ANALYSIS USING THE ALTMAN Z-SCORE MODEL AT PT. TIRTA MAHAKAM RESOURCES Tbk

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ABSTRAK

This study aims to analyze financial distress at PT. Tirta Mahakam Resources Tbk which is listed on the Indonesia Stock Exchange during the 2017-2021 period using the Altman Z-Score model. Data is obtained from published financial reports issued by the official website www.idx.co.id. The type of research used in this research is quantitative research with a descriptive approach. Sampling technique with purposive Sampling is a technique chosen based on certain considerations, both expert and scientific considerations. The results of this study indicate that in 2017-2021 the company is in a financial distress zone which will result in bankruptcy. This is because the Z-Score obtained is small, which is far from the number 2.99. Where the Z-Score value in 2017 was (0.977), in 2018 it was (0.941), in 2019 it was (0.336) and in 2020 it was (-5.810) and in 2021 the Z-Score value was obtained (-5.541). The cause of financial distress at PT. Tirta Mahakam Resources Tbk, namely due to a decrease in working capital, a decrease in total assets, a decrease in sales and the acquisition of profit and low profitability (loss).
Keywords: Financial Distress , Altman Z-Score

INTRODUCTION

Financial reports reflect the company's financial condition at a certain time, so that from these reports information can be obtained about the deficiencies or weaknesses and strengths of the company in its financial sector (Putra et al., 2021). Maith (2013) "Proving that financial reports are useful, research must be carried out on the benefits of financial reports, one of the ways management can measure financial conditions is by analyzing financial reports in previous years." Financial statement analysis is a series of tools or instruments used to obtain various information. Financial Ratio Analysis or Financial Ratio is an analytical tool used by companies to assess financial performance based on comparative data for each item contained in the financial statements such as balance sheets, loss/profit and cash flows in a certain period. Based on this analysis, all kinds of policies and decisions can be taken later. Bankruptcy ratios can be measured through financial reports by analyzing the ratios of financial statements. Bankruptcy is characterized by a condition where the company experiences insufficient funds to run its business which was started when the company failed to fulfill its obligations. If the company experiences financial difficulties, its operating activities will be disrupted and have an impact on business continuity in the future or will experience bankruptcy (Susilawati, 2019). Problems that are often experienced by a company so that the company goes bankrupt usually start from financial difficulties. Financial distress conditions can have a negative impact on companies, especially go public companies which will affect the confidence of investors and creditors as well as other external parties, therefore the management must take precautions to overcome financial distress and bankruptcy conditions (Armadani et al., 2021).

Prihatini & Purbawati (2021) "Financial distress can occur if a company cannot show good finances, it can be seen from the achievement of low profits and very high losses". Conditions of financial distress can be identified more quickly by using a model or early warning system where financial distress and early signs of bankruptcy can be identified

through analysis of data contained in financial reports. There are various kinds of early warning systems as a measure of financial distress that have been developed by various countries, one of which is the Altman Z-Score model. This model is used in predicting bankruptcy because the Altman Z-Score model has advantages over other bankruptcy prediction methods where the Altman Z-Score model has combined the ratios needed to assess liquidation, profitability, solvency and activity (Susilawati, 2019).

Based on the company's financial statements PT. Tirta Mahakam Resources Tbk changes every year, the problems in this study can be seen in the table:

Table 1. Company Financial Data PT. Tirta Mahakam Resources Tbk

Year	2017	2018	2019	2020	2021
Current asset	589,913,892,673	648,335,408,999	616,143,811,548	143,392,688,609	53,418,838,375
Current liabilities	513,715,444,072	599..302.543.303	606,083,831,925	423,487,395,154	198,517,209,180
Working capital	76.198448.601	49,032,865,969	10,059,979,623	(280,094,706,545)	(145,098,370,805)
Retained earning	(99,977,561,305)	(136,454,735,820)	(188,197,633,875)	(602,596,073,290)	(729,113,929,491)
Total Asset	859,913,892,673	923,366,433,799	895,683,018,081	394,725,543,723	282,668,964,144
Sale	795,611,411,050	1,042,813,378,742	645,859,484,361	168,879,831,491	15,676,233,957
EBIT	2,334,588,272	(37,845,576,140)	(52,794,021,588)	(400,263,966,463)	(125,616,466,260)
Profit/Loss	(1,230,999,610)	9,215,116,999	(45,799,101,449)	(374,250,781,929)	(107,639,358,829)

Source : www.idx.co.id

From the data above, it can be seen in 2020 and 2021 that the acquisition value of current debt is higher than the acquisition of current assets, this will result in working capital at PT. Tirta Mahakam Resources Tbk in 2020 and 2021 experienced a negative or decreased value. Negative working capital means that there is a high probability that the company will find it difficult to operate and repay credit installments, and even risk going bankrupt. In accordance with the statement of Nugraha & Fajar (2018) "The lower the working capital turnover, the poorer financial performance will be shown where the company is unable to continue to increase sales with a limited amount of capital so that activity decreases and the greater the potential for the company to experience financial or financial difficulties. distressed ". The acquisition of total asset value at PT. Tirta Mahakam Resources Tbk in 2019 and 2021 experienced a decline. The size of a company is expressed in total assets, if the total assets obtained decrease, the size of the company will also decrease. In accordance with the statement of Abbas et al. (2020) "A company if it has large total assets will show that the company is relatively stable and able to generate greater profits compared to companies that have few or low total assets which will result in the company generating small profits or losses". Sales at PT. Tirta Mahakam Resources Tbk in 2019-2021 it has decreased. Sales of a company down will have an impact on the company and result in losses, so that the company is able to improve its performance, the company's management must be

able to manage the company well. This is in accordance with Munadi (2008) "With good product marketing it will be able to increase sales and win market share. If that has happened, it is certain that the company will get the maximum profit. If the marketing of the product is not done or is not appropriate, there will be a decrease in sales which will have an impact on decreasing the income received by the company. Meanwhile, the acquisition of retained earnings from 2017-2021 at PT. Tirta Mahakam Resources Tbk suffers losses every year. Retained earnings are one of the most important sources of funds to finance a company's growth so that it can be used as an opportunity for a company to provide a signal to investors regarding its ability to pay its obligations. If the balance of retained earnings is minus, the company will experience a loss that exceeds the accumulated retained earnings from previous years, a continuously negative retained earnings balance will cause the company to experience financial difficulties and may be threatened with bankruptcy.

There was a decrease or loss in the acquisition of EBIT value in 2018-2021. How successful the operational activities of a company can be measured from the EBIT value, therefore investors and creditors can see how much profit a company generates from its operational activities. If the EBIT value has a negative number, the company has not been able to generate maximum operational profit and vice versa. In accordance with Koeswardhana (2020) "Profit can also be used as a tool to measure company performance and provide information related to management's obligations for its responsibility in managing the resources that have been entrusted to it." Finally, from the value of profit acquisition at PT. Tirta Mahakam Resources Tbk in 2019-2021 the company experienced losses. This will have an impact on the continuity of the company's own performance and also the company will experience financial distress or bankruptcy. According to Brahmin (2007) " Companies that can be categorized as experiencing financial distress , namely if their financial performance shows negative operating profit, negative net income, negative equity book value, and companies that do mergers ."

METHODS

The type of research used in this research is quantitative research with a descriptive approach. Sampling technique with purposive Sampling is a technique chosen based on certain considerations, both expert and scientific considerations. Purposive sampling is done by first determining the sample criteria to be taken. Then it is determined based on the population that will be the research sample so that this technique is based on the completeness of the financial report data that will be examined to analyze financial distress using the Altman Z-Score model. The data collection technique used in this study is based on secondary data in the form of PT. Tirta Mahakam Resources Tbk in 2017-2021 which is listed on the Indonesia Stock Exchange with documentation techniques, namely studying documents in the form of problems related to research. After that it is done by observation or observation in the form of activity on a axis or object with the intention of feeling and then understanding the knowledge of a phenomenon based on previously known knowledge and ideas, as well as obtaining the information needed to continue a research. The data taken in this study is sourced from the official website of the Indonesia Stock Exchange, namely www.idx.co.id which has been published.

1. **RESULTS AND DISCUSSION**

   The financial report is a report that can explain how the condition or financial condition experienced by the company, whether it is increasing or decreasing. The objective of financial reports is to provide information about the financial position , financial performance and cash flows of an entity that is useful to a wide range of users of financial statements in making economic decisions. The financial statements

examined by the authors in assessing financial distress at PT. Tirta Mahakam Resources Tbk namely:

1. Statement of Financial Position
   Statement of financial position is a financial statement that reports the company's assets, liabilities, and equity at a certain time which can be used for various financial analysis .
2. Income statement
   The income statement is a type of financial statement that contains the income and expenses of a business that results in a loss or net profit.

The two financial statements can be used to assess the company 's financial distress . The **Altman Z-Score** model used in this study is the first **Altman Z-Score** model, where this model is used for public manufacturing companies. The financial data used by the author is the 2017-2020 period with the Z-Score formula, namely $Z = 1.2 X1 + 1.4 X2 + 3.3 X3 + 0.6 X4 + 0.999 X5$.

Table 3 . Calculation Results of the First Altman Z-Score Model

Year	1,2(X1)	1.4(X2)	3,3(X3)	0.6(X4)	0.999(X5)	Z-Scores	Company Category
2017	0.1056	-0,1624	0,0066	0,1032	0,924075	0,977075	Financial Distress
2018	0,0636	-0,2058	-0,1353	0,0906	1,127871	0,940971	Financial Distress
2019	0,0132	-0,294	-0,1914	0,0882	0,720279	0,336279	Financial Distress
2020	-0,8508	-2,1364	-3,3462	0,0966	0,426573	-5,810227	Financial Distress
2021	-0.6156	-3.6106	-1.4652	0.0948	0.054945	-5.541655	Financial Distress

Source: Processed Data

The results of the company's Z-Score value are declared financial distress caused by several factors, some of which are:

a. Decrease in Working Capital
   The acquisition of the value of current assets is smaller than the acquisition of the value of the company's current liabilities which has resulted in the company's working capital decreasing and even losing money in the last two years, namely in 2020-2021.
b. Decrease in Total Assets
   Acquisition of total asset value in 2019 to 2021 has decreased. The size of a company is expressed in total assets, if the total assets obtained decrease, the size of the company will also decrease
c. Sales Decline
   The decline in sales occurred in 2019-2021. This makes it difficult for the company to make a profit. Declining sales means that there is no growth in the company
d. Earnings of profits and profitability that are getting lower or losing money
   From the company's financial data, the profit generated by the company is losing money, both from retained earnings, EBIT and the company's net profit show negative numbers. This will have an impact on the continuity of the company's own performance and also the company will experience financial distress or bankruptcy.

CONCLUSION

PT. Tirta Mahakam Resources Tbk, which was listed on the IDX during the 2017-2021 period, experienced problems in its finances or commonly known as financial distress. By using the Altman Z-Score model to see the level of financial distress that the company at PT. Tirta Mahakam Resources Tbk proved bankrupt. Where the Z-Score value in 2017 was (0.977), and for 2018 it was (0.941), in 2019 the company's Z-Score value was (0.336), in 2020 the company's Z-Score value was (-5.810), and finally in in 2021 the company's Z-Score is (-5.541). If the results of these values are adjusted to the cut-off point value of the first Altman Z-Score model, the company will experience financial problems which will result in bankruptcy, because the results of the company's Z-Score value are far from 2.99.

This problem is supported by the factors that cause the company to experience financial distress , namely a decrease in working capital, a decrease in total company assets and a decrease in sales and company profits, both operating and net profits experience a negative number (loss).

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