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Knowing the Impact of COVID-19 on the Financial Distress of PT XYZ with the Altman Z-Score and Springate Methods

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Abstract: ***Financial distress can be experienced by every company, both large and small companies because the factors that cause financial distress can come from within (internal) or outside (external) the company, internal factors that can affect the condition of financial distress, namely liquidity. , leverage, and company size, but externals such as the current Covid-19 pandemic can affect the risk of company bankruptcy, So the purpose of this study is to determine the tendency of PT XYZ, which is engaged in the XYZ sector to experience financial distress due to the Covid-19 pandemic. The research method used is descriptive analysis with a qualitative approach using the Altman Z-Score and Springate models as a comparison and finds that there is a decrease. financial performance in the second quarter***

Keywords: financial distress, Altman Z-Score, Springate, COVID-19

1. Preliminary

The covid-19 pandemic situation makes the economic situation in Indonesia difficult, Based on data from the Central Statistics Agency (BPS) (2019) Indonesia's economic growth in 2019 was 5.2% which decreased from 2018 of 5.17% so that with the arrival of 2020 is expected to be a breath of fresh air for Indonesia's economic growth so that it does not continue to decline, but the unexpected happened with the Covid-19 pandemic that struck as of March making Indonesia's growth sluggish negative economic growth in Q1 and II of 2020. The pandemic has a domino effect from health to social and economic problems, including PT XYZ as a company engaged in the property sector, this situation can create a new threat to the company, namely bankruptcy, by knowing the condition of the company in difficult times, it is hoped that it can become an early warning system that can be used by the company to determine the next steps to improve the company's financial condition and keep the company away from financial distress and bankruptcy.

2. Theoretical review

2.1 Financial statements

According to Kasmir (2012), financial ratios are an activity to compare the numbers in the financial statements by dividing one number by another. Comparisons can be made between one component and one component in a financial report between the existing components in the financial statements. Then the figures being compared can be figures in one period or several periods. In practice, a company's financial ratio analysis can be classified as follows:

a. Balance sheet ratio
Comparing figures originating only from the balance sheet.

b. Income statement ratio,
Compares figures sourced only from the income statement.

c. Ratio between reports
Comparing figures from two sources (mixed data), both on the balance sheet and in the income statement.

2.2 Financial distress

According to Brigham and Daves (2014), financial distress in a company occurs when the company cannot meet the payment schedule or when cash flow projections indicate that the company will soon be unable to fulfill its obligations.

1) Economic failure, where the company cannot cover the total costs, including the cost of capital.
2) Business failure, occurs when a business stops operations resulting in losses to creditors.
3) Technical insolvency, is the inability to meet current liabilities when they fall due, indicating a temporary lack of liquidity. In this case, the creditor is usually willing to help through debt restructuring.
4) Insolvency in bankruptcy, reflected in the book value of debt that exceeds the market value of assets. This problem is permanent and leads to business liquidity.
5) Legal bankruptcy, which is bankruptcy legally, occurs when a lawsuit has been filed officially with the law.

Altman Z-Score Method
The Z-score is a score determined from five financial ratios, each of which is multiplied by a certain weight and will show the probability of the company's bankruptcy with the following formula:

$$\text{Z-score} = 0.717\ WC / TA + 0.847\ RE / TA + 3.107\ EBIT / TA + 0.42\ MVE / BVD + 0.998\ S / TA$$

Note:

WC / TA = working capital / total assets
RE / TA = retained earning / total assets
EBIT / TA = earning before interest and tax / total assets
MVE / BVD = market value of equity / book value of debt
S / TA = sales / total assets

If the Z-score is less than 1.2 then it is a company that has the possibility of bankruptcy, if the Z-score is between 1.2-2.90 it is included in the zone of ignorance, whereas if the Z-score is more than 2.90 then it is a non-company. -bankrupt. The model can then be used for both public and non-public companies.

Springate Method
Bankruptcy prediction using the Springate method was developed in 1978 by Gorgon LV Springate. The Springate method uses step-wise multiple discriminate analysis by selecting four of 19 commonly used financial ratios and calculating the following model:

$$S = 1.03\ A + 3.07\ B + 0.66\ C + 0.4\ D.$$

Note:
S: Overall index
A: Working capital to total assets
B: Earnings before interest and taxes on total assets
C: Profit before tax to total current liabilities
D: Sales of total assets

To determine the potential for bankruptcy, companies can be classified with a Z score> 0.862 classified as healthy companies, while companies that have a Z score <0.862 are classified as companies that have the potential to go bankrupt.

3. Research methods

3.1 Research Objects and Sources

The subject of this research is PT XYZ which is engaged in XYZ and uses monthly financial reports as an object of research during the Covid-19 pandemic or throughout 2020.

3.2 Data source

Sources of data in this study used secondary data obtained from the company's financial statements every month this research uses financial reports, guidebooks, journals, papers, articles, as well as sources from internet media related to the research conducted.

3.3 Types of Research and Data Collection Methods

The research design used in the research is descriptive research using a qualitative approach. According to Nazir (2014), the descriptive method is a method of examining a group of people, an object, condition, a thought, or an event in the present. The aim is to make a descriptive, depiction, or painting systematically, factually, and accurately regarding the facts, characteristics, and relationships between the phenomena to be studied, data collection used in this research is a literature study. The secondary data collected is company financial reports obtained from monthly financial reports issued by companies during the Covid-19 pandemic

4. Results and Discussion

Descriptive Analysis

To find out the effect of the covid -19 situation on PT XYZ's financial distress, it is necessary to know some things in the financial statements that can be used as a guide to provide an overview of PT XYZ's financial condition by calculating the available working capital and can be explained in Figure 1 as follows:

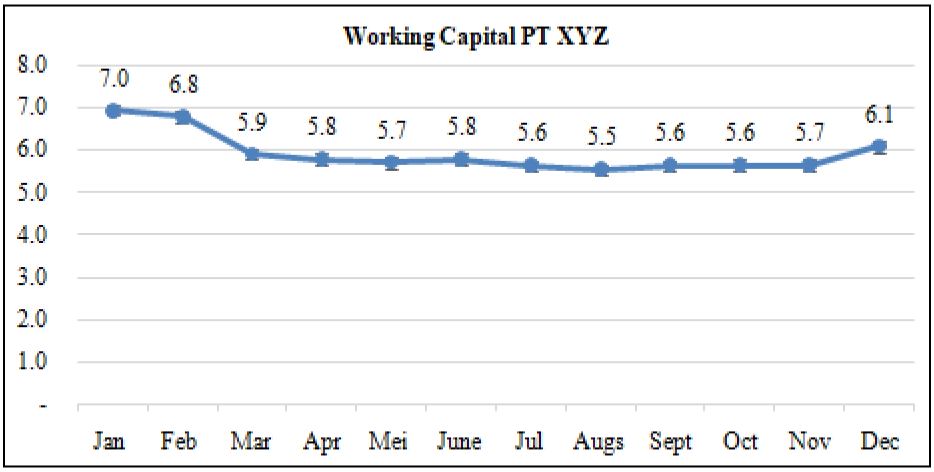

Image 1: *Working capital* PT XYZ Year 2020

Based on table 1, we can see that early 2020 went quite well for PT XYZ, where in the first quarter the company had good capital to be used to develop its business for the next quarter, but there was a decline along with the decline in operating income during the Covid-19 situation. increasing and government policies related to large-scale social restrictions which caused many tenants to experience financial difficulties, but with a good company strategy PT

XYZ's working capital improved again in the fourth quarter so that the company could survive well until the fourth quarter

Another thing that needs to be considered is company revenue because company revenue is the main indicator to find out how the company's sales performance can influence PT XYZ's financial distress figure, to find out the company's revenue it can be seen in Figure 2 below:

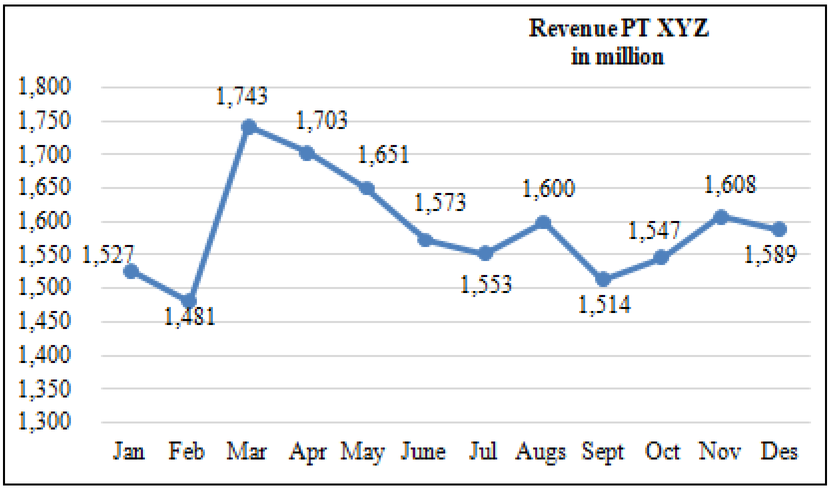

Figure 2: PT XYZ Operating Revenues in 2020

Based on Figure 2 above, it can be seen that there was a decline during the second quarter (May-August) of 2020, this is directly proportional to the capital growth owned by PT XYZ so that it can be seen that PT XYZ was directly affected by the Covid-19 pandemic situation that hit especially in the quarter. II of 2020

5. Conclusion

The covid-19 pandemic situation has made the Indonesian economy in a minus figure so that it affects industries operating in Indonesia, including PT XYZ which is engaged in the property sector, as a company that relies on business concentrations from leases and projects, the pandemic situation reduces business income obtained by PT XYZ, this directly affects the working capital of the company, but based on research using the Z-Score and Springate methods, the covid-19 pandemic situation does not affect the company's financial health and is proven by the Z-Score and S-Score. which is below the limit and can be said to be healthy, This proves PT XYZ's financial capacity in managing assets and income so that the company can continue to operate normally during a pandemic and avoid bankruptcy and financial distress, with this research it is hoped that PT XYZ can operate better when the situation returns to normal so that it increases income. and working capital owned.

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