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FINANCIAL DISTRESS ANALYSIS USING ALTMAN AND ZMIJEWSKI ON TOURISM INDUSTRY

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Abstract

This study examines financial distress scenarios in the tourism and recreation industry using the Altman Z-score and Zmijewski X-Score methodologies. Employing a quantitative descriptive research approach with purposive sampling, the study analyzes 12 publicly listed companies on the Indonesia Stock Exchange from 2019 to 2022. The results indicate that PT. Eastparc Hotel is the most financially stable, contrasting with PT. Bukit Uluwatu Villa as the weakest. While both methods yield different results, the disparity is not highly significant due to the varied components analyzed in the financial reports. The research recommends using multiple analytical methods for bankruptcy prediction to allow for accuracy assessment and to determine the suitability of each model for specific companies.

Keywords : *Financial distress, Tourism and recreation industry, Z-score altman, zmijewski x-score.*

1. INTRODUCTION

In recent years, the world has faced a significant challenge in the form of the Covid-19 pandemic. This global health crisis is characterized by a highly contagious virus with a high mortality rate. The pandemic has had a profound negative impact on communities worldwide, affecting various aspects of life, including business. During the Covid-19 pandemic, government authorities implemented policies such as the Large-Scale Social Restrictions (PSBB) and the Enforcement of Restrictions on Community Activities (PPKM) to limit the spread of the virus. These policies, aimed at reducing community activities and encouraging people to stay at home, have significantly disrupted business operations.

One of the sectors profoundly affected by the COVID-19 pandemic is the tourism sector. Typically, tourism companies engage in activities that involve entertainment in open spaces, such as parks and playgrounds, as well as interactions among individuals. However, with the emergence of the COVID-19 pandemic, all tourism-related activities were halted due to government regulations. This had a severe impact on tourism companies as they lost all their customers during the pandemic. This assertion is supported by the research findings of Usmany and Loupatty (2021). According to their study, the real estate, hospitality, and tourism sectors experienced a significant decline during the pandemic. The research revealed that 58% of companies were in distress, 11% were in a grey area, and only 31% were in a financially healthy condition.

Based on data released by the Central Statistics Agency (BPS, 2021) regarding the number of tourists visiting in 2019-2020, there was a significant decline in 2020 with the emergence of the COVID-19 pandemic.

This decrease amounted to 88.9% compared to the previous year. This substantial decline has had a significant impact on the tourism sub-sector business due to the loss of consumers. Additionally, data from the Head of the Ministry and Creative Economy Bureau indicated a 50% decline in state foreign exchange originating from the tourism sector in 2020, dropping from 280 trillion rupiah to 140 trillion rupiah. These data points underscore the profound impact of the COVID-19 pandemic on the tourism sub-sector.

Based on the aforementioned phenomena and conditions, it is likely that tourism sub-sector companies will experience a decline in their financial performance. A significant decline in economic performance could lead a company to experience financial distress or even bankruptcy. Financial distress is defined as a condition where a company is on the brink of bankruptcy, thus financial distress analysis is often referred to as bankruptcy prediction analysis (Juliani et al., 2022).

There are several models available for predicting financial distress, with two prominent ones being the Altman Z-score and Zmijewski X-score models. These models serve as valuable tools for analysts to assess the financial health of a company and determine whether it is in a state of distress (Altman, 1983; Alcalde et al., 2022). Altman's Z-Score model, introduced in 1967 and later refined in 1983, is particularly noteworthy. This model is designed to forecast a company's financial health and assess the likelihood of it experiencing financial distress, which could potentially lead to bankruptcy (Alcalde et al., 2022).

In the Altman Z-score method, several ratios are utilized, including the liquidity ratio (working capital to total assets), profitability ratio (retained earnings to total assets and income before tax to total assets), and solvency ratio (market value of equity to total liabilities). Previous research has shown that the Altman Z-score model is highly effective in predicting a company's likelihood of bankruptcy. This model relies on analyzing the company's financial ratios, which provide insights into its financial position (Altman, 1983; Alcalde et al., 2022). These ratios describe the relationship between various amounts, offering analysts a comprehensive view of a company's financial health.

The Zmijewski X-score method, similar to Altman's Z-score, uses financial ratios to predict financial distress. These ratios include the current ratio (liquidity ratio), return on assets (profitability ratio), and debt-to-equity ratio (solvency ratio) (Weston & Copeland, 2005; Yendrawadi & Adiwafi, 2020). Research by (Latif and Triyanto, 2018) supports this approach, indicating that the return on asset ratio and debt ratio have a negative impact on financial distress.

Similar to Altman's approach, the Zmijewski X-score method utilizes key financial indicators to assess and predict the likelihood of financial distress in a company. This method emphasizes the significance of evaluating a company's liquidity, profitability, and solvency positions as crucial elements in forecasting its financial stability or distress.

In a previous empirical study by (Firdayani et al, 2022), which examined the financial distress of companies in the tourism sector in 2020 with a sample of 27 companies, it was found that almost all companies in the tourism sector experienced financial distress during that year. This was attributed to external factors, particularly the emergence of the Covid-19 pandemic, which resulted in a decline in company revenues and financial instability.

In another empirical study focusing on bankruptcy prediction using Altman's Z-score and Zmijewski X-score methods in Indonesia from 2017 to 2022, a sample of 4 companies was analyzed. The companies included PT. Airasia Indonesia Tbk, PT. Garuda Indonesia Tbk, PT. Jaya Trishindo Tbk, and PT. Indonesia Transport & Infrastructure. The research results indicate that the Altman Z-score model had a presentation accuracy rate of 88%, which is relatively high. Additionally, the Zmijewski X-score model demonstrated a very high level of accuracy, reaching 100%. This suggests that the Zmijewski X-score model outperforms the Altman Z-score model in terms of accuracy (Nafiisa et al., 2022).

Building upon prior research findings, this study conducts a review of financial distress analysis utilizing Altman and Zmijewski's X-score approach. The research focuses on companies within the tourism and recreation industry that are listed on the Indonesian Stock Exchange.

2. LITERATURE REVIEW

Financial Distress

Financial distress, often referred to as financial difficulty, is a condition that occurs before a company actually undergoes bankruptcy. There is a common misconception that financial distress and bankruptcy are synonymous; however, in reality, these two conditions are distinct. Financial distress is a state in which a company experiences a decline in financial performance, placing it in a phase preceding bankruptcy. Therefore, not all companies experiencing financial distress are inevitably bound for bankruptcy.

According to (Niken Savitri Primasari, 2017), financial distress can be identified as a condition in which a company experiences an inability to meet its current obligations that have fallen due, such as trade debts, tax debts, and short-term bank debts. Additionally, (Niken Savitri, 2017) suggests that financial distress can also occur due to a decline in a company's financial condition in terms of activity ratios, liquidity, profitability, and solvency.

According to (Platt and Platt, 2002), as cited in (Rahmayanti, 2017), financial distress is defined as a stage of declining financial condition that occurs before bankruptcy or liquidation takes place. The above definition also elucidates that the condition of financial distress is characterized by the inability of a company or the unavailability of company funds to meet its obligations, both short-term and long-term.

According to (Hadi, 2019), financial difficulties arise due to economic distress, downturns in the industry, and poor management practices within a company. Poor corporate governance can also lead to financial difficulties due to operational misconduct within the company. Furthermore, based on the research conducted by (Nurhayati et al, 2019), their findings indicate that the financial expertise of the audit committee has a negative and significant impact on financial distress.

From an external perspective, factors contributing to financial distress include government policies that can add to the business burden borne by the company. Additionally, increasing loan interest rates can result in a rise in the interest burden borne by the company.

According to (Amelia, 2014) financial distress can arise from various factors, both internal and external to the company. Internal factors may include cash flow difficulties, high levels of debt, and operational losses over several years. External factors, on the other hand, can include economic downturns, changes in market conditions, and unexpected events such as natural disasters or pandemics. It is important for investors to consider both internal and external factors when assessing the financial health of a company.

Altman Z-score Analysis Model

The Altman Z-Score bankruptcy prediction model, introduced by Altman in 1983, is a method for predicting a company's financial health and the likelihood of bankruptcy. The revised formula by Altman in 1983 (Alcalde et al., 2022). The formula used in this research to analyze financial distress in non-manufacturing companies is as follows:

$$\text{Z-Score} = 6{,}56\text{WCTA} + 3{,}26\text{RETA} + 6{,}72\text{EBITTA} + 1{,}05\text{MVETL}$$

Where:

WCTA = Working Capital to Total Asset
RETA = Retained Earning to Total Asset
EBITTA = Earnings Before Interest and Tax to Total Asset
MVETL = Market Value of Equity to Total Liabilities

The Z value obtained from this formula is used to assess the financial health of the company and estimate the risk of bankruptcy. A higher Z value generally indicates a healthier financial condition, while a lower Z value may signify a higher risk of bankruptcy. The financial distress classification for this formula is as follows:

Z-Score > 2.675 : Healthy Company
2,675 > Z-Score > 1,1 : Grey Area
1,1 > Z-Score : Distress

Zmijewski X-Score Analysis Model

The Zmijewski Model (X-Score) is one of the multivariate analysis models designed to predict corporate bankruptcy with a relatively reliable level of precision and accuracy, invented by Zmijewski in 1984 (Nazareth & Reddy, 2023). In this method, several financial ratio indicators are considered, such as return on assets, debt ratio, and current ratio. In the Zmijewski method, the assessment criteria are as follows: if the value of Z is less than 0.5, then the company is considered healthy. The formula for this model is as follows:

$$\text{X-score} = -4{,}3 - 4{,}5CR + 5{,}72ROA + 0{,}004DER$$

Where:
CR = Current Ratio
ROA = Return on Asset
DER = Debt to Equity Ratio

3. RESEARCH METHODS

This study adopts a quantitative methodology, employing descriptive research to ascertain the values of individual variables, whether singular or multiple, without engaging in comparisons or establishing connections with other variables (Cresswell J.D, 2017). The focal point of this investigation comprises companies within the tourism and recreation industry listed on the Indonesia Stock Exchange during the period spanning from 2019 to 2022. The reason for choosing the research period of 2019-2022 is because during that time, the pandemic spread and had significant impacts on many companies, particularly in the tourism and recreation industry. The population in this study consists of 15 tourism and recreation industry companies listed on the Indonesia Stock Exchange, as shown in the table below:

Table 2.1 Research Population Tourism and Recreation Industry

No	Company Code	Company Name
1	BAYU	PT. Bayu Buana Tbk
2	BUVA	PT. Bukit Uluwatu Villa
3	CLAY	PT. Citra Putra Realty Tbk
4	DFAM	PT. Dafam Properti Indonesia Tbk
5	EAST	PT. Eastparc Hotel Tbk
6	FAST	PT. Fast Food Indonesia Tbk
7	FITT	PT. Fitra International Hotel
8	PJAA	PT. Pembangunan Jaya Ancol Tbk
9	PANR	PT. Panorama Sentrawisata Tbk
10	PDES	PT. Destination Tirta Nusantara
11	PNSE	PT. Pudjiadi & Sons
12	JGLE	PT. Graha Andrasetra Propertindo
13	HOME	PT. Hotel Mandarine Regency Tbk
14	HOTL	PT. Saraswati Griya Lestari Tbk
15	DUCK	PT. Jaya Bersama Indo Tbk

From the population above, the sample for this research is determined using the purposive sampling method. The criteria for selecting samples in this study include:

1. Companies in the tourism and recreation industry listed on the Indonesia Stock Exchange during the period 2019-2022.
2. Companies that have published annually audited financial reports.

From the sampling method above, the number of companies that met the criteria were 12 companies, namely PT. Bayu Buana, PT. Bukit Uluwatu Villa, PT. Citra Putra Realty Tbk, PT. Dafam Properti Indonesia

Tbk, PT. Eastparc Hotel Tbk, PT. Fast Food Indonesia Tbk, PT. Fitra International Hotel, PT. Pembangunan Jaya Ancol Tbk, PT. Panorama Sentrawisata Tbk, PT. Destination Tirta Nusantara Tbk, PT. Pudjiadi & Sons, and PT. Graha Andrasetra Propertindo. The data collection procedure in this study uses the documentation method.

The data utilized in this research is derived from secondary sources in the form of company financial reports accessible on idx.com. The variables under investigation in this study are employed to ascertain financial distress, utilizing both the Altman Z-score analysis model and the Zmijewski X-score analysis model.

4. RESULT AND DISCUSSION

Based on the results of the analysis carried out using Altman's Z-score and Zmijewski's X-score methods, it is noted that there are several companies whose analysis results differ between the Z-score and X-score models. This discrepancy can be attributed to the use of different financial ratios in each model, which may lead to varying outcomes in the calculation of financial distress.

Using Altman's Z-score analysis, two companies have consistently maintained a financially healthy condition over the four years of investigation. These companies are PT. Bayu Buana Tbk and PT. Eastparc Hotel Tbk. Both companies exhibit stable and positive levels of financial ratios. Additionally, the two companies share similarities in their analysis results, with both demonstrating a high level of solvency ratio or MVETL ratio, which helps improve their financial condition and avoid financial distress. Furthermore, the Z-score value of both companies increased in the first three years and decreased in 2022.

In contrast, two companies were consistently in a state of distress over the four years of analysis. These companies are PT. Bukit Uluwatu Villa Tbk and PT. Citra Putra Realty. The financial condition of these two companies experienced a continuous and significant decline during the four years of investigation. The low Z-score value for both companies can be attributed to their low levels of liquidity and profitability, specifically in terms of working capital, retained earnings, and gross profit. Therefore, these companies need to improve these three components to enhance their financial condition. Failure to correct this situation may lead to bankruptcy.

Furthermore, eight companies experienced fluctuations in the Z-score value over the four years of analysis. These companies include PT. Dafam Properti Indonesia Tbk, PT. Fast Food Indonesia Tbk, PT. Hotel Fitra Indonesia Tbk, PT. Pembangunan Jaya Ancol Tbk, PT. Panorama Sentrawisata Tbk, PT. Destination Tirta Nusantara Tbk, PT. Pudjiadi&Sons Tbk, and PT. Graha Andrasetra Propertindo Tbk.

PT. Dafam Properti Indonesia Tbk was in a healthy condition in 2019. However, in 2020, the Z-score value decreased, placing it in the grey area. Subsequently, in 2021, the company experienced another increase, returning it to a healthy condition. However, in 2022, the company experienced a very significant decline, placing it in a state of distress. This significant decrease in 2022 is attributed to a considerable reduction in the profitability ratio of retained earnings and gross profit of the company.

PT. Fast Food Indonesia was in a healthy condition in 2019, with a fairly high Z-score, indicating a healthy financial situation. However, from 2020 to 2022, the company experienced a significant decline in its financial condition, placing it in the grey area. This suggests that the company is beginning to experience financial difficulties, but they are not yet severe enough to be in a state of distress.

PT. Hotel Fitra Indonesia was in a state of distress in 2019 and 2020. However, in 2021 and 2022, the company experienced a significant improvement in its financial condition, placing it in a healthy condition. This improvement can be attributed to a substantial increase in profitability ratios, namely the ratio of retained earnings and gross profit of the company.

PT. Pembangunan Jaya Ancol Tbk was in a healthy condition in 2019. However, in 2020, the company's financial situation experienced a decline, placing it in a state of distress. Although there was an improvement in the company's financial condition in 2021 and 2022, the company was still in a state of distress during those two years.

PT. Panorama Sentrawisata Tbk was in the grey area in 2019. However, from 2020 to 2022, the company experienced a decline, placing it in a state of distress.

PT. Destination Tirta Nusantara was in a healthy condition in 2019 and 2020. However, in 2021 and 2022, the company experienced a significant decline in its financial situation, placing it in a state of distress. This is attributed to a significant decrease in the ratio of working capital and retained earnings.

PT. Pudjiadi & Sons has experienced fluctuating conditions over the last four years. In 2019, the company was in a healthy state. Then, in 2020, the company's condition improved and was healthy. However, in 2021 and 2022, the company experienced a significant decline, leading to a state of distress in 2022.

PT. Graha Andrasetra Propertindo was in the grey area in 2019-2021, indicating that the company was starting to experience financial difficulties, but they were not yet serious. However, in 2022, the company experienced an improvement, placing it in a healthy condition.

Table 3.1 Altman Z-score Analysis Model of Companies of Tourism and Recreation Industri

Company Stock Code	Z-score			
	2019	2020	2021	2022
BAYU	4.8495	5.1415	5.1776	4.8240
BUVA	-1.3554	-9.0161	-9.2539	-9.6699
CLAY	-1.6094	-3.5077	-4.6249	-5.0097
DFAM	4.3809	1.9515	4.0425	0.3805
EAST	6.7407	14.5648	29.9893	17.9237
FAST	6.1245	2.0589	1.4260	1.2276
FITT	0.5965	-0.9443	11.971	10.2729
PJAA	2.7985	-0.9492	0.4432	1.1134
PANR	1.3288	-0.8594	-1.1226	0.5510
PDES	3.8116	5.6964	-3.3069	-0.6985
PNSE	2.0563	4.0858	1.7616	0.9868
JGLE	2.1607	2.0002	2.0909	3.4099

Source: Company Financial Statement, Analyzed

Z-Score > 2,6 : Healthy Company
1,1 < Z-Score < 2,6 : Grey Area (The possibilities of experiencing financial difficulties
Z-Score < 1,1 : Distress (Experiencing financial distress with high risk)

Using the Zmijewski X-Score method, eight companies were in a healthy condition over the four years of analysis. These companies include PT. Bayu Buana Tbk, PT. Eastparc Hotel Tbk, PT. Fast Food Indonesia Tbk, PT. Hotel Fitra Indonesia Tbk, PT. Pembangunan Jaya Ancol Tbk, PT. Panorama Sentrawisata Tbk, PT. Pudjiadi&Sons Tbk, and PT. Graha Andrasetra Propertindo Tbk. This is indicated by the calculation of the Zmijewski X-score value, which is smaller than 0. This situation suggests that the companies are in good condition and are not experiencing financial difficulties. The smaller the X-score value of a company, the smaller the possibility of the company experiencing financial problems and bankruptcy. However, this does not mean that a company that is in a state of distress will definitely fail and go bankrupt. Financial difficulties in the short term are temporary and not that serious, but if these difficulties are not dealt with quickly, they will worsen, and if they are too severe, they will be difficult to handle. If the company can no longer endure this bad condition, then the company can liquidate and reorganize it.

Furthermore, three companies that were in a healthy condition in 2019 experienced a significant decline from 2020 to 2022, resulting in these companies being in a state of distress. These companies include PT. Bukit Uluwatu Villa Tbk, PT. Citra Putra Realty Tbk, and PT. Destination Tirta Nusantara Tbk. The decline in 2020 was attributed to the emergence of the Covid-19 pandemic phenomenon.

PT. Dafam Properti Indonesia Tbk was in a healthy condition in 2019-2020, as indicated by an X-score value of less than 0. However, from 2021 to 2022, the company experienced a significant decline, placing it in a state of distress during those two years. This indicates that the company is experiencing a critical financial condition that requires serious handling.

Table 3.2 Zmijewski X-Score Analysis Model of Companies of Tourism and Recreation Industry

Company Stock Code	X-score			
	2019	2020	2021	2022
BAYU	-1.5983	-1.7250	-2.5375	-1.4111
BUVA	-1.5061	3.0517	2.1539	2.3731
CLAY	-0.1455	0.9227	1.5796	1.7179
DFAM	-0.2196	-0.0874	0.1746	0.5385
EAST	-3.2045	-3.9958	-4.1919	-4.2784
FAST	-1.6135	-0.0078	-0.0960	-0.1125
FITT	-1.6817	-0.6439	-1.4888	-1.4248
PJAA	-1.8343	-0.6638	-0.2492	-0.9616
PANR	-1.4974	-0.3341	-0.1906	-0.7823
PDES	-0.9436	0.9723	1.7094	0.6084
PNSE	-1.7196	-1.0659	-0.8809	-1.1524
JGLE	-2.0572	-2.2547	-2.0848	-0.5566

Source: Company Financial Statement, Analyzed

Based on the analysis conducted using the Altman Z-score and Zmijewski X-score methods, several findings regarding the average financial condition of the sample were obtained, revealing some slightly divergent interpretations. PT. Panorama Sentrawisata employed two analytical models, Z-score and X-score, yielding discrepancies in both financial distress analysis models. The Z-score calculation indicates that the company has been in a distressed state over the past four years. However, based on the X-score calculation, it suggests that the company has been in a healthy condition over the same period.

However, on the other hand, PT. Bayu Buana employed two analytical models, Z-score and X-score, and the results indicated consistent findings in both financial distress analysis models. The calculations using both Z-score and X-score models demonstrated that the company is in a healthy condition.

Based on the results of the analysis above, it can be seen that the company with the best financial condition among the 12 companies using two analysis models is PT. Eastparc Hotel Tbk. This condition indicates the possibility that management does not have financial difficulties in its operational activities, and the company can be categorized as a company that is not experiencing financial distress. PT. Dafam Property Indonesia, for the last three years, has been in quite good condition. The company's liquidity and solvency levels are quite stable and good, which puts the company in a healthy state. However, in 2022, there will be a decrease in the ratio of retained earnings and gross profit, which will result in the company being in a state of financial distress. A good level of retained earnings will provide additional funds for the company to meet current debts and operational activities.

PT. Graha Andrasetra Propertindo is a company that is consistently developing positively. This indicates that the company's financial condition improves every year, placing it in a healthy state. This improvement can be attributed to the increase in the ratio of working capital, retained earnings, and the company's market capital.

Companies that face bankruptcy, such as PT. Bukit Uluwatu Villa Tbk, PT. Citra Putra Realty Tbk, PT. Destination Tirta Nusantara Tbk, and PT. Pudjiadi & Sons, experience a decrease in the value of working capital and an increase in current debt. This condition can cause the Z-score value to decrease because the value of operating capital received influences the Z-score value. When existing assets are smaller than current liabilities, it can result in poor working capital value. The amount of working capital owned by a company is of concern to short-term creditors because it shows the amount of assets that have been issued for long-term funding sources. A low liquidity ratio indicates the company's limited ability to meet its short-term debt, leading to difficulties in meeting these obligations. Additionally, there is a decline in market capital, which causes the company's solvency ratio to decrease. This impacts investors and shareholders who may hesitate to invest in the company, making it difficult for the company to acquire current cash.

Companies that experienced a decline in financial conditions in 2020, such as PT. Fitra International Hotel and PT. Jaya Ancol Tbk, faced challenges due to a decrease in the level of working capital and gross profit. The decline in the working capital ratio made it difficult for these companies to fulfill their operational obligations, hindering their operational processes due to limited capital. This situation triggered a decline in profitability ratios, making it challenging for the companies to generate profits from their main operational activities. In subsequent years, as the companies' working capital improved, they were able to achieve a good level of profit, indicating that both companies were able to generate profits from their operational activities and were free from distress conditions.

PT. Fast Food Indonesia Tbk has experienced a decline in its financial condition over the last four years, primarily due to a significant decrease in the value of the company's working capital and gross profit. When a company's operating capital is poor, it can disrupt operational activities, making it difficult for the company to obtain cash for its processes, leading to decreased profits. To address this, companies need to increase their working capital to ensure that operational activities generating profits are not hindered, allowing the company to generate profits. Fortunately, the company responded well by providing capital in the form of retained earnings, ensuring smooth cash flow to overcome existing liquidity problems. Thus, despite the significant decline, the company has not yet entered the distress category.

Based on the research above, it can be said that the occurrence of financial distress in the tourism and recreation industry is due to the deteriorating financial conditions of the companies. Additionally, the emergence of the Covid-19 pandemic in 2020 has created obstacles for companies in the tourism and recreation industry to conduct their operational activities, leading to a hindrance in the inflow of cash to the companies. This is in line with the statements made by (Amelia, 2014) and (Hadi, 2019) regarding the causes of financial distress in companies.

Companies with poor liquidity ratios need to increase their current financial levels, which can be achieved by increasing the company's working capital level. Working capital is a key component of financial ratios that indicates the company's ability to carry out operational activities and generate profits. A poor working capital ratio can have a negative impact on the level of profit obtained. Therefore, companies need to focus on maintaining a stable working capital level to ensure liquidity. One way to increase the working capital ratio is to enhance asset efficiency, where less effective company assets can be sold to generate cash and improve the level of working capital and overall liquidity (Boronenkova et al., 2020).

Companies with poor profitability ratios need to enhance their ability and effectiveness in generating profits. This can be achieved by improving and increasing the company's retained earnings and gross profit. Retained earnings represent profits that are reinvested into the company as capital for its ongoing activities. Poor retained earnings indicate that the company did not earn high profits in a certain period, leading to a lack of funds for reinvestment in the following period. Gross profit can be increased by enhancing operational and production efficiency to sell more products and generate greater profits. Additionally, companies can improve profitability through effective marketing strategies and collaborations with suppliers to attract regular customers and streamline the sales process (Sholastika & Triyono, 2022).

Companies with poor solvency ratios need to enhance their ability to carry out operational activities using their capital rather than relying on debt. Additionally, companies should aim to increase their market capitalization. This can be achieved by improving company quality, profitability, assets, and other factors that can positively impact the company (Medvedeva, 2020).

5. CONCLUSION

PT. Eastparc Hotel and PT. Bayu Buana are companies with the best financial performance in the tourism and recreation industry, according to Altman Z-score and Zmijewski X-score analysis. These companies are considered healthy due to stable and increasing working capital, leading to good and stable profitability levels in operational activities. Additionally, their positive market capitalization results in no difficulty in attracting investors, resulting in high cash flows and creditors' trust. Conversely, PT. Bukit Uluwatu Villa has the worst financial performance due to very low liquidity and profitability levels, leading to continuous losses and financial difficulties.

Recommendation for Company

To overcome financial distress, companies should focus on improving liquidity, profitability, and financial solvency. Strategies may include operational and financial improvements, restructuring, and more effective resource management.

A company facing liquidity challenges can improve its cash flow by enhancing inventory management, accelerating accounts receivable collection, and closely monitoring expenses. It may also consider debt restructuring, negotiating with creditors, or securing additional funding to address liquidity issues.

A company struggling with profitability should analyze its financial reports to pinpoint the causes. Strategies to improve profitability may include cutting inefficient costs, enhancing operational efficiency, and restructuring business strategies. Diversifying products/services, implementing effective marketing strategies, and adding value to products can also help. Consulting with experts and business consultants can provide valuable insights.

In the case of a company with poor solvency, it's crucial to evaluate its financial structure to identify the root causes. Swift actions may include debt restructuring through negotiations with creditors or seeking new capital solutions. The company should also focus on improving cash flow management, operational efficiency, and optimizing assets.

Recommendation for Investor

To avoid investing in companies experiencing financial distress, investors should conduct a thorough analysis of the company's financial statements, paying attention to financial ratios that reflect financial health. They should also consider the company's business prospects and management quality. Signs such as declining revenues, declining profits, or unbalanced debt increases should be noted, as these can indicate serious financial problems.

Recommendation for Future Research

The Altman Z-score and Zmijewski models provide different results because they use different components for analysis. Therefore, it is essential to conduct an accuracy analysis to determine the best method for analyzing a company's financial condition.

The process of analyzing a company's bankruptcy conditions is recommended for future researchers not to rely solely on a single analysis model. Moreover, further research can conduct an accuracy analysis of each existing model to identify their strengths and weaknesses. This approach helps determine the most suitable model for analyzing a specific company. Utilizing multiple analysis models for comparison purposes enhances the accuracy of the analysis and facilitates the identification of the company's strengths and weaknesses, as well as appropriate assessment standards.

Investors should avoid companies in the tourism and recreation industry with poor Z-score and X-score values that do not demonstrate performance improvement, as they have a high potential for bankruptcy. If a company's financial health is deteriorating and showing signs of bankruptcy, it should focus on enhancing its poor financial reports and addressing macroeconomic conditions in Indonesia.

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