

**Comparison Of Financial Distress In Companies Affected By The Covid-19 Pandemic**  
(Empirical Study Of Hotel, Restaurant, Tourism, And Aviation Sub Sector Companies Listed On  
The Indonesia Stock Exchange)

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***ABSTRACT***

The extraordinary impact on the global economy in early 2020 was caused by COVID-19, one of which was financial system stability. Economic instability causes a decrease in company revenue, especially in hotel, restaurant, tourism and aviation subsectors, which can lead to financial distress. Financial Distress analysis is important to provide an overview of the company's financial condition. This study aims to determine the difference in the level of financial distress before and during the COVID-19 pandemic in hotel, restaurant, tourism, and aviation sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2019–2022, using the Altman Z-score calculation model. The data used in this study are secondary data taken from financial reports through the official IDX website, [www.idx.co.id](http://www.idx.co.id). Sample determination was carried out using the purposive sampling method. The number of samples selected was 36 companies. The analysis technique used in this research is one-way analysis of variance. The results showed a value of  $0.885 > 0.05$ , which means that there is no difference in the level of financial distress in companies before and during the COVID-19 pandemic.

**Keywords** : Financial Distress, Altman Z-Score, COVID-19 Pandemic, Hotel Restaurant, Tourism, and aviation Sub-sector Companies

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## I. INTRODUCTION

Every element is negatively impacted by COVID-19, but the economy is particularly affected. The COVID-19 has had an impact on a lot of businesses in Indonesia. One of them is a company engaged in the hotel, restaurant, tourism, and aviation subsectors. The coronavirus pandemic has become a serious threat. This pandemic has affected people's habits and harmed their health, social life, and economy (Khan et al., 2020). According to the International Monetary Fund, when the crisis occurs in the global economy, contraction or negative economic growth is predicted to be experienced by 95% of countries (Rahmah & Novianty, 2021).

Based on the Ministry of Finance's statement, the hotel, restaurant, tourism, and airline sub-sectors are the most affected companies due to the pandemic. Implementing the Large-Scale Restrictions (PSBB) policy is one of the steps designed to stop the spread of the coronavirus. Due to people spending more time at home, there has been a sharp decline in the number of people visiting restaurants and hotels (Nainggolan, 2021). Therefore, tourist visits, which were originally 16,106,954 in 2019, experienced a sharp decline in 2020, with a total of only 4,052,923 visits. more than 2,000 hotels and 8,000 restaurants to close. During January to April 2020, the total potential lost revenue was IDR 70 trillion, which was divided between the hotel sector at IDR 30 trillion and restaurants at IDR 40 trillion. Meanwhile, foreign exchange losses

reached US\$4 billion. The pandemic also affected the aviation sector, which resulted in flight cancellations throughout January–February 2020 for a total of 1,023 international flights and 11,780 domestic flights. This industry had a reduction in revenue, which was also correlated with a decrease in foreign visitor arrivals in Indonesia. International visitors to Indonesia will arrive in substantially smaller numbers in 2020 than they did in 2019 (Badan Pusat Statistik, 2023).

Platt & Platt, (2002) defines financial distress as a condition where the company's finances continue to decline gradually before bankruptcy occurs. Not only economic factors, but financial distress can also be caused by changing environmental factors. One of the causes of environmental changes is unexpected events, disasters, and outbreaks such as the COVID pandemic.

According to Nadiya Nafisamuna & Nurfauziah, (2022), the level of financial distress experienced by companies is important to be compared, this is because COVID-19 brings negative changes to the level of financial distress experienced by companies. The results of the comparison can be used to determine how much the phenomenon affects the company's financial performance, so that the right decisions can be made by the principal and agent to assess and decide on the appropriate policy if something similar to COVID-19 happens again. The same thing was also revealed by Song et al., (2022) that the COVID-19 pandemic caused a decrease

in revenue for the company, which led to an increase in the risk of corporate financial distress. Panigrahi, (2019) states that the company's worsening condition indicates financial distress, which can then trigger an aggressive response from competitors to seize opportunities to increase market share. Financial distress prediction is used as an early detection of company bankruptcy so that companies can take action for the repair process before bankruptcy occurs. Cassidy & Handoko, (2022) state that the COVID-19 pandemic phenomenon affects the difference in prediction results and needs to be considered in predicting financial distress. Therefore, research on the differences experienced by companies before and during COVID-19 is important to do.

The results of research by Mahtani & Garg, (2020) and Nadiya Nafisamuna & Nurfauziah, (2022) show that COVID-19 brings negative changes to the company's financial performance, so there are differences in the level of financial distress owned by the company. However, different results were shown by Lewaru & Loupatty, (2021) and Nurtjahjo dkk., (2022) where the COVID-19 pandemic did not show differences in the results of financial distress conditions experienced by companies.

There have been many previous studies that examine the differences in financial distress experienced by companies due to the COVID-19 pandemic, but there are differences in the results of their research. This is due to differences in the use of measurement models and the objects studied causing the diversity of research results obtained.

According to Gunawan dkk., (2017) the difference or inconsistency in results is due to the different characteristics of each model, a model that is suitable for certain business categories is not always suitable for different business categories. In the previous period, the number of samples observed was only two periods, so the use of samples used was limited. Therefore, research related to differences in the level of financial distress before and during the pandemic requires renewal.

In this study, researchers added different objects from previous studies, namely adding the aviation sector, in addition to the hotel, restaurant and tourism sub-sector companies. Companies engaged in the aviation sector were also adversely affected during the pandemic. The number of countries that implement lockdowns to reduce the spread of the corona virus has caused the aviation sector to also experience a drastic decline, because this sector must be forced to reduce its flight schedules, especially international flights. As a result of the Covid-19 phenomenon, a number of airlines have closed their operations (Nainggolan, 2021).

In addition to different objects, the description of the results of the analysis is also different from previous studies. In previous studies, the focus of the results was on the financial condition, while in this study the assessment of the research results was accompanied by disclosure of the differences in the use of strategies taken by the principal and agent which led to an increase or decrease in the company's financial condition in facing the challenges of the Pandemic phenomenon. According to Priyatningsih, (2016) adjusting business

strategies to the environment or resources owned by the company is important.

Therefore, researchers are interested in conducting research related to financial distress that occurs in relation to the COVID-19 event, whether unexpected events such as the Covid-19 pandemic will have an impact on differences in the financial distress zone experienced by companies in the hotel, restaurant, tourism and aviation sub-sectors.

## II. RESEARCH METHOD

This study uses a quantitative approach with the use of secondary data in the form of financial reports taken through access to the website [www.idx.co.id](http://www.idx.co.id), which is the official website of the Indonesia Stock Exchange.

In this study, the sample used was 144 companies in the tourism, hotel, restaurant, and aviation sub-sectors listed on the Indonesia Stock Exchange in 2019–2022. The technique used is purposive sampling with the following criteria:

**Table 1 sample criteria and amount**

No	Criteria	Amount
1.	Companies listed on the Indonesia Stock Exchange (IDX).	833
2.	Hotel, restaurant, tourism and aviation sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2019-2022.	47
3.	<b>Minus:</b> hotel, restaurant, tourism, and aviation sub-sector companies that did not publish their financial statements in 2019-2022.	(11)
4.	Total companies used as samples from 2019-2022.	36

To calculate the value of financial distress experienced by the company, the Altman Z-Score model is used. This

method was chosen due to its accuracy of up to 90.9% in predicting company bankruptcy and 97% in predicting the non-bankruptcy of a company based on the payment of obligations owned by the company (Altman, 1968).

The formula of the Altman Z-Score Model is as follows:

$$Z'' = 6,56 \text{ WCTA} + 3,26 \text{ RETA} + 6,72 \text{ EBITTA} + 1,05 \text{ BVEBVL}$$

Description:

WCTA = Working Capital to Total Asset

RETA = Retaine Earning / Total Asset

EBITTA = EBIT / Total Asset

BVEBVL= Book Value of Equity / Book Value of Total Liabilities.

The Altman Z-Score Model analysis is based on the following values:

- Nilai  $Z'' < 1,1$  = Distress Zone
- Nilai  $1,1 < Z'' < 2,6$  = Grey Zone
- Nilai  $Z'' > 2,6$  = Green Zone

## III. RESULTS AND DISCUSSION

### Descriptive Statistic Test

A descriptive statistical test is used as a medium for describing the calculation results of financial distress predictions to analyze data, which is then used to provide a description of the data that has been collected to draw general conclusions. The results are the average data (mean), standard deviation, maximum, and minimum values from the calculation of financial distress predictions using the Altman Z Score method (Ghozali, 2016). The following are the results of descriptive statistics for each variable calculated using SPSS software version 26:

**Tabel 2 Descriptive Statistics Test**

Descriptive Statistics					
	N	Mini mum	Maxi mum	Mean	Std. Deviation
2019	36	-10.63	216.51	10.24	36.10
2020	36	-13.88	716.28	22.90	119.12
2021	36	-18.29	301.31	10.91	50.56
2022	36	-19.07	401.71	15.08	67.14

**Classic Assumption Test**

**Tabel 3 Normality Test**

One-Sample Kolmogorov-Smirnov Test	
	Unstandardized Residual
N	144
Asymp. Sig. (2-tailed)	.200 <sup>e,d</sup>

**Multicoleniarity Test**

The Result of the calculation of the tolerance value of all variables > 0.10 mean that there is no correlation between independent variables with a value > 95%. As for VIF calculation, it can be seen that the overall VIF value is 10.00, so it can be concluded that this study is free from multicoleniarity between independent variables in the regression model.

**Autocorellation Durbin Watson Test**

The results show the D-W value obtained is 2.086, the DU value is 1.7851, and the 4-DU value is 2.2149, or du d 4-du. This means that, based on these results, no autocorrelation was found in the study.

**Heterokedastisity Test**

The use of the heteroscedasticity test aims to observe the residual variance of the variables used to determine whether it is not the same (Ghozali, 2016). This study uses the Glejser test to determine whether the research data is homogeneous or not. The result is that the significance value of the four variables is (0.918, 0.779, 0.066, 0.252) > 0.05,

meaning that it certainly does not contain heteroscedasticity.

**Hypothesis One Way Analysis of Variance**

The one-way analysis of variance test results show a value of  $0.885 > 0.05$ . Based on the results, it is concluded that there are no differences in financial distress in the tourism, hotel, restaurant, and aviation sub-sector companies listed on the IDX before and during the COVID-19 pandemic.

**DISCUSSION**

In the hotel, restaurant, tourism, and aviation sub-sectors of the 36 companies studied, there are 21 companies that do not experience zone changes throughout 2019 to 2022, and 6 of them (AKKU, CLAY, CMPP, GIAA, BUVA, and FITT) are continuously in the distress zone.

PT AirAsia Indonesia Tbk (CMPP) experienced financial distress before the pandemic took place; the cause was an increase in aircraft rental costs by 45% and fuel costs by 35%. A total of nine new routes were launched to improve the company's position in the domestic market, including five international routes. As a result, the company's revenue increased sharply by 63.07% on an annualized basis. However, this increase was still unable to cover the cost of expenses borne by the company. Then, after the pandemic, the company could not recover; passengers fell by 83% due to the closure of several routes due to restrictions imposed to prevent the spread of the pandemic. Efforts made by the company's management were to sell flight tickets at low prices, but this

strategy could not attract consumer demand even in the holiday season and year-end conditions. Reducing the number of aircraft to be operated was also carried out to reduce costs incurred. (Rosana, 2021). Financial distress experienced by companies both before and during the pandemic is in the same difficult condition; the strategies carried out by companies in both situations still cannot cover the losses experienced by the company.

Then there are two companies in the gray zone category, including DFAM and HRME. PT Menteng Heritage Realty Tbk (HRME) before the pandemic had experienced unfavorable conditions caused by the high political temperature that occurred in the country, and the situation with tensions due to trade between large countries still overshadowed the community. This has an effect on reducing the occupancy rate of hotel rooms in the company (PT Menteng Heritage Realty Tbk, 2019). Since the onset of COVID-19 in March, hotel reservation cancellations in Indonesia have skyrocketed. With the implementation of PSBB on April 10, 2020, the demand for rooms and events disappeared. Although the hotel is still operating, there is no demand for the luxury segment that The Hermitage has been targeting. After the activities were reopened, HRME posted an increase in revenue of IDR 20 billion in 2020, but at the same time, the operating expenses incurred also increased. Even so, the burden borne by the company did not make the company decline, the company

was still in the same condition as in the year before the COVID, which was in the gray zone like 2019. Growth worth 29.8 billion was experienced in 2022. This increase was caused by innovations made by the company with various programs offered.

There are 13 companies in the green zone category (ARTA, BAYU, JGLE, INPP, JIHD, KPIG, MINA, and EAST). During the COVI-19 pandemic, PT Arthavesr Tbk (ARTA) took advantage of the government's Repatriation Hotel Program, where qualified hotels were used as quarantine places for people who had just arrived from overseas travel. The company strategized by offering conservative yet competitive pricing. In addition, the company continuously improves the hotel's excellence by enhancing the quality of service, food, meeting facilities, and various digital offerings in order to get added value from guests. As a result, in 2021, the company managed to increase its sales by 44.49%, with sales of 42,088 rooms compared to 2020 (PT Arthavest Tbk, 2021). In 2022, the company further strengthened its focus on government, a strategy mainly due to funding from the World Bank for various institutions, including several ministries, with the aim of holding MICE activities in the hospitality industry. As a result, sales increased by 32.02% over the previous year, reaching 55,563 rooms. This year, the hotel also intensified its participation in various exhibitions and events in the hospitality industry and tourism sector to further increase

mindshare among consumers and clients. The hotel also continued to improve its excellence by upgrading its quality (PT Arthavest Tbk, 2022). Thanks to that, the company can continue to survive both before and during the COVID pandemic. While companies that have experienced changes towards improving financial performance are PT Tourindo Guide Indonesia Tbk (PGJO), Before 2020, when COVID-19 had not yet occurred, revenue had not been obtained since June 2018 because Pigijo's website had just been soft launched. In the process, it resulted in the company's operating costs increasing (Prima, 2020). Therefore, the company is experiencing financial distress. In 2020, the pandemic will be considered by the company's management as an opportunity to gain a strategic corporate advantage. The company launched the Digital Travelpreneur Certification program, then pioneered the sociopreneur movement with #SupportLocalExpert, where Pigijo has collaborated with Indonesians abroad. With this activity, Pigijo managed to get support from the Indonesian diaspora through the purchase of virtual tour packages and regional specialty products that have been curated by the Pigijo team and displayed on the company's website, pigijo.com. Furthermore, the company held an event called PSBB, Pigijo Sharing Bareng Bareng, which was presented by organizing a talk show through IG Live and aimed to promote the tourism potential of regions in Indonesia. Through this, PGJO managed

to increase its revenue amid the COVID-19 pandemic (Utami, 2020).

There are 14 companies with declining finances during the pandemic (FAST, JSPT, MAPB, PDES, PANR, PNSE, PGLI, PJAA, SOTS, PZZA, PTSP, SHID, and HELI) that experienced a financial decline, which indicates that the company has a high risk of bankruptcy. The sharp changes experienced by (PJAA) PT Pembangunan Jaya Ancol Tbk as a company whose main income is obtained from the recreation unit have had a heavy impact on the company. Especially since March 2020, the recreation units that are managed have to be closed for about six months, including school holidays, Lebaran, Christmas, and New Year, which are the harvest time for recreation places. As a result, the number of visits to the Taman Impian Jaya Ancol tourist area decreased by 76% from 18 million visitors to 4.5 million visitors in 2020. In the midst of declining financial conditions, the company did not lay off its employees. Management made strategies in dealing with the pandemic situation, including implementing a basic cost strategy, namely that cost expenditures are limited only for the safety of visitors, completing Symphony of the Sea, and rescheduling all projects. This is done so that the costs incurred by the company do not swell. However, the efforts made were not optimal; the company's liabilities were calculated to have increased as of March 31, 2021, to a value of IDR 2.8 trillion from IDR 2.28 trillion in a period of 9 months. The

increase in the company's liabilities was due to its decision to issue sustainable bonds II Phase II-2021 worth IDR 731 billion (Nurhaliza, 2021).

The results of this study are in line with research conducted by (Nadiya Nafisamuna & Nurfauziah, 2022) which examines the potential for financial distress with the object of research on food and beverage companies in Indonesia listed on the IDX, which shows the same research results, namely that there is no difference in the company's financial distress. The results of this study are different from research conducted by Saputra dkk., (2022) who conducted research on transportation companies listed on the IDX in 2019 and 2020, the results showed a difference in the level of financial distress that occurred in transportation companies before and during the COVID-19 pandemic. This happens because the time period used is different, namely in the 2nd quarter, so the research results obtained are different, and besides that, the objects and years of research studied are not the same.

The discussion is in line with the agency theory proposed by Berle & Means, (1932), and developed by Jensen & Meckling, (1976) Agency theory addresses a variety of problems that arise. If the agent makes mistakes in decision-making, it will have an impact on the reduced profits obtained in the business being managed. which then results in financial difficulties, also referred to as financial distress (Kartika et al., 2020). COVID-19 is one of the

various problems faced by companies. The sustainability of the company is influenced by decisions made by the management and owners of the company. The strategy chosen by the company determines the steps that must be taken to deal with the problems the company has so that the company avoids financial distress. Management plays an important role in determining the decisions taken. Even though there are restrictions on activities due to the pandemic, most companies do not experience changes in financial distress conditions before or during the pandemic. This is because the management and company owners have succeeded in creating a good strategy so that the company can survive in the midst of a pandemic. Meanwhile, companies that have decreased due to a zone change and are classified as having poor health are doing so due to inappropriate decision-making.

#### **IV. CONCLUSION**

Based on the research that has been conducted related to the analysis of differences in the level of financial distress before and during the COVID-19 pandemic in restaurant, hotel, tourism, and aviation sub-sector companies on the Indonesia Stock Exchange for the 2019–2022 period, it is concluded that there are no differences in financial distress before and during the COVID-19 pandemic. It can be said that the majority of companies have no findings of differences using the Altman Z-Score model. Although the level of financial distress experienced has increased, most companies are still in the same zone. This is influenced by company management and company owners in making



decisions, despite the constraints on activities during the COVID pandemic, the steps taken by the company determine how business processes can run. The company's innovations and strategies in developing its business so that the company can survive the downturn. The COVID pandemic is not the main and only cause of the failure of the company's operations, but the decisions taken by the company are the main determinant of how the company can survive. The existence of a COVID pandemic can be overcome by the accuracy of the strategies taken by several companies. Even before the pandemic came, they were already experiencing poor financial conditions. This statement is also supported by the results of the one-way analysis of variance test, which show a value of  $0.885 > 0.05$ , which means that  $H_0$  is accepted and there is no difference in financial distress before and during the COVID-19 pandemic.

In this study, there are several limitations. The first limitation is that this research is limited to the hotel, restaurant, tourism, and aviation sub-sectors, which means that the results of this study cannot be generalized to other company sub-sectors so that future research can make comparisons between company sub-sectors. The second limitation is that this study has a limited observation time until 2022 only, so it is hoped that further research can be conducted over a longer period. The last limitation is that researchers use companies listed on the Indonesia Stock Exchange, so researchers hope that future research can expand coverage to include companies listed on foreign stock exchanges.

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