X_2$  value of the company was no longer negative. The  $X_3$  ratio in 2019 was negative which indicated that the company suffered losses from its operational activities. The  $X_1$  ratio of PT. Saraswati Griya Lestari, in 2019 was at a negative value which showed that the company had a difficulty in paying off its short-term obligations in that year. The  $X_2$  ratio in the company for three consecutive years was at a negative value which indicated that its retained earnings were low. The  $X_3$  ratio in 2018-2019 was at a negative value, which meant that the company suffered losses in its operational activities. The  $X_1$  ratio of PT. Intikeramik Alamasri Industri for three consecutive years was at a negative value, which indicated that the company got a difficulty in paying off its short-term obligations. Likewise, the  $X_2$  ratio of the company for three years was in a negative value indicating that its retained earnings were low. The  $X_3$  ratio of the company in 2017 and 2019 was at a negative value where the company suffered losses from its operational activities. And the  $X_4$  ratio of the company in 2017 was at a negative value indicating that it used a lot of debt rather than the existing capital. Then The  $X_3$  ratio of PT. Pudjiadi & Sons in 2018-2019 was at a negative value which showed that it suffered losses from its operational activities. There was also one company that was in the gray zone category, which meant it is not in a healthy condition or in financial distress, it was PT. Panorama Center. In the  $X_3$  ratio of the company in 2018-2019 was at a negative value in which it suffered losses from its operational activities.

The results of this study supported the research from Fadhilah, M.R (2019) which used the Altman Z-Score model, where there were companies that were included in the bankruptcy zone. The companies which entered the bankruptcy zone were in the form of retail companies in which there were eight companies from 2013-2017, but in this study there were three companies which entered the bankruptcy zone from 2017-2019.

Then the same results were shown in the research of Sugesti A.R (2017) using the Altman Z-Score method where there was one telecommunication company which was included in the bankruptcy zone and one telecommunication company which entered the gray area in 2008-2012, but in this research there were three companies which entered the bankruptcy zone and one company which entered the gray area from 2017-2019.

And the research from Ondang, R. Ch.S. (2017) using the Altman Z-Score method showed the results in which there were four companies having liquidity problems, thus in each year from 2008-2021 these four companies were included in the financial distress condition and could get bankruptcy, but in this study there were three companies that entered the bankruptcy zone from 2017-2019.

#### 4. Conclusion (10pt)

Based on the results of the analysis described by the writer on the previous pages, the following conclusions could be drawn:

1. The average value of the financial ratios  $X_1-X_4$  of the restaurant, hotel and tourism sector companies in 2017 to 2019 showed the fluctuating results. The companies having a negative  $X_1$  ratio during the period were PT. Intikeramik Alamsari Industri, PT. Bukit Uluwatu Villa, PT. Jakarta International Hotels & Development and PT. Jaya Ancol development showed that their current liabilities were greater than the current assets, therefore the current assets were unable to meet the company's obligations. In the companies with a negative  $X_2$  ratio, in which they were PT. Intikeramik Alamsari Industri, PT. Red Planet Indonesia, PT. Ayana Land International, PT. Saraswati Griya Lestari and PT. Sanurhasta Mitra indicated that they generated the retained earnings from total assets showed the negative results, which meant that their losses exceeded the retained earnings. In the companies with a negative value  $X_3$  ratio found in the company PT. Intikeramik Alamsari Industri, PT. Red Planet Indonesia, PT. Ayana Land International and PT. Hotel Sahid Jaya International indicated that they suffered loss and their total assets could not generate a profit from their operational activities. In the companies with a negative value  $X_4$  ratio found in PT. Intikeramik Alamsari Industri in 2017 indicated that it used more debt than its capital.

- 2. There were three companies in the restaurant, hotel and tourism sector which were predicted to experience bankruptcy based on the distress zone category or financial difficulties, they were:
- 1. PT. Bukit Uluwatu Villa for three years (2017-2019)
- 2. PT. Saraswati Griya Lestari for three years (2017-2019)
- 3. PT. Intikeramik Alamasri Industri for a year (2019)

These three companies had problems with their financial ratios showing that they had unhealthy financial performance and did not have any improvement for the last three years. This showed that these companies experienced the financial distress or financial difficulties which could lead to bankruptcy.

3. Based on the results of the Z"-Score trend analysis of the restaurant, hotel and tourism sector companies from 2017-2019, they showed the fluctuating results. In this sector, there are eleven dominating companies where their trend movements tended to move in the "not bankrupt zone" (safe zone), and there are two companies with a trend which tended to move in the "bankrupt zone" (distress zone), while the remaining five companies were engaged in fluctuating zones or moved in the existing zones.

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