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Analysis of Bankruptcy Prediction at PT. Indofarma Tbk uses the Altman Z-Score Method for the 2021-2023 Period

Moh. Rasyid ✉, Martha [2] Edi Yanto [3], Rendy Aziz Syahputra [4], Masri Arfandi [5]

[1,2,3] Management Studies Program, Mujahidin College of Economics
[4] Development Economics Studies Program, Mujahidin College of Economics

Abstract

This research aims to find out the potential for bankruptcy in PT. Indofarma Tbk uses the Altman Z-Score method for the 2021-2023 period. The type of research used is quantitative descriptive. The secondary data source is in the form of financial statements of PT. Indofarma Tbk for the 2021-2023 period accessed through the www.idx.co.id website The data analysis method used used was using the Modified Altman Z-Score method which used four variables, namely: Working capital/total assets (X1), retained earnings/total assets (X2), Earnings before interest and taxes/total assets (X3), net book equity/total book value (X4). Based on the results of the analysis and discussion, it was concluded that by using the Altman Z-Score method PT. Indofarma Tbk for the 2021-2023 period is classified as a company that is predicted to experience bankruptcy. This is characterized by a Z-Score result below 1.1, meaning a critical financial condition. The significant decline in various financial ratios, including liquidity and profitability, reflects the ever-increasing accumulation of losses and increasingly pronounced bankruptcy ratios.

Keywords: *Bankruptcy Prediction, Altman Z-Score.*

✉ Corresponding author :
Email Address : moh.rasyid@stiemujahidin.ac.id (Indonesia)

INTRODUCTION

A pharmaceutical company is a business entity that focuses on research, development, and distribution of medicines. They play an important role in public health by providing cures for various diseases. In this context, pharmaceutical companies such as PT. Indofarma Tbk faces major challenges, including dependence on imported raw materials and the need to continue to innovate to meet the growing market demand. PT. Indofarma Tbk (INAF), which was listed on the IDX in 1918, recently experienced serious financial problems due to alleged financial irregularities that caused state losses of Rp371 billion. The financial problems of PT. Indofarma Tbk is caused by a combination of external and internal formats. Externally, the formation of a pharmaceutical SOE holding forced a change in the focus of the medical device and herbal business without careful preparation, followed by market pressure due to the pandemic and weak supervision that made the fraund only revealed after the BPK audit. Internally, poor management can be seen in the manipulation of financial statements, procurement not as needed, and fictitious transactions, while corrupt practices exacerbate losses through the use of unauthorized funds, and financial problems such as delayed salaries and poor debt management also exacerbate the situation.

Between 2020 and 2023, a number of former company officials were named as suspects in alleged corruption in financial management by the Jakarta High Prosecutor's Office. Because Bayu was suspected of participating in illegal activities with the previous suspect, he was designated as a suspect. The suspects include CSY who serves as the Head of Finance of PT. Indofarma Global Medika from 2019 to 2021, GSR, who served as Director of PT. Indofarma Global Medika from 2020 to 2023, and AP who served as President Director of PT. Indofarma Tbk for the period 2019 to 2023. Syarief Sulaeman Nahdi, Special Criminal Assistant (Aspidsus) (21/9/2024).

Table 1 Data on Total Revenue and Net Profit of PT. Indofarma Tbk in 2021-2023

Account	2021	2022	2023
Revenue	Rp. 2.901.986.532.879	Rp. 980.370.552.490	Rp. 523.599.087.434
Profit (Loss)	Rp. (37.571.241.226)	Rp. (457.649.309.385)	Rp. (721.000.075.536)

Source : Data processed 2024

The data shows a continuous downward trend in the revenue and profitability of PT. Indofarma Tbk from year to year, with losses increasing significantly. If this trend continues, the company may face further financial difficulties, including the risk of bankruptcy, if there are no strategic steps to improve its financial condition. Based on the description above, the researcher is interested in conducting a research entitled "Analysis of Bankruptcy Prediction at PT. Indofarma Tbk uses the Altman Z-Scor method for the 2021-2023 period". For this reason, the formulation of the problem in this study is whether there is a potential for bankruptcy in PT. Indofarma Tbk uses the Altman Z-Score method for the 2021-2023 period?

METHODOLOGY

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This research uses a type of descriptive research with a quantitative approach, which involves the analysis of financial data which is then compiled in a table to assess the financial health of the company. This research aims to find out the potential for bankruptcy in PT. Indofarma Tbk uses the Altman Z-Score method for the 2021-2023 period. The secondary data source is in the form of financial statements of PT. Indofarma Tbk for the 2021-2023 period which is accessed through the www.idx.co.id website.

The data analysis method used was using the Modified Altman Z-Score method. This model can be used in all categories of companies, including manufacturing and non-manufacturing, private and public and companies that issue bonds in developing countries. The Altman Z-Score method calculates several financial variables to assess a company's financial health in the following ways:

$$Z = 6{,}56(X1)+3{,}26(X2)+6{,}72(X3)+ 1{,}05(X4)$$

Where:

X1 = Working Capital/Total Assets
X2 = Retained Profit/Total Assets
x3 = Profit before interest and taxes/total assets
X4 = Equity Book Value/Total Book Value of Debt

Table 2. Modification Altman *Z-Score* Model *Cut-off Point Criteria*

Criteria	Z Value
Not bankrupt if Z >	2,6
Areas prone to bankruptcy *(grey area)*	1,1-2,6
Bankruptcy if Z<	1,1

Source : Altman (1995)

RESULTS AND DISCUSSION

Working Capital To Total Asset

This ratio provides information about a company's ability to generate net working capital from its total assets.

Table 3. Working Capital Ratio of PT. Indofarma Tbk

Year	Current Assets	Current Liability	Working Capital
2021	Rp. 1.376.390.099.989	Rp. 1.073.700.277.723	Rp. 302.689.822.266
2022	Rp. 810.988.701.644	Rp. 1.025.331.067.523	Rp. (214.342.365.879)
2023	Rp. 198.991.900.314	Rp. 1.231.087.955.072	Rp. (1.032.096.054.758)

Source : Data processed 2024

The table shows a significant year-on-year decline. A ratio of 0.1531 indicates the company's ability to meet its short-term obligations. However, in 2022 the ratio decreased to (0.1447) and reached (1.3583) in 2023, indicating serious liquidity problems due to a decrease in working capital and exacerbated by indications of fraud and financial manipulation.

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Book *Value Of Equity To Total Book Value Of Debt*

This ratio provides information about a company's ability to meet its obligations using its equity relative to its total debt.

Table 4. The ratio of the book value of equity to the book value of the total debt of PT. Indofarma Tbk

Year	Equity Book Value	Book Value of Total Debt	Ratio values
2021	Rp. 444.798.070.138	Rp. 1.532.081.326.004	0,2903
2022	Rp. (6.324.965.445)	Rp. 1.487.737.061.285	(0,0043)
2023	Rp. (804.152.258.266)	Rp. 1.563.981.235.924	(0,5142)

Source : Data processed 2024

The table shows that the company's financial condition deteriorated drastically from 2021-2023. Originally stable, the company's equity was then unable to cover debt due to declining revenue, losses, high tax costs, alleged financial storage and PKPU resulting in critical solvency.

Altman *Z-Score Method Results*

Table 6. Altman Z-Score PT. Indofarma Tbk

Formula	**Tahun**		
	2021	**2022**	**2023**
Z-Score	0,9244	(5,0058)	(9,5855)
Indikasi	Bangkrut	Bangkrut	Bangkrut

Source : Data processed 2024

The results of the Altman *Z-Score* analysis show that the value has declined from 0.9244 in 2021 to (9.5855) in 2023, indicating the potential for bankruptcy due to decreased revenue, large losses, and corruption cases that force companies to apply for a postponement of debt payment obligations (PKPU).

CONCLUSION

Based on the results of research on bankruptcy prediction at PT. Indofarma Tbk using the Altman Z-Score method for the period 2021 to 2023 can be concluded that the company PT. Indofarma Tbk is predicted to go bankrupt. This is marked by the result of a consistent Z-Score value below the safe threshold (1.1) declining from 0.9244 in 2021 to (9.5855) in 2023. The significant decline in financial ratios including liquidity and profitability, reflects the ever-increasing accumulation of losses and an increasingly pronounced bankruptcy ratio. The X1 ratio indicates a serious liquidity problem, followed by the negative X2 ratio describing the accumulation of losses that far exceed the total assets. In addition, the decline in the X3 ratio signifies that the company is not only failing to generate profits but also incurring deepening losses that exacerbate operational problems. And the X4 shows an inability to meet its long-term obligations. This situation was exacerbated by alleged manipulation of financial statements and poor managerial practices, as well as a significant decline in revenue. As a result, the company faces great difficulties in paying debts and is even unable to pay employees' salaries, which ultimately prompts the company to file for the Deferred Debt Payment Obligation (PKPU) process.

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