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# FINANCIAL RATIO ANALYSIS OF PT X FOR THE 2020–2024 PERIOD USING THE ALTMAN Z-SCORE METHOD AND ACCOUNTS RECEIVABLE TURNOVER RATIO

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## Abstract

*This study aims to analyse the financial condition of PT X, an integrated construction-services company, for the 2020–2024 period using financial ratio analysis and the Altman Z-Score method. The study is motivated by the phenomenon of PT X recording consecutive net losses throughout the observation period despite a continuous increase in revenue, reaching approximately IDR3.2 trillion in 2024, which raises questions regarding the company's operational efficiency, receivables management, and capital structure. This research applies a descriptive method with a quantitative approach, based on secondary data in the form of the company's audited annual financial statements for 2020–2024, obtained through the official website of the Indonesia Stock Exchange and the company's official website, using a documentation technique. The analysis covers the liquidity, solvency, activity (including accounts receivable turnover), and profitability ratios, as well as the five variables of the Altman Z-Score (X1–X5). The results show that all liquidity ratios (Current Ratio, Quick Ratio, Cash Ratio) failed to reach the ideal industry standard throughout the observation period, the Debt to Asset Ratio reached 105% in 2024, and all three profitability ratios remained negative. The Accounts Receivable Turnover Ratio also did not reach the ideal standard but showed a consistent improving trend, from 2.33 times in 2020 to 10.34 times in 2024. The resulting Z-Score consistently fell within the distress zone ( $Z < 1.81$ ) throughout the entire observation period. These findings are expected to help the company's management and other stakeholders assess its financial condition and take appropriate corrective measures, particularly regarding operational cost efficiency and capital structure*

## Keywords

Accounts Receivable  
Turnover; Altman Z-Score;  
Construction Industry;  
Financial Ratio Analysis

## INTRODUCTION

The growth of economic activity in the current era of globalisation has driven increasing business activity across various industrial sectors, including the construction sector. This sector plays a strategic role in supporting national infrastructure development, yet it also carries a high level of risk because it is heavily influenced by economic conditions, government policy, and project-specific dynamics. Intensifying competition among construction companies requires each firm to maintain stable and sustainable operational and financial performance.

As the number of companies listed on the Indonesia Stock Exchange continues to grow, transparency and accountability in financial performance have become increasingly important. Investors and other stakeholders require accurate information about a company's condition as a basis for decision-making. Financial statement analysis is therefore an essential tool for assessing a company's financial health. Such analysis is commonly conducted through a range of financial ratios that reflect a company's liquidity, solvency, activity, and profitability (Fahmi, 2013). Liquidity ratios measure a company's ability to meet its short-term obligations, activity ratios reflect the effectiveness of asset management and operating activities, and solvency ratios measure the company's ability to meet its long-term obligations (Kasmir, 2017).

PT X is an integrated construction-services company whose operations span foundation, structural, and infrastructure work. As part of a larger business group, the company is, in principle, backed by strong capital support. In recent years, however, PT X has exhibited a phenomenon that warrants closer examination: consecutive net losses. According to the company's financial statements, PT X recorded net losses in every year of the 2020–2024 period, as summarized in Table 1.

**Table 1. Development of PT X's Net Profit (Loss), 2020–2024**

| Year | Net Profit (Loss) (IDR million) | Change  |
|------|---------------------------------|---------|
| 2020 | (1,323,209)                     | –       |
| 2021 | (693,366)                       | 47.6%   |
| 2022 | (451,613)                       | 34.9%   |
| 2023 | (276,638)                       | 38.7%   |
| 2024 | (542,065)                       | (95.9%) |

*Note. Figures in IDR million. Source: PT X's audited consolidated financial statements, 2020–2024.*

The change column in Table 1 shows the percentage increase or decrease in the amount of loss relative to the previous year, calculated by comparing the difference between the current year's loss and the prior year's loss; a positive value indicates a reduction in the amount of loss (an improvement in performance), while a negative value, shown in parentheses, indicates a larger loss than in the previous year. As the table shows, PT X recorded losses in every year of the 2020–2024 period. From 2021 to 2023,

the company's losses showed an improving trend; in 2024, however, the loss widened sharply again, by 95.9% relative to the previous year. This phenomenon of five consecutive years of losses is worth examining further, particularly given that the company remained operational and even recorded rising revenue throughout this period.

This phenomenon becomes even more notable when viewed from an operational perspective, as the company's revenue continued to rise throughout the observation period, reaching approximately IDR3.2 trillion in 2024. This condition suggests that the losses were not caused by a declining ability to generate revenue, but were more likely related to other aspects, such as cost efficiency, trade-receivables management, or the company's capital structure. As an initial indication, the company's Debt to Asset Ratio reached 105% in 2024, while its liquidity ratios failed to meet the ideal standard throughout the observation period — supporting indicators of the need for a more comprehensive examination of the company's financial condition, including from the standpoint of receivables management.

In addition, from a financial-structure perspective, the company also retains a fairly substantial base of total assets. This indicates that, despite the consecutive losses, PT X still holds sufficient resources to sustain its operations, making this phenomenon worth analysing more comprehensively rather than from the standpoint of profit and loss alone.

Developments in 2025 show that PT X continued to record an interim loss of IDR687.18 billion. This indicates that the phenomenon of consecutive losses is ongoing, reinforcing the need for further analysis of the company's financial condition using financial ratios, the Altman Z-Score method, and the accounts receivable turnover ratio.

The selection of PT X as the object of this research is based on several considerations: the company recorded consecutive net losses over the past five years (2020–2024); a significant increase in losses occurred in 2024 after an improving trend in preceding years; the company continued to increase its revenue despite recording losses, making it worthwhile to examine the underlying causes, including from the standpoint of receivables management through the accounts receivable turnover ratio; and the company still retains a substantial asset base that allows it to sustain business continuity.

Research on financial ratio analysis and the Altman Z-Score method has been conducted extensively, including a study by Kinanti et al. (2023), who analysed the financial condition of a comparable company using the Altman Z-Score method for the year 2021 and found that the company was in a less favourable financial condition. However, research combining financial ratio analysis with the Altman Z-Score method specifically on the object examined in this study remains limited. This research therefore seeks to provide a more comprehensive picture of the company's financial health over the 2020–2024 period.

Given the phenomenon of consecutive losses described above, a comprehensive analysis is required to assess the company's financial condition, not only from the standpoint of profit and loss but also based

on other financial indicators. This research therefore applies financial ratio analysis — covering liquidity, solvency, activity (including accounts receivable turnover), and profitability ratios — together with the Altman Z-Score method as an analytical tool.

Based on the discussion above, this research seeks to answer three research questions: how did PT X's financial ratios — covering liquidity, solvency, activity (including accounts receivable turnover), and profitability — develop over the 2020–2024 period; how did PT X's financial condition, as assessed using the Altman Z-Score method, develop over the 2020–2024 period; and how did PT X's accounts receivable turnover ratio develop over the 2020–2024 period, and how does it relate to the company's liquidity condition. Accordingly, this research aims to analyse PT X's financial ratios over the 2020–2024 period, to analyse PT X's financial condition based on the Altman Z-Score method over the same period, and to analyse PT X's accounts receivable turnover ratio and its relationship to the company's liquidity condition.

## **LITERATURE REVIEW**

Financial statement analysis is the process of examining the relationships among the various components of a company's financial statements in order to understand its financial position and performance (Fahmi, 2013). Common analytical techniques include ratio analysis, comparative analysis, trend analysis, and common-size analysis, among others (Munawir, 2014; Harahap, 2018). Financial ratio analysis, in particular, is widely used because it allows relatively rapid, standardised assessment of a company's condition across several dimensions, commonly grouped into liquidity, solvency, activity, and profitability ratios (Kasmir, 2017).

Liquidity ratios measure a company's ability to meet its short-term obligations using its current assets, and typically include the Current Ratio, Quick Ratio, and Cash Ratio. Solvency ratios, comprising the Debt to Asset Ratio and Debt to Equity Ratio, measure the extent to which a company's assets and equity are financed by debt, and thus its ability to meet its long-term obligations. Activity ratios, including Total Assets Turnover, Fixed Assets Turnover, and Accounts Receivable Turnover, measure the effectiveness with which a company manages its assets to generate sales and convert receivables into cash. Profitability ratios — Net Profit Margin, Return on Assets, and Return on Equity — measure a company's ability to generate profit relative to its sales, assets, and equity (Kasmir, 2017). For the purposes of this research, each ratio is compared against commonly used industry-average standards: a Current Ratio of at least 2 times, a Quick Ratio of at least 1.5 times, and a Cash Ratio of at least 50% for liquidity; a Debt to Asset Ratio of no more than 35% and a Debt to Equity Ratio of no more than 90% for solvency; an Accounts Receivable Turnover of at least 15 times, a Total Assets Turnover of at least 2 times, and a Fixed Assets Turnover of at least 5 times for activity; and a Net Profit Margin of at least 20%, a Return on Assets of at least 30%, and a Return on Equity of at least 40% for profitability (Kasmir, 2017).

Beyond individual ratios, a company's overall financial health also relates to the broader concepts of financial distress and bankruptcy. Financial distress refers to a stage of financial difficulty that precedes bankruptcy, typically marked by an inability to meet obligations as they fall due, declining profitability, and a deteriorating capital structure (Brigham & Gapenski, 1997; Fahmi, 2013). Both internal factors — such as inefficient operating-cost management and an imbalanced funding structure — and external factors — such as macroeconomic conditions and industry dynamics — can contribute to a company's financial distress (Kasmir, 2017).

One widely used method for assessing bankruptcy risk is the Altman Z-Score, a multiple discriminant-analysis model developed by Altman (1968) that combines five financial ratios into a single composite score: X1 (working capital to total assets), X2 (retained earnings to total assets), X3 (earnings before interest and tax to total assets), X4 (market value of equity to book value of total liabilities), and X5 (sales to total assets). The Z-Score is calculated using the formula  $Z = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.0X5$ , and the resulting value is classified into one of three zones: a safe zone ( $Z > 2.99$ ), a grey zone ( $1.81 < Z \leq 2.99$ ), and a distress zone ( $Z \leq 1.81$ ), the last of which indicates a high probability of bankruptcy within the near future (Altman, 1968).

Prior studies on financial ratio analysis and the Altman Z-Score method, particularly within the construction sector, provide useful context for this research and help to establish its contribution. Atul et al. (2022) applied all four categories of financial ratios to a single manufacturing company over 2018–2020 but did not incorporate a bankruptcy-prediction method. Putri and Maulana (2023) applied the Altman Z-Score across sixteen food-and-beverage manufacturing companies for 2019–2021, a multi-firm design that did not combine the method with financial ratio analysis. Kinanti et al. (2023) applied the Altman Z-Score to the same company examined in this study, alongside one other construction firm, but used only a single year of data (2021) without combining it with ratio analysis; both firms were found to fall within the distress zone. Adwiwanzah and Albeta (2025) applied the Altman Z-Score across ten construction-material manufacturing companies for 2021–2023, again as a multi-firm study without an accompanying ratio analysis. Resfitasari et al. (2021) examined a single state-owned construction company using the Altman Z-Score over a two-year period (2019–2020), while Sihaloho et al. (2021) examined the relationship between liquidity, solvency, and profitability across construction-sector companies using a regression approach rather than a descriptive single-firm design.

Taken together, these studies show that research combining financial ratio analysis with the Altman Z-Score method on a single construction company observed over an extended period remains limited; most prior studies apply either method separately, or apply the Altman Z-Score across multiple firms within a short observation window. This research seeks to address that gap by combining financial ratio analysis,

the Altman Z-Score method, and the accounts receivable turnover ratio for PT X across the full 2020–2024 period.

## METHODS

This research applies a descriptive method with a quantitative approach. A descriptive method is one that seeks to determine the value of one or more independent variables without making comparisons to, or establishing relationships with, other variables (Sugiyono, 2019); in this research, the descriptive approach is used to describe PT X's financial health based on the results of financial ratio and Altman Z-Score calculations over the 2020–2024 period. A quantitative approach, meanwhile, is one grounded in numerical data analysed through defined calculation procedures to describe or test a particular condition (Sugiyono, 2019); this approach is applied because the data processed in this research consist of the figures contained in the company's financial statements, which are subsequently analysed using financial ratios and the Altman Z-Score formula. The two approaches are applied jointly: financial-statement data are collected and processed quantitatively through ratio and Altman Z-Score calculations, after which the results are interpreted descriptively to characterise the company's level of financial health

The data used in this research are quantitative in nature (Sugiyono, 2019), comprising PT X's statements of financial position and consolidated income statements for the 2020–2024 period. These data are secondary, obtained not directly by the researchers but through documents already made available by other parties (Sugiyono, 2019) — specifically, PT X's audited annual financial statements for 2020–2024, published on the official website of the Indonesia Stock Exchange and the company's official website. The research is further supported by relevant literature, including books, journal articles, and prior studies related to financial ratio analysis and the Altman Z-Score method. This use of secondary, published financial-statement data, combined with a descriptive quantitative approach, is consistent with the approach adopted in several prior studies discussed above, including Kinanti et al. (2023), Resfitasari et al. (2021), and Adwiwanzah and Albeta (2025), each of which applied the Altman Z-Score method to data published through the Indonesia Stock Exchange.

Data were collected using a documentation technique, involving the collection, recording, and review of documents relevant to the object of research, in both written and electronic form (Sugiyono, 2019). In this research, the documentation technique was carried out by downloading PT X's annual financial statements for 2020–2024 from the official website of the Indonesia Stock Exchange ([www.idx.co.id](http://www.idx.co.id)) and the company's official website; the data obtained were then reviewed, recorded, and reorganised as needed for analysis, with particular attention to the statement-of-financial-position and income-statement items relevant to the calculation of financial ratios and the Altman Z-Score. Supporting data — journal articles, books, and other relevant literature — were also collected through a literature study

to strengthen the theoretical foundation and to aid in the interpretation of the financial-ratio and Altman Z-Score results.

Data analysis proceeded through six stages. The first stage involved calculating PT X's financial ratios based on data drawn from the statement of financial position and income statement for 2020–2024, covering liquidity ratios (Current Ratio, Quick Ratio, Cash Ratio), solvency ratios (Debt to Asset Ratio and Debt to Equity Ratio), activity ratios (Accounts Receivable Turnover, Total Assets Turnover, and Fixed Assets Turnover), and profitability ratios (Net Profit Margin, Return on Assets, and Return on Equity).

The second stage involved interpreting the year-on-year development of these ratios and comparing the results against industry-average standards to assess whether the company's performance fell within a favorable or unfavorable category.

The third stage involved calculating the five underlying Altman Z-Score variables — X1 (working capital to total assets), X2 (retained earnings to total assets), X3 (EBIT to total assets), X4 (market value of equity to book value of total liabilities), and X5 (sales to total assets) — for each year of the observation period. For X4, the market value of equity was obtained by multiplying the number of shares outstanding by the company's closing share price at the end of each reporting period, as published through the Indonesia Stock Exchange (Investing.com, 2025).

The fourth stage involved calculating the Z-Score itself using Altman's (1968) formula,  $Z = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.0X5$ . The fifth stage involved interpreting the resulting Z-Score against Altman's classification criteria — a safe zone ( $Z > 2.99$ ), a grey zone ( $1.81 < Z \leq 2.99$ ), and a distress zone ( $Z \leq 1.81$ ) — for each year of the observation period. The sixth and final stage involved integrating the results of the financial ratio analysis and the Altman Z-Score interpretation to form a comprehensive picture of PT X's financial health over 2020–2024, presented in tables and charts to support the conclusions and recommendations set out in the final section of this article.

## RESULTS AND DISCUSSION

The data used in this research consist of PT X's audited consolidated annual financial statements for the 2020–2024 period, comprising the statement of financial position and the income statement, published through the official website of the Indonesia Stock Exchange ([www.idx.co.id](http://www.idx.co.id)) and the company's official website (PT X, 2021–2025). The statement-of-financial-position items used include current assets, total assets, current liabilities, total liabilities, net working capital, retained earnings, and total equity; the income-statement items used include revenue, cost of goods sold, gross profit, earnings before interest and tax (EBIT), and net income after tax. These items form the basis for the liquidity, solvency, activity, and profitability ratio calculations, as well as the X1 through X5 variables of the Altman Z-Score model. For the X4 variable specifically (market value of equity to book value of total liabilities), the market value of

equity was obtained by multiplying the number of shares outstanding by the company's closing share price at the end of each reporting period, as published through the Indonesia Stock Exchange. The 2020–2024 period was selected because PT X recorded consecutive net losses throughout these years, making it a relevant window for a deeper assessment of the company's financial health, as discussed in the Introduction.

### Liquidity Ratio Analysis

**Table 2. Liquidity Ratio Analysis Results, 2020–2024**

| <b>Liquidity Ratio</b> | <b>2020</b> | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> | <b>Ideal Standard</b> |
|------------------------|-------------|-------------|-------------|-------------|-------------|-----------------------|
| Current Ratio (x)      | 0.84        | 1.40        | 1.15        | 1.00        | 0.86        | $\geq 2.00$           |
| Quick Ratio (x)        | 0.83        | 1.38        | 1.13        | 0.99        | 0.85        | $\geq 1.50$           |
| Cash Ratio (%)         | 3           | 37          | 15          | 14          | 15          | $\geq 50$             |

The Current Ratio of PT X stood at only 0.84 times in 2020, derived from current assets of IDR2,210,364 million divided by current liabilities of IDR2,620,265 million. A ratio below 1.00 times indicates that current assets were insufficient to cover short-term liabilities in full; this condition coincided with a net loss of IDR1,323,209 million recorded in the same year, which further eroded the company's equity. The ratio improved to 1.40 times in 2021, driven by a sharp decline in current liabilities, from IDR2,620,265 million to IDR1,288,711 million, partly attributable to the full repayment of a shareholder loan of IDR727,758 million. Although this represented an improvement, the figure remained well below the 2.00-times industry standard. This improvement proved short-lived: the ratio declined again, to 1.15 times in 2022 and further to 1.00 times in 2023 — a level at which current assets merely matched current liabilities with no margin of safety — as current liabilities rose from IDR1,397,747 million to IDR2,170,056 million. In 2024, the ratio fell further, to 0.86 times, a level comparable to 2020; unlike 2020, however, PT X's equity had by this point turned negative (an equity deficiency of IDR140,993 million), making the 2024 position more precarious than it had been five years earlier. Throughout 2020–2024, the Current Ratio never reached the 2.00-times standard, and in three of the five years it remained below 1.00 times.

The Quick Ratio followed a similar pattern, recorded at 0.83 times in 2020 (current assets of IDR2,210,364 million less inventory of IDR44,983 million, divided by current liabilities of IDR2,620,265 million). The narrow gap between the Quick Ratio and the Current Ratio indicates that inventory represents only a small component of PT X's current assets, which is typical of a construction company whose current assets are dominated by trade receivables and project billings rather than physical stock. The ratio rose to 1.38 times in 2021, the highest level recorded during the observation period, as current liabilities declined and inventory contracted, from IDR44,983 million to IDR36,129 million; even so, this peak remained below the 1.5-times standard. The ratio then fell to 1.13 times in 2022 and to 0.99 times in 2023 — below 1.00 times, meaning that liquid assets excluding inventory alone were no longer sufficient to cover short-

term obligations — before declining further, to 0.85 times, in 2024. Because the Quick Ratio and Current Ratio moved in tandem throughout the five years, the liquidity pressure faced by PT X did not originate from an accumulation of inventory, but from a broader imbalance between current assets and current liabilities. The Quick Ratio never reached the 1.5-times standard at any point during 2020–2024, despite the temporary improvement recorded in 2021.

The Cash Ratio reached its most precarious point in 2020, at only 3%, meaning that the cash held by the company could cover merely 3% of its short-term obligations, indicating heavy reliance on external financing to sustain day-to-day operations. The ratio surged to 37% in 2021 — the highest level recorded during the period — as cash and cash equivalents rose from IDR73,400 million to IDR471,657 million, driven by two corporate actions: a limited public offering (rights issue) and a capital injection without pre-emptive rights. Even so, this figure remained below the 50% standard. The improvement was not sustained: the Cash Ratio dropped sharply, to 15%, in 2022 and remained largely stagnant, at 14–15%, through 2023 and 2024, as a substantial portion of the company's cash continued to be absorbed by ongoing construction projects, preventing any meaningful rebuilding of cash reserves.

Taken together, the three liquidity ratios show that PT X was never able to consistently meet the respective industry standards of 2.00 times, 1.5 times, and 50% throughout 2020–2024; all three ratios improved temporarily in 2021 as a result of the capital-raising corporate actions described above, but this improvement was not sustained, and the ratios weakened again to reach their lowest points in 2024, coinciding with the onset of negative equity. This pattern points to persistent liquidity pressure, a conclusion that is further corroborated by the Altman Z-Score results discussed later in this section.

## Solvency Ratio Analysis

**Table 3. Solvency Ratio Analysis Results, 2020–2024**

| <b>Solvency Ratio</b>    | <b>2020</b> | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> | <b>Ideal Standard</b> |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-----------------------|
| Debt to Asset Ratio (%)  | 89          | 55          | 68          | 85          | 105         | ≤ 35                  |
| Debt to Equity Ratio (%) | 843         | 122         | 215         | 559         | (2,094.95)  | ≤ 90                  |

The Debt to Asset Ratio (DAR) stood at 89% in 2020, derived from total liabilities of IDR2,731,074 million divided by total assets of IDR3,055,106 million, indicating that almost the entirety of the company's assets was financed by debt — far above the 35% industry standard. The ratio fell to 55% in 2021, consistent with the liquidity findings above: a substantial portion of the company's liabilities, including the shareholder loan, was repaid, accompanied by additional paid-in capital; despite this significant decline, the figure

remained well above the standard. The ratio rose again, to 68%, in 2022 — an increase driven not by a significant addition of new debt but by the erosion of equity from continuing losses, which enlarged the proportion of debt relative to assets — and further, to 85%, in 2023, nearly returning to its 2020 level. At its peak in 2024, DAR reached 105%, a figure above 100% indicating that total liabilities had exceeded total assets, such that even a complete liquidation of assets would be insufficient to settle the company's debts; this condition coincided with the equity deficiency recorded in the same year.

The Debt-to-Equity Ratio (DER) was recorded at 843% in 2020, meaning that liabilities exceeded equity by more than eightfold; this exceptionally high figure was not driven by the size of the debt itself but by equity that had already been substantially eroded by successive losses. The year 2021 marked the best point of improvement, with DER falling sharply to 122% as a result of the combination of debt repayment and capital injection described above, though this remained above the 90% standard. This improvement was not sustained: the ratio rose to 215% in 2022 and further to 559% in 2023, as equity continued to be eroded by losses while current liabilities also increased. In 2024, DER turned negative, at -2,094.95%, the result of total liabilities of IDR2,953,727 million divided by an equity position that had itself turned negative — an equity deficiency of IDR140,993 million. This negative figure does not indicate that the company's debt burden was smaller than its equity; rather, it signals a more serious condition in which equity has been entirely eroded by accumulated losses and can no longer serve as a buffer against the company's liabilities. In other words, the negative DER recorded in 2024 constitutes a more severe warning signal than the already-elevated debt-to-equity ratios of the preceding years.

Overall, both DAR and DER followed the same pattern observed in the liquidity ratios: a temporary improvement in 2021, attributable to corporate capital-raising actions, followed by sustained deterioration through 2024. DAR, having reached its lowest point of 55% in 2021, rose consistently thereafter to 105% in 2024, meaning that the company's liabilities had come to exceed its assets; DER moved from its best level of 122% in 2021 to -2,094.95% in 2024 as equity turned negative. PT X's capital structure grew increasingly fragile as its dependence on debt continued to expand while the equity that should have served as a risk buffer was progressively depleted, indicating serious financial pressure building toward the end of the observation period.

## Activity Ratio Analysis

**Table 4. Activity Ratio Analysis Results, 2020–2024**

| <b>Activity Ratio</b>     | <b>2020</b> | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> | <b>Ideal Standard</b> |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-----------------------|
| Receivable Turnover (x)   | 2.33        | 3.20        | 3.02        | 5.66        | 10.34       | ≥ 15.00               |
| Total Assets Turnover (x) | 0.39        | 0.60        | 0.49        | 0.90        | 1.13        | ≥ 2.00                |
| Fixed Assets Turnover (x) | 1.83        | 2.75        | 2.41        | 6.97        | 12.03       | ≥ 5.00                |

Accounts Receivable Turnover stood at 2.33 times in 2020, derived from revenue of IDR1,204,429 million divided by trade receivables of IDR515,923 million. This figure was far below the 15-times standard, indicating that the company required a relatively long period to convert its receivables into cash — a condition also influenced by the COVID-19 pandemic, which weighed on the cash flow of many construction companies during this period. The ratio rose to 3.20 times in 2021, driven by the combination of revenue increasing to IDR1,494,671 million and trade receivables contracting to IDR467,708 million. In 2022, the ratio eased slightly, to 3.02 times, in line with the decline in revenue recorded that year, although trade receivables also contracted, to IDR342,807 million, limiting the extent of the decrease. The most significant improvements occurred in the final two years: the ratio jumped to 5.66 times in 2023 as revenue surged to IDR2,349,638 million while trade receivables remained relatively stable, at IDR415,257 million, and reached its highest point of the observation period, 10.34 times, in 2024, driven by revenue rising further, to IDR3,172,312 million, alongside trade receivables that contracted to IDR306,801 million, the lowest level recorded over the five years. Although this ratio never reached the 15-times standard throughout 2020–2024, its consistent upward trend indicates that PT X became progressively more effective at collecting its trade receivables.

Total Assets Turnover (TATO) stood at only 0.39 times in 2020, derived from revenue of IDR1,204,429 million divided by total assets of IDR3,055,106 million, indicating that every IDR1 of assets generated only about IDR0.39 of revenue — far below the 2-times standard, a condition influenced by the COVID-19 pandemic that year. The ratio edged up to 0.60 times in 2021; although revenue rose, from IDR1,204,429 million to IDR1,494,671 million, the increase was insufficient to lift the ratio significantly. In 2022, the ratio fell back to 0.49 times as revenue declined sharply, to IDR1,036,870 million — down nearly 31% from the previous year — while assets did not contract at a comparable pace. The ratio began to recover in 2023, reaching 0.90 times as revenue surged to IDR2,349,638 million, nearly double the prior year, and rose further, to 1.13 times, in 2024, on revenue of IDR3,172,312 million. Although this represents

the highest level recorded during the observation period, it remained well short of the 2-times standard; TATO therefore never reached the ideal level at any point during 2020–2024.

Fixed Assets Turnover (FATO) stood at 1.83 times in 2020, derived from revenue of IDR1,204,429 million divided by net fixed assets of IDR657,998 million, well below the 5-times standard. The ratio rose to 2.75 times in 2021 as revenue increased while fixed assets contracted, from IDR657,998 million to IDR543,775 million. It eased slightly, to 2.41 times, in 2022, in line with the revenue decline discussed above, though fixed assets also contracted, to IDR429,592 million, limiting the decrease. In 2023, the ratio jumped sharply, to 6.97 times, finally surpassing the 5-times standard; this increase was driven not only by rising revenue but also by fixed assets that continued to shrink, from IDR429,592 million to IDR336,870 million. The ratio rose further, to 12.03 times, in 2024, as fixed assets contracted again, to IDR263,754 million. This elevated FATO figure warrants cautious interpretation: the increase likely does not reflect genuine efficiency gains in asset utilisation, but rather the fact that the company had not made fixed-asset investments for an extended period, causing its remaining fixed assets to age and decline in value, which mechanically inflates the ratio.

In summary, Receivable Turnover never reached the 15-times standard throughout 2020–2024 but showed a consistent upward trend, from 2.33 times to 10.34 times, indicating steadily improving receivables management at PT X; TATO likewise never reached the 2-times standard across the five years, reflecting a persistent inefficiency in the overall use of total assets from the beginning to the end of the period; and FATO only reached the 5-times standard in the final two years (2023 and 2024), although this improvement was driven more by the continued shrinkage of fixed assets in the absence of reinvestment than by a genuine gain in operating performance. Unlike TATO and FATO, whose movements were more strongly influenced by changes in the asset base, the improvement in Receivable Turnover purely reflects a genuine gain in collection effectiveness, making it one of the few encouraging signals amid the pressure evident in the other ratios.

## Profitability Ratio Analysis

**Table 5. Profitability Ratio Analysis Results, 2020–2024**

| <b>Profitability Ratio</b> | <b>2020</b> | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> | <b>Ideal Standard</b> |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-----------------------|
| Net Profit Margin (%)      | (109.86)    | (46.39)     | (43.55)     | (11.77)     | (17.09)     | ≥ 20                  |
| Return on Assets (%)       | (43.32)     | (27.97)     | (21.39)     | (10.60)     | (19.27)     | ≥ 30                  |
| Return on Equity (%)       | (408.36)    | (62.15)     | (67.30)     | (69.85)     | 384.47      | ≥ 40                  |

Net Profit Margin (NPM) was recorded at  $-109.86\%$  in 2020, meaning that every IDR1 of revenue did not generate a profit but instead produced a loss exceeding the value of the revenue itself — a figure far removed from the 20% standard, a result consistent with the pandemic period, during which operating costs were disproportionate to the revenue earned. The ratio improved to  $-46.39\%$  in 2021 and further to  $-43.55\%$  in 2022; losses persisted but were less severe than in 2020. The year 2023 marked the best point in the observation period, with NPM rising to  $-11.77\%$ , the closest the company came to break-even, although the figure remained negative. In 2024, however, NPM declined again, to  $-17.09\%$ , even though revenue that year reached its highest level (IDR3,172,312 million); this indicates that the costs borne by the company grew faster than its revenue, such that despite a large turnover, the profit margin remained negative.

Return on Assets (ROA) stood at  $-43.32\%$  in 2020, far below the 30% standard, meaning that every IDR1 of assets employed by the company generated a loss rather than a profit. Its pattern of improvement mirrored that of NPM:  $-27.97\%$  in 2021,  $-21.39\%$  in 2022, and its best point of  $-10.60\%$  in 2023. In 2024, however, the ratio deteriorated again, to  $-19.27\%$ . This indicates that the company's assets had not yet been managed to generate profit consistently, despite the improving trend evident in the middle years of the observation period.

Return on Equity (ROE) was recorded at  $-408.36\%$  in 2020, the most extreme figure among the three profitability ratios, a result of the company's already-thin equity at the time — itself a consequence of successive losses — such that the same loss amount, divided by a thin equity base, produced a disproportionately large negative ratio. The ratio improved significantly, to  $-62.15\%$ , in 2021, but deteriorated again, to  $-67.30\%$ , in 2022 and further, to  $-69.85\%$ , in 2023 — a direction of movement that diverged from NPM and ROA, both of which improved in that year; this occurred because equity continued to shrink faster than the improvement in losses, such that even as losses narrowed, the ratio relative to equity appeared to worsen. In 2024, ROE was mathematically recorded at  $+384.47\%$ , derived from a net loss of IDR542,065 million divided by equity that had itself turned negative — an equity deficiency of IDR140,993 million. This positive figure is illusory and potentially misleading, as it appears to indicate an exceptionally high return on capital when, in fact, the company remained in a loss position with a deficit in equity. This differs from the case of DER, whose value remained logically consistent even when negative; the  $+384.47\%$  figure for ROE in 2024 should therefore not be interpreted as an indication of improving performance, but rather as an additional warning signal of financial distress, and must be read together with the underlying negative-equity condition rather than in isolation as a measure of profitability.

Overall, none of the three profitability ratios reflected healthy performance at any point during 2020–2024, let alone reached their respective standards of 20%, 30%, and 40%. NPM and ROA remained consistently negative throughout the observation period, following a similar pattern of gradual improvement

through 2023 before deteriorating again in 2024; ROE was likewise negative throughout 2020–2023, improving in 2021 before weakening again through 2023, and in 2024 turned into an illusory positive figure of +384.47% that resulted from a net loss being divided by an equally negative equity base rather than any genuine improvement in performance. The core problem facing PT X is therefore not merely the absence of profit, but an equity position that has been progressively eroded to the point of turning negative — a condition consistent with the findings from the liquidity, solvency, and activity ratios discussed above.

### Altman Z-Score Analysis

Beyond the ratio-by-ratio analysis above, this research further assesses PT X's financial condition using the Altman Z-Score method, which combines five financial variables — X1 through X5 — into a single composite indicator of bankruptcy risk.

**Table 6. Working Capital to Total Assets (X1), 2020–2024**

| Year | Current Assets | Current Liabilities | Working Capital | Total Assets | X1     |
|------|----------------|---------------------|-----------------|--------------|--------|
| 2020 | 2,210,364      | 2,620,265           | (409,901)       | 3,055,106    | (0.13) |
| 2021 | 1,808,369      | 1,288,711           | 519,658         | 2,478,713    | 0.21   |
| 2022 | 1,606,973      | 1,397,747           | 209,226         | 2,111,024    | 0.10   |
| 2023 | 2,166,914      | 2,170,056           | (3,142)         | 2,608,782    | 0.00   |
| 2024 | 2,491,320      | 2,911,454           | (420,134)       | 2,812,734    | (0.15) |

*Note. Figures in IDR million, except X1.*

The first Altman variable, Working Capital to Total Assets (X1), was recorded at  $-0.13$  in 2020, derived from negative net working capital of IDR409,901 million (current assets of IDR2,210,364 million less current liabilities of IDR2,620,265 million) divided by total assets of IDR3,055,106 million. This negative value is consistent with the Current Ratio, which was likewise below 1.00 times in the same year, confirming that current assets were insufficient to cover current liabilities in full. In 2021, X1 turned positive, at 0.21, as net working capital shifted to IDR519,658 million following the sharp decline in current liabilities, from IDR2,620,265 million to IDR1,288,711 million; this marked the highest point for X1 during the observation period, in line with the capital-raising corporate action discussed under the liquidity ratios. Working capital remained positive but narrower in 2022 (X1 of 0.10, on net working capital of IDR209,226 million) and essentially broke even in 2023 (X1 of 0.00, on a net working capital deficit of only IDR3,142 million). Pressure returned in 2024, when X1 turned negative again, at  $-0.15$ , as net working capital fell into a deficit of IDR420,134 million — the second-lowest value after 2020, signalling renewed short-term liquidity pressure toward the end of the observation period. Overall, X1 fluctuated from negative to positive and back to negative across 2020–2024 without ever achieving a strong, stable working-capital position, a pattern consistent with the Current Ratio and Quick Ratio results discussed earlier.

**Table 7. Retained Earnings to Total Assets (X2), 2020–2024**

| Year | Retained Earnings | Total Assets | X2     |
|------|-------------------|--------------|--------|
| 2020 | (2,096,193)       | 3,055,106    | (0.69) |
| 2021 | (2,786,845)       | 2,478,713    | (1.12) |
| 2022 | (3,228,872)       | 2,111,024    | (1.53) |
| 2023 | (3,497,283)       | 2,608,782    | (1.34) |
| 2024 | (4,039,583)       | 2,812,734    | (1.44) |

*Note. Figures in IDR million, except X2.*

The second variable, Retained Earnings to Total Assets (X2), stood at  $-0.69$  in 2020, derived from an accumulated retained-earnings deficit of IDR2,096,193 million divided by total assets of IDR3,055,106 million. This already-substantial negative value reflects an accumulation of losses extending beyond the 2020 loss alone. In 2021, X2 deteriorated further, to  $-1.12$ , as the retained-earnings deficit continued to grow, to IDR2,786,845 million, following that year's net loss of IDR693,366 million; notably, although the liquidity ratios and X1 improved significantly in 2021 owing to the capital-raising action described above, X2 continued to worsen, because the new capital raised did not restore the retained-earnings balance but instead added to other equity components such as paid-in capital. This deteriorating trend continued into 2022, with X2 falling further, to  $-1.53$ , as the deficit widened to IDR3,228,872 million. In 2023, despite the company recording a substantially smaller net loss (IDR276,638 million, the lowest of the observation period), X2 improved slightly, to  $-1.34$ , as total assets also increased that year, reducing the deficit's proportion relative to assets. In 2024, X2 deteriorated again, to  $-1.44$ , as the retained-earnings deficit surged to IDR4,039,583 million following the sharp rise in net loss to IDR542,065 million that year. Overall, X2 never turned positive throughout 2020–2024, and in fact worsened, from  $-0.69$  to  $-1.44$  — a structural signal indicating that PT X's accumulated losses far exceed its total assets, reflecting financial pressure that has persisted over several years and has never been offset by profit.

**Table 8. EBIT to Total Assets (X3), 2020–2024**

| Year | EBIT        | Total Assets | X3     |
|------|-------------|--------------|--------|
| 2020 | (1,110,006) | 3,055,106    | (0.36) |
| 2021 | (698,341)   | 2,478,713    | (0.28) |
| 2022 | (473,121)   | 2,111,024    | (0.22) |
| 2023 | (261,970)   | 2,608,782    | (0.10) |
| 2024 | (468,505)   | 2,812,734    | (0.17) |

*Note. Figures in IDR million, except X3.*

The third variable, EBIT to Total Assets (X3), remained in negative territory throughout 2020–2024. In 2020, the ratio stood at its lowest point,  $-0.36$ , the result of an operating loss of IDR1,110,006 million divided by total assets of IDR3,055,106 million — a figure consistent with the pandemic conditions that

paralysed many construction projects at the time. The operating loss narrowed in the following year, to IDR698,341 million, lifting X3 to  $-0.28$ ; the improvement continued in 2022 ( $-0.22$ ) and became more pronounced in 2023, when X3 reached its best point over the five years,  $-0.10$ , as the operating loss fell to just IDR261,970 million. This three-year trend (2021–2023) mirrors the direction seen earlier in NPM and ROA. Unfortunately, the improvement was not sustained: in 2024 the operating loss widened again, to IDR468,505 million — nearly double the previous year — pulling X3 back down to  $-0.17$ . This occurred even as revenue, as discussed under TATO, reached its highest level that year, meaning operating expenses grew faster than revenue itself.

**Table 9. Market Value of Equity to Book Value of Total Debt (X4), 2020–2024**

| Year | Share Price<br>(IDR) | Shares<br>Outstanding | Market Value<br>of Equity | Total<br>Liabilities | X4   |
|------|----------------------|-----------------------|---------------------------|----------------------|------|
| 2020 | 440                  | 6,425,160,000         | 2,827,070                 | 2,731,074            | 1.04 |
| 2021 | 210                  | 12,675,160,000        | 2,661,784                 | 1,362,982            | 1.95 |
| 2022 | 157                  | 12,675,160,000        | 1,990,000                 | 1,440,027            | 1.38 |
| 2023 | 136                  | 12,675,160,000        | 1,723,822                 | 2,212,725            | 0.78 |
| 2024 | 91                   | 12,675,160,000        | 1,153,440                 | 2,953,727            | 0.39 |

*Note. Market value of equity and total liabilities in IDR million, except X4.*

Unlike the first three variables, which are derived purely from the financial statements, the fourth variable, Market Value of Equity to Book Value of Total Debt (X4), is influenced by market perception through the company's share price (Investing.com, 2025). It should be noted that PT X's status as a publicly listed company does not cease merely because it records losses; its shares continued to be traded on the exchange, so market transactions and the resulting market value of equity persisted even though the company was, in accounting terms, operating at a loss. The market value of equity reflects investors' expectations regarding the company's future prospects, which do not necessarily align with its financial condition in any given period, and can therefore differ from its book value of equity — a distinction that is the primary reason the Altman Z-Score incorporates the market value of equity rather than relying solely on book value. In 2020, X4 stood at 1.04, based on a market value of equity of IDR2,827,070 million (a share price of IDR440 multiplied by 6,425,160,000 shares outstanding), slightly exceeding total liabilities of IDR2,731,074 million; from the market's perspective, PT X was still considered to hold sufficient value to cover its debt, even though its accounting-based DAR already stood at 89% at the time. The year 2021 marked the highest point for X4 during the period, at 1.95, driven by two simultaneous factors: the number of shares outstanding surged to 12,675,160,000 following the rights issue discussed under the liquidity ratios, while total liabilities fell sharply, to IDR1,362,982 million, owing to the repayment of the shareholder loan; this combination pushed the market value of equity (IDR2,661,784 million) well above

the company's liabilities. This condition, however, did not persist. PT X's share price continued to weaken, from IDR210 in 2021 to IDR157 in 2022 and IDR136 in 2023, while the number of shares outstanding remained unchanged; combined with total liabilities that rose each year, X4 declined in successive steps: 1.38 in 2022, then below 1 in 2023 (0.78) — the first year in which the market value of equity fell below total liabilities. In 2024, X4 fell to its lowest point, 0.39, as the share price dropped to just IDR91 while total liabilities rose further, to IDR2,953,727 million, the highest level recorded during the observation period; the resulting market value of equity of only IDR1,153,440 million did not even reach half of total liabilities, consistent with the equity-deficiency condition also reflected in the DER and ROE results discussed earlier.

**Table 10. Sales to Total Assets (X5), 2020–2024**

| Year | Sales     | Total Assets | X5   |
|------|-----------|--------------|------|
| 2020 | 1,204,429 | 3,055,106    | 0.39 |
| 2021 | 1,494,671 | 2,478,713    | 0.60 |
| 2022 | 1,036,870 | 2,111,024    | 0.49 |
| 2023 | 2,349,638 | 2,608,782    | 0.90 |
| 2024 | 3,172,312 | 2,812,734    | 1.13 |

*Note. Figures in IDR million, except X5.*

Unlike the four preceding variables, the fifth, Sales to Total Assets (X5), measures purely the company's efficiency in generating sales from its total assets, without being influenced by profit, equity, or market perception. Numerically, X5 is identical to the Total Assets Turnover ratio discussed under the activity ratios, as both compare revenue to total assets. In 2020, X5 stood at 0.39, reflecting revenue depressed by the COVID-19 pandemic (IDR1,204,429 million); the ratio then fluctuated in line with the company's revenue trend, rising modestly to 0.60 in 2021, falling back to 0.49 in 2022 alongside declining revenue, then rising significantly to 0.90 in 2023 and reaching its highest point, 1.13, in 2024, as revenue continued to grow, reaching IDR3,172,312 million. Unlike X1, X2, and X3, which remained consistently negative throughout the observation period, X5 showed a clear upward trend from year to year. Nevertheless, its overall contribution to the Z-Score remained limited, as its weight in Altman's formula (1.0X5) is the second-smallest of the five variables after X4, meaning the improvement in X5 was insufficient to offset the much larger negative contributions from X2 and X3.

**Table 11. Altman Z-Score Calculation Results, 2020–2024**

| Year | 1.2X1  | 1.4X2  | 3.3X3  | 0.6X4 | 1.0X5 | Z-Score | Zone     |
|------|--------|--------|--------|-------|-------|---------|----------|
| 2020 | (0.16) | (0.97) | (1.19) | 0.62  | 0.39  | (1.31)  | Distress |
| 2021 | 0.25   | (1.57) | (0.92) | 1.17  | 0.60  | (0.48)  | Distress |
| 2022 | 0.12   | (2.14) | (0.73) | 0.83  | 0.49  | (1.44)  | Distress |

|      |        |        |        |      |      |        |          |
|------|--------|--------|--------|------|------|--------|----------|
| 2023 | 0.00   | (1.88) | (0.33) | 0.47 | 0.90 | (0.84) | Distress |
| 2024 | (0.18) | (2.02) | (0.56) | 0.23 | 1.13 | (1.38) | Distress |

Having computed all five variables, X1 through X5, the Z-Score for PT X was obtained by summing each variable multiplied by its respective weight in Altman's formula,  $Z = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.0X5$ . In 2020, the Z-Score was recorded at  $-1.31$ , far below the  $1.81$  threshold, placing PT X in the distress zone from the very start of the observation period; the largest contributors to this negative value were  $3.3X3$  ( $-1.19$ ) and  $1.4X2$  ( $-0.97$ ), indicating that operating losses and the accumulated retained-earnings deficit were the two most dominant factors depressing the Z-Score. The year 2021 produced the best Z-Score of the observation period, at  $-0.48$ , an improvement driven primarily by  $0.6X4$ , which rose to  $1.17$  in line with the temporary strengthening of the market value of equity following the capital-raising corporate action; even so, the contribution from  $1.4X2$  became more negative still, at  $-1.57$ , showing that the improvement on the market side was not matched by an improvement in the company's accumulated earnings position. This improvement reversed in 2022, when the Z-Score fell to  $-1.44$ , driven by  $1.4X2$  widening to  $-2.14$ , the largest negative contributor that year. In 2023, the Z-Score improved slightly, to  $-0.84$ , supported by  $3.3X3$  recording its smallest negative contribution of the period ( $-0.33$ ), consistent with EBIT also reaching its best level that year. This improvement, however, was again short-lived: in 2024 the Z-Score deteriorated once more, to  $-1.38$ , as  $1.4X2$  widened again to  $-2.02$  and  $3.3X3$  also worsened, to  $-0.56$ ; although  $1.0X5$  recorded its highest positive contribution of the period ( $1.13$ ), this was insufficient to lift the Z-Score out of the distress zone.

Based on Altman's (1968) classification, under which a company is categorised as being in the distress zone when Z falls below  $1.81$ , PT X's Z-Score remained consistently within this zone throughout 2020–2024, with every annual value also being negative; at no point during the observation period did the Z-Score approach the grey zone, let alone the safe zone. The trajectory of the Z-Score mirrors the findings from the financial ratio analysis discussed above in every respect: a temporary improvement in 2021 driven by corporate capital-raising action, renewed deterioration thereafter, a modest improvement in 2023 as losses narrowed, and a sharp deterioration again in 2024 as the company's equity turned negative. The consistency of this pattern across multiple, methodologically distinct approaches — liquidity, solvency, activity, and profitability ratios, as well as the Altman Z-Score — reinforces the indication that PT X is facing serious, structural financial pressure, requiring fundamental improvement, particularly in its ability to generate operating profit and to contain the accumulation of losses.

## Overall Financial Health Assessment

The results of the financial ratio analysis and the Altman Z-Score point in a consistent direction in describing PT X's financial condition over 2020–2024. All four categories of financial ratios — liquidity,

solvency, activity, and profitability — remained consistently below their respective industry-average standards throughout the observation period; the Debt to Asset Ratio reached as high as 105% in 2024, meaning that total liabilities had come to exceed total assets, a finding that aligns closely with the Altman Z-Score results, which placed the company in the distress zone in every year observed. The negative contribution to the Z-Score consistently originated from the X2 (Retained Earnings to Total Assets) and X3 (EBIT to Total Assets) variables, pointing to two underlying root causes: the accumulation of a retained-earnings deficit stemming from repeated losses, and operating losses that have not yet been brought into positive territory. A temporary improvement did occur in 2021, driven by a capital-raising corporate action, but this improvement was not sustained and the company's condition weakened again to its lowest point in 2024. Unlike the other ratios, however, Accounts Receivable Turnover showed a consistent improving trend throughout the observation period, rising from 2.33 times in 2020 to 10.34 times in 2024, indicating that PT X's management of receivables collection became progressively more effective from year to year, even though this ratio had not yet reached the industry's ideal standard.

These findings, however, need to be read in a balanced manner. PT X continued to record a significant increase in revenue throughout the observation period and still retains a substantial base of total assets to support the continuity of its operations. This indicates that the company's core problem does not lie in its ability to generate revenue, but rather in three more specific areas. The first is operational efficiency: rising revenue has not been matched by adequate cost control, keeping profit margins under pressure throughout the period. The second is capital structure: the company's heavy reliance on debt relative to its own capital points to a need for debt restructuring or equity-strengthening measures. The third is asset-utilisation efficiency: a Total Assets Turnover that has never reached the ideal standard indicates that the company's total assets have not yet been optimally deployed to generate sales, even though, from the specific standpoint of receivables management, the company has shown meaningful improvement.

This condition is consistent with theory concerning the factors that influence a company's financial health (Kasmir, 2017), which holds that internal factors such as operating-cost management and funding structure play a significant role. Viewed through the stages of financial distress described by Brigham and Gapenski (1997) and Fahmi (2013), PT X's condition during the observation period points to a stage that requires serious management attention, particularly regarding the balance between external financing and the ability to generate operating profit.

These findings are also consistent with prior research. Resfitasari et al. (2021), examining a state-owned construction company, found a similarly distressed Z-Score pattern, indicating that financial pressure in the construction sector has affected both privately held and state-owned firms alike. Likewise, Kinanti et al. (2023), examining the same company as the object of this study, reported consistent results for the year 2021, indicating that this condition reflects a tendency that has persisted for several years prior

to the present observation period. In addition, the finding regarding operational inefficiency aligns with the results of Sihaloho et al. (2021), who reported that liquidity and solvency ratios have a significant effect on profitability among construction-sector companies.

Accordingly, the most relevant direction for improvement going forward for PT X lies in strengthening operating-cost efficiency and improving its capital structure through a more balanced funding strategy between debt and equity, while continuing to build on the improvement already achieved in receivables management.

## **CONCLUSION**

Based on the analysis of financial ratios and the Altman Z-Score applied to PT X over the 2020–2024 period, several conclusions can be drawn. In terms of financial ratios, the liquidity ratios — Current Ratio, Quick Ratio, and Cash Ratio — failed to meet the industry-average standard throughout the observation period; the solvency ratios point to a high dependence on debt, with the Debt to Asset Ratio reaching 105% in 2024; the activity ratios, particularly Total Assets Turnover, likewise fell short of the ideal standard; and all three profitability ratios (Net Profit Margin, Return on Assets, and Return on Equity) failed to show positive results throughout the period. In terms of the Altman Z-Score, PT X's Z-Score remained within the distress zone ( $Z < 1.81$ ) in every year observed, with the largest negative contributions consistently arising from the X2 (Retained Earnings to Total Assets) and X3 (EBIT to Total Assets) variables, reflecting an accumulated retained-earnings deficit alongside operating losses that have not yet been brought into positive territory. With respect to receivables management, Accounts Receivable Turnover rose consistently, from 2.33 times in 2020 to 10.34 times in 2024, although it did not reach the ideal standard of 15 times; this improvement indicates that the company became increasingly effective at collecting its receivables, thereby helping to support the availability of operating cash flow even as its overall financial condition continued to require improvement. Taken together, the financial ratio analysis and the Altman Z-Score point in a consistent direction, showing that PT X faces pressure in the areas of operational efficiency and capital structure; nevertheless, the company continued to record revenue growth and retains a substantial base of total assets to support the continuity of its operations, indicating that the root of the problem lies more in cost control and funding-structure management than in the company's ability to generate revenue.

Based on these findings, several practical implications can be drawn. For PT X's management, improvement efforts should be focused on operating-cost efficiency and the strengthening of capital structure, given that the company's core problems lie in cost control and debt dependence rather than in revenue generation; measures such as debt restructuring, renegotiation with creditors, and further capital injections through corporate action should continue to be pursued to achieve a more balanced capital

structure, while sustaining the positive trend already achieved in receivables management. For investors and creditors, these findings may serve as one consideration in assessing the company's financial condition prior to investment or lending decisions, alongside other relevant factors such as industry prospects and the company's future strategic plans. For future researchers, it is recommended that the observation period be extended and that additional analytical methods, such as Springate or Zmijewski, be incorporated for comparison, along with further investigation into the factors driving the improvement in receivables management so that similar gains might be replicated in other financial areas.

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