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# The Influence of Debt and Liquidity Policies on Financial Distress at PT Sepatu Bata Tbk 2013-2025

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***Keywords: Altman Z-Score, Debt to Equity Ratio, Financial Distress, Liquidity, Working Capital***

***Abstract :*** *This research is motivated by the deteriorating financial condition of PT Sepatu Bata Tbk, which is characterized by an increase in the debt ratio, decreased liquidity, and a negative Altman Z-Score value at the end of the observation period. This study aims to analyze the effect of debt and liquidity policies on financial distress, both partially and simultaneously. The study uses a quantitative approach with a descriptive method. The population and sample of the study are the financial statements of PT Sepatu Bata Tbk for the period 2013–2025, with 13 years of observation. Secondary data were collected through financial statement documentation. Debt policy is measured using the Debt to Equity Ratio (DER), liquidity using the Current Ratio (CR), and financial distress using the Altman Z-Score. Data analysis includes descriptive statistics, classical assumption tests, multiple linear regression, t-tests, F-tests, and coefficients of determination. The results show that DER has no significant effect on financial distress ($p = 0.207$), while CR has a positive and significant effect ($p < 0.001$). Simultaneously, DER and CR have a significant effect on financial distress ($F = 23.597$; $p < 0.001$), with an Adjusted R Square of 0.790. In conclusion, liquidity is a significant factor in explaining a company's financial distress, so the management of current assets, short-term liabilities, and funding structure needs to be strengthened to support financial stability.*

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## Introduction

The development of technology and information in the era of globalization has encouraged industrial and business growth, including the fashion industry, which contributes significantly to the Indonesian economy. According to CNBC Indonesia (2019), the fashion sector contributes approximately 18.01% to the national creative economy. One of the subsectors experiencing growth is the footwear industry. Indonesia is recognized as one of the world's largest footwear producers,

contributing approximately 4.6% to global production (Selfie, 2019). Furthermore, domestic and export demand for footwear products increased by 4.13% in 2019 compared with the previous year (Investor Daily, 2019). These developments create opportunities for footwear companies to expand their businesses while requiring them to maintain product quality and competitiveness amid increasingly intense market competition. However, business sustainability is not determined solely by market opportunities and product competitiveness but also by the company's ability to manage its financial resources effectively. PT Sepatu Bata Tbk is one of the companies facing significant financial challenges, as reflected in the closure of its operational factory in April 2024 and the cessation of its manufacturing activities in 2025. Nevertheless, the company has not been declared bankrupt and continues its business activities as a distributor. This situation highlights the importance of effective financial management, particularly debt and liquidity policies, in maintaining financial stability and reducing the potential risk of financial distress.

A company's sustainability is closely related to its ability to generate profits, manage funding sources, and fulfill both short-term and long-term obligations. Silanno and Loupatty (2021) explain that business operations are subject to fluctuations as part of the dynamics of economic activity. In this context, financial distress is an important consideration for investors and creditors when making investment decisions or providing financing. Sukamulja (2025) states that financial statements can be used to identify and predict potential financial difficulties experienced by a company. Financial distress requires particular attention because it may affect a company's ability to maintain its operational activities and fulfill its financial obligations. Economic instability, including the COVID-19 pandemic, has also contributed to slower economic growth and declining industrial activity in Indonesia (Bappenas, 2020). These conditions have placed additional pressure on business activities, particularly in the manufacturing sector. Therefore, examining a company's financial performance through its debt structure, liquidity position, and financial distress indicators is necessary to understand its financial development and identify potential financial risks.

The financial challenges experienced by PT Sepatu Bata Tbk can be observed through changes in its debt policy during the 2013–2025 period. Based on the company's annual reports, total debt decreased from IDR 283,831,895 thousand in 2013 to IDR 209,895,228 thousand in 2019, while equity increased from IDR 396,853,060 thousand to IDR 653,251,326 thousand. This development indicates that the company initially maintained a relatively favorable capital structure, supported by a higher level of equity compared with its debt. However, its financial condition began to deteriorate after 2020, when equity decreased to IDR 477,944,179 thousand. In 2022, total debt increased to IDR 404,306,330 thousand, while equity declined to IDR 319,767,628 thousand. The pressure became more evident in 2023, when total debt reached IDR 454,389,781 thousand and equity decreased to IDR 131,350,048 thousand. In 2024 and 2025, the company recorded negative equity of IDR 15,926,892 thousand and IDR 131,653,781 thousand, respectively. These developments indicate a substantial deterioration in the company's capital structure and an increase in financial risk. This phenomenon is relevant to the findings of Idarti and Hasanah (2018), who found that debt policy has a positive effect on financial distress, while liquidity has no significant effect. Similarly, Indarti and Sapari (2020) found that leverage, measured using the Debt-to-Asset Ratio, has a positive and significant effect on financial distress. These findings suggest that debt-based financing is an important factor to consider when assessing a company's financial condition, although its influence may vary across research settings.

In addition to debt policy, liquidity is another important factor in assessing the financial condition of PT Sepatu Bata Tbk. Based on the company's annual reports for 2013–2025, its Current Ratio increased from 169.26% in 2013 to 330.92% in 2019, indicating a relatively strong ability to meet short-term obligations during the initial observation period. However, the ratio subsequently declined to 138.22% in 2020 and 101.52% in 2022. The downward trend continued in 2023, 2024, and 2025, when the Current Ratio reached 88.90%, 70.08%, and 48.23%, respectively. A Current Ratio below 100% indicates that current assets are insufficient to cover current liabilities. This deterioration is also reflected in the company's Altman Z-Score, which declined from 8.82 in 2019 to 2.58 in 2020 and 1.67 in 2022, before reaching negative values of -1.26 in 2023, -4.61 in 2024, and -9.20 in 2025. These changes indicate a substantial deterioration in the company's financial condition, accompanied by weakening working capital, profitability, and equity positions. However, previous research has reported different findings regarding the relationship between liquidity and financial distress. Indarti and Sapari


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(2020), for example, found that liquidity measured using the Current Ratio had a negative but insignificant effect on financial distress. This difference between previous empirical findings and the financial developments observed at PT Sepatu Bata Tbk provides a basis for further investigation into the role of liquidity in explaining the company's financial distress.

The research gap in this study arises from two considerations. First, previous studies, such as those conducted by Idarti and Hasanah (2018) and Indarti and Sapari (2020), examined the relationships between debt or leverage, liquidity, and financial distress in broader company samples. Their findings also indicate that the relationships between these financial variables and financial distress are not entirely consistent. However, these studies do not specifically explain how debt and liquidity policies relate to the financial transition of an individual company from a relatively stable condition to substantial financial pressure, particularly when its equity becomes negative and its liquidity falls below the level required to cover current liabilities. Second, the financial development of PT Sepatu Bata Tbk during 2013–2025 provides a specific empirical context for examining these relationships across different financial conditions. Therefore, this study contributes by examining the partial and simultaneous effects of the Debt to Equity Ratio (DER) and Current Ratio (CR) on financial distress, measured using the Altman Z-Score, within one company over a thirteen-year observation period. The analysis is expected to provide a more focused understanding of how debt and liquidity indicators relate to financial distress during a significant transition in the company's financial condition.

Based on these phenomena and the identified research gap, this study aims to analyze the effect of debt policy on financial distress, the effect of liquidity on financial distress, and the simultaneous effect of debt and liquidity policies on financial distress at PT Sepatu Bata Tbk during the 2013–2025 period. The significance of this research lies in its examination of the company's financial development from a relatively stable period to increasingly severe financial pressure, as reflected in rising debt relative to equity, declining liquidity, negative equity, and decreasing Altman Z-Score values. The findings are expected to provide practical insights for company management in evaluating debt and liquidity policies, assist investors and creditors in assessing financial risks, and contribute to academic discussions on financial distress, particularly in the context of a single company experiencing substantial changes in its financial condition period 2013–2025, so that the analysis includes changes in the company's financial condition from a relatively stable period to experiencing increasingly severe financial pressure.

## Method

This study uses a quantitative approach with a descriptive method. According to Sugiyono (2019:8), a quantitative research method is a method based on the philosophy of positivism, used to study a specific population or sample, with data collection using research instruments and quantitative or statistical data analysis to test predetermined hypotheses. Descriptive statistics are used to analyze and describe the collected data without intending to draw generally applicable conclusions (Sugiyono, 2019:55). This study uses secondary data in the form of PT Sepatu Bata Tbk's financial statements for the period 2013–2025 to analyze the effect of debt policy as measured by the Debt to Equity Ratio (DER) and liquidity as measured by the Current Ratio (CR) on financial distress as measured using the Altman Z-Score.

The research instrument consists of documentation data from PT Sepatu Bata Tbk's financial statements for the 2013–2025 period, including the financial position statement and income statement. The debt policy variable is measured using the Debt to Equity Ratio (DER), which is the ratio of total liabilities to total equity. The liquidity variable is measured using the Current Ratio (CR), which is the ratio of current assets to current liabilities. Meanwhile, the financial distress variable is measured using the Altman Z-Score based on the financial indicators used in the study.

Data analysis techniques include descriptive statistics to describe the characteristics of the research data, classical assumption tests, and multiple linear regression analysis. Classical assumption tests include normality, multicollinearity, heteroscedasticity, and autocorrelation tests to determine the feasibility of the regression model. According to Ghozali (2018), multiple linear regression is used to


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analyze the influence of independent variables on the dependent variable, both partially and simultaneously. Furthermore, the coefficient of determination ($R^2$) test is used to determine the ability of the independent variables to explain the variation of the dependent variable. Hypothesis testing is carried out through a t-test to determine the effect of debt and liquidity policies partially and an F-test to determine the influence of both variables simultaneously on financial distress.

The population in this study is the financial statements of PT Sepatu Bata Tbk, which include the statement of financial position and the income statement. According to Sugiyono (2019:80), a population is a generalized area consisting of objects or subjects with certain characteristics that researchers determine to be studied and then conclusions drawn. The sample of this study is the financial statements of PT Sepatu Bata Tbk for the period 2013–2025, which were selected based on their suitability to the needs of debt policy analysis, liquidity, and financial distress. Thus, the research data includes financial statements for 13 years of observation.

The research procedure begins by identifying the financial phenomena and problems of PT Sepatu Bata Tbk based on the development of debt, liquidity, and financial distress policies during the 2013–2025 period. Furthermore, secondary data was collected through documentation techniques by obtaining financial reports from the official website of the Indonesia Stock Exchange (www.idx.co.id) and company publication sources. Literature studies were also conducted by reviewing scientific books and previous research relevant to the research variables. After the data was collected, variable measurements were carried out using DER, CR, and Altman Z-Score. The data were then analyzed through descriptive statistics, classical assumption tests, multiple linear regression, coefficient of determination tests, and partial and simultaneous hypothesis tests. The final stage of the research was carried out by interpreting the analysis results to determine the effect of debt and liquidity policies on financial distress at PT Sepatu Bata Tbk during the 2013–2025 period.

## Results and Discussion

### Calculation and Research Results

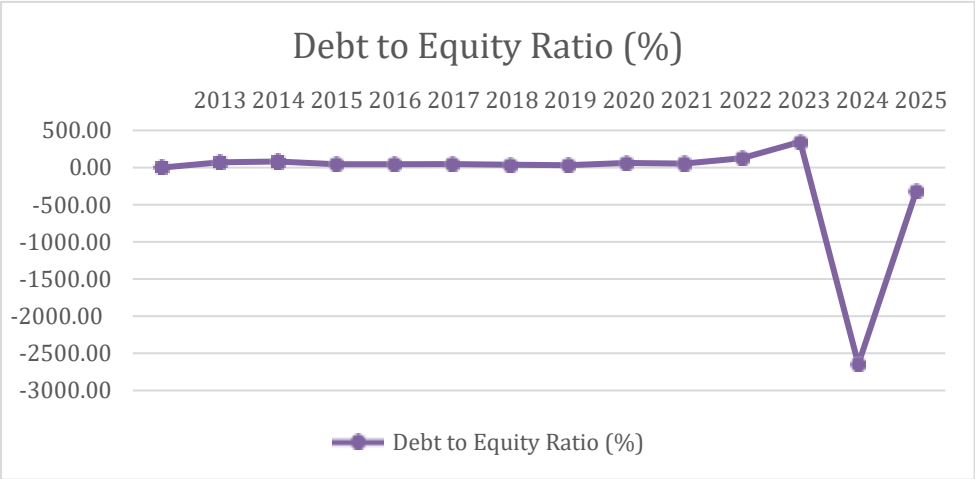
#### 1. Debt to Equity Ratio (DER) Calculation at PT. Sepatu Bata Tbk for the 2013-2025 Period

**Table 1. Data Analysis of Debt to Equity Ratio of PT. Sepatu Bata Tbk 2013–2025**

| YEAR | TOTAL DEBT (Expressed in Thousands of Rupiah) | EQUITY (Expressed in Thousands of Rupiah) | DER (%) |
|---|---|---|---|
| 2013 | 283,831,895 | 396,853,060 | 71.52 |
| 2014 | 345,775,482 | 429,115,605 | 80.58 |
| 2015 | 248,070,766 | 547.187.208 | 45.34 |
| 2016 | 247,587,638 | 557.155.279 | 44.44 |
| 2017 | 276,382,503 | 579,308,728 | 47.71 |
| 2018 | 240,048,866 | 636,807,359 | 37.70 |
| 2019 | 209,895,228 | 653,251,326 | 32.13 |
| 2020 | 297,380,758 | 477,944,179 | 62.22 |
| 2021 | 225,816,742 | 426,925,493 | 52.89 |
| 2022 | 404,306,330 | 319,767,628 | 126.44 |
| 2023 | 454,389,781 | 131,350,048 | 345.94 |
| 2024 | 421,587,981 | - 15,926,892 | -2647.02 |
| 2025 | 414,210,558 | - 131,653,781 | - 314.62 |

Source: Secondary data processed by the author (2026)


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Based on Table 1 for PT Sepatu Bata Tbk for the period 2013–2025, it can be seen that the results of the company's Debt to Equity Ratio (DER) calculation during the period 2013 to 2025, can be interpreted that the company's capital structure experienced quite significant fluctuations, even tending to deteriorate drastically in the final years of the research period. In the period 2013–2019, the company's DER was in a relatively stable and healthy range, namely between 32.13% and 80.58%. The lowest DER value was recorded in 2019 at 32.13%, which indicates that in that year the company had a much smaller proportion of debt compared to its equity, so its capital structure was classified as conservative and its financial risk was relatively low. This condition is supported by the equity value which continued to increase from IDR 396,853,060 in 2013 to IDR 653,251,326 in 2019, while total debt was relatively controlled.

However, entering 2020 to 2023, the company's DER showed a sharp upward trend, from 62.22% in 2020 to 345.94% in 2023. This increase occurred due to a combination of increasing total debt (from IDR 297,380,758 to IDR 454,389,781) and equity which actually shrank significantly (from IDR 477,944,179 to only IDR 131,350,048). This condition indicates that the company is increasingly dependent on debt financing compared to its own capital, so that the financial risk borne by the company has increased substantially. The most worrying condition occurred in 2025 and 2025, where the company's equity value turned negative, namely minus Rp15,926,892 in 2025 and minus Rp131,653,781 in 2025. As a result, the DER value in both years became extremely negative, namely -2,647.02% in 2025 and -314.62% in 2025. It should be emphasized that this negative DER value does not mean that the company's financial condition is improving, but rather indicates that the company is in a negative equity condition or capital deficiency, a critical condition where the company's total liabilities have exceeded its total assets.

## 2. Current Ratio (CR) Calculation at PT. Sepatu Bata Tbk for the 2013-2025 Period

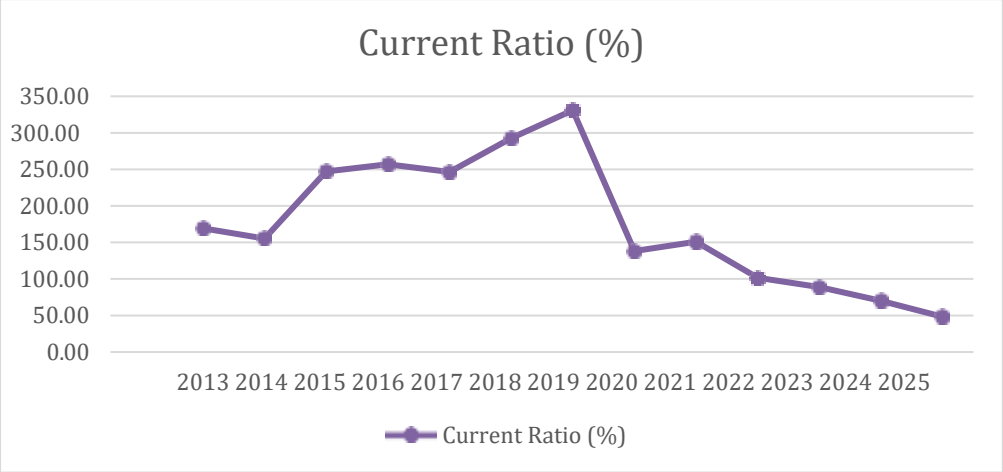
**Table 2. Current Ratio Data Analysis of PT. Sepatu Bata Tbk 2013–2025**

| YEAR | CURRENT ASSET (Expressed in Thousands of Rupiah) | CURRENT LIABILITIES (Expressed in Thousands of Rupiah) | CR (%) |
|---|---|---|---|
| 2013 | 435,578,754 | 257,337,714 | 169.26 |
| 2014 | 490,875,888 | 316,233,635 | 155.23 |
| 2015 | 521,210,881 | 210,931,517 | 247.10 |
| 2016 | 533,900,133 | 207,734,690 | 257.01 |
| 2017 | 567,954,415 | 230,497,528 | 246.40 |


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| | | | |
|---|---|---|---|
| 2018 | 569,545,551 | 194,538,478 | 292.77 |
| 2019 | 544,652,375 | 164,585,862 | 330.92 |
| 2020 | 343,779,513 | 248,721,907 | 138.22 |
| 2021 | 297,612,923 | 197,108,646 | 150.99 |
| 2022 | 364,304,782 | 358,835,564 | 101.52 |
| 2023 | 346,313,563 | 389,560,822 | 88.90 |
| 2024 | 270,263,408 | 385,636,274 | 70.08 |
| 2025 | 184,348,542 | 382.242.261 | 48.23 |

Source: Secondary data processed by the author (2026)




Based on table 2 at PT Sepatu Bata Tbk for the period 2013–2025, it can be seen that the company's short-term liquidity level has experienced a consistent downward trend, especially since 2019, although in the initial period of the study the company's liquidity condition was classified as very good. In the period 2013–2019, the company's Current Ratio was at a high level and tended to increase, namely from 169.26% in 2013 to a peak of 330.92% in 2019. This increase was driven by the growth of Current Assets which was quite stable, while Current Liabilities actually decreased during that period, for example from IDR 257,337,714 in 2013 to only IDR 164,585,862 in 2019. A CR value above 200% in this period indicates that the company has a very strong ability to meet its short-term obligations using its current assets, even tending to indicate the existence of idle funds that have not been optimized. However, entering 2020, the company's Current Ratio experienced a sharp decline to 138.22%, and this downward trend continued consistently until the end of the study period. This decline was caused by a combination of continuously decreasing Current Assets (from IDR 343,779,513 in 2020 to only IDR 184,348,542 in 2025) and relatively increasing Current Liabilities during the same period. This condition indicates that the company's ability to finance its short-term liabilities through current assets is weakening year after year.

The most worrying condition is seen in 2022 to 2025, where the Current Ratio value has been below 100%, even continuing to decline to only reach 48.23% in 2025. This CR value below 100% is a serious indicator that the company's Current Assets are no longer able to cover its Current Liabilities in full, which means the company has the potential to face difficulties in meeting its short-term obligations on time.


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### 3. Financial Distress Calculation at PT. Sepatu Bata Tbk for the 2013-2025 Period

**Table 3. Analysis of Financial Distress Data of PT. Sepatu Bata Tbk 2013–2025**

| YEAR | Working Capital to Total Assets (WCTA) | Retained Earnings to Total Assets (RETA) | Earning Before Interest and Tax to Total Assets (EBITA) | Book Value of Equity to Book Value of Total Liabilities | Z Score |
|---|---|---|---|---|---|
| 2013 | 1.72 | 1.84 | 0.65 | 1.47 | 5.67 |
| 2014 | 1.48 | 1.75 | 0.90 | 1.30 | 5.43 |
| 2015 | 2.56 | 2.21 | 1.31 | 2.32 | 8.39 |
| 2016 | 2.66 | 2.22 | 0.55 | 2.36 | 7.80 |
| 2017 | 2.59 | 2.19 | 0.64 | 2.20 | 7.61 |
| 2018 | 2.81 | 2.32 | 0.73 | 2.79 | 8.65 |
| 2019 | 2.89 | 2.40 | 0.26 | 3.27 | 8.82 |
| 2020 | 0.80 | 1.93 | -1.83 | 1.69 | 2.58 |
| 2021 | 1.01 | 2.03 | -0.60 | 1.99 | 4.43 |
| 2022 | 0.05 | 1.36 | -0.56 | 0.83 | 1.67 |
| 2023 | -0.48 | 0.62 | -1.70 | 0.30 | -1.26 |
| 2024 | -1.87 | -0.30 | -2.41 | -0.04 | -4.61 |
| 2025 | -4.59 | -1.76 | -2.50 | -0.33 | -9.20 |

*Source: Data processed by the author 2026*

Based on table 3 at PT Sepatu Bata Tbk for the period 2013–2025, the calculation of the Altman Z-Score (Z") model at PT Sepatu Bata Tbk during the period 2013 to 2025, it can be interpreted that the company's Financial Distress condition experienced a very significant change, from a very healthy category in the initial period to a severe bankruptcy category in the final period of the study. It can be seen that in the period 2013–2019, the company's Z-Score value was at a high level and tended to increase, namely from 5.67 in 2013 to reaching a peak of 8.82 in 2019. The Z-Score value which is far above 2.60 (safe limit) indicates that the company is in a very healthy financial condition and has a very low risk of bankruptcy. This condition is supported by all of its forming ratios which are positive and relatively stable, namely WCTA which ranges from 1.48 to 2.89 (reflecting strong liquidity), RETA between 1.75 to 2.40 (reflecting good cumulative profitability), EBITTA which, although fluctuating, remains positive (0.26 to 1.31), and the equity to debt ratio (Book Value of Equity to Book Value of Total Liabilities) which is consistently above 1, indicating that the company's equity is still greater than its total debt.

However, entering 2020, the Z-Score saw a drastic drop to 2.58, beginning to approach the risk zone (grey zone). This decline was primarily driven by the EBITTA ratio, which turned negative at -1.83, indicating the company was beginning to experience operating losses. This downward trend continued in the following years, with the Z-Score dropping again to 4.43 in 2021, then to 1.67 in 2022, which already entered the risk-of-bankruptcy category (grey zone, as it falls between 1.1 and 2.6).

The most worrying situation occurred between 2023 and 2025, where the company's Z-Score fell into negative territory consecutively, namely -1.26 in 2023, -4.61 in 2025, and reached a low of -9.20 in 2025. A Z-Score value below 1.1 indicates that the company is predicted to experience bankruptcy, and the more negative the value, the more severe the level of financial difficulties faced. This extreme decline was caused by the deterioration of all components of the Z-Score simultaneously: WCTA turning negative (reflecting negative working capital or current liabilities exceeding current assets), RETA which was also negative (indicating accumulated losses that erode retained earnings), EBITTA which was increasingly in the negative zone (indicating increasing operational losses), and the equity to debt ratio which was also negative (reflecting a


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negative equity condition or capital deficiency).

Overall, the results of the Z-Score analysis show a consistent and significant downward trend in the financial condition of PT Sepatu Bata Tbk throughout the 2013-2025 period, from being in the safe zone (2013-2019), fluctuating in the gray zone (2020-2022), until finally falling into the distress zone with a negative Z-Score value in the last two years (2023-2025). This finding indicates that PT Sepatu Bata Tbk has a high potential for bankruptcy if significant steps are not taken to improve financial performance, especially in terms of working capital management, profitability, and the company's capital structure.

## Research result

### 1. Descriptive Statistical Analysis

**Table 4. Results of Descriptive Statistical Tests**

**Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Standard Deviation |
|---|---|---|---|---|---|
| DER | 13 | -2647.02 | 345.94 | -154,9802 | 761,36672 |
| CR | 13 | 48.23 | 330.92 | 176,6642 | 90.09810 |
| *Financial Distress* | 13 | -9.20 | 8.82 | 3.5375 | 5,60712 |
| Valid N (listwise) | 13 | | | | |

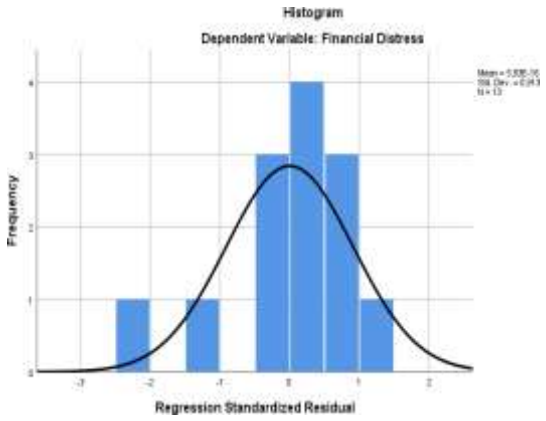
Source: Data processed by SPSS 27 (2026)

Based on the results of descriptive statistical analysis, this study uses 10 observation data. The Debt to Equity Ratio (DER) variable has a minimum value of -2647.02, a maximum of 345.94, a mean of -154.9802, and a standard deviation of 761.36672, which indicates a fairly high data spread. The Current Ratio (CR) variable has a minimum value of 48.23, a maximum of 330.92, a mean of 176.6642, and a standard deviation of 90.09810, thus indicating a fairly high data spread. Meanwhile, the Financial Distress variable has a minimum value of -9.20, a maximum of 8.82, a mean of 3.5375, and a standard deviation of 5.60712, which indicates that the Financial Distress data has relatively low or more homogeneous data.

### 2. Classical Assumption Testing

#### A. Normality Test

##### a. Normality Test using Graphical Analysis



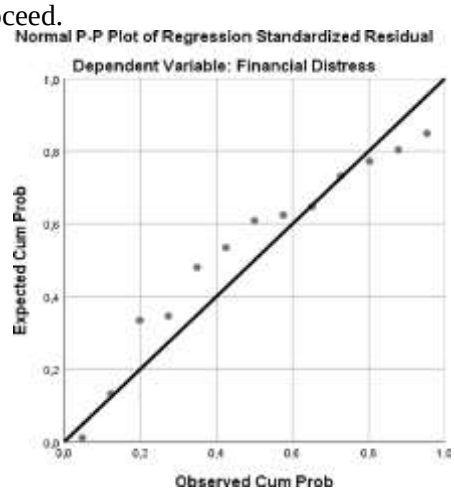

Source: Data processed by SPSS 27 (2026)

**Graph 1. Normality Test Results**

Based on Graph 1, the Histogram of the Normality Test, it can be seen that the residual distribution forms a bell-shaped curve, and the data are relatively symmetrical around the mean. This indicates that the residuals in the regression model are normally distributed. Therefore, it can be concluded that the regression model meets the assumption of normality, allowing the


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regression analysis to proceed.




Source: Data processed by SPSS 27 (2026)

**Graph 2. P-Plot Test Results**

Based on the Normal PP Plot of Regression Standardized Residuals, it can be seen that the residual points are spread away from the diagonal line, especially in the middle of the data distribution. This indicates that the residuals in the regression model are not fully normally distributed and there are deviations from the normality assumption. Therefore, further normality testing is necessary using formal statistical tests such as the Kolmogorov-Smirnov test to ensure that the regression model meets the normality assumption before being used in further analysis. The results are presented in the following table.

**b. Normality Test using Statistical Analysis**

**Table 5. Results of the Normality Test (One-Sample Kolmogorov-Smirnov Test)**

**One-Sample Kolmogorov-Smirnov Test**

| | | | Unstandardized Residual |
|---|---|---|---|
| N | | | 13 |
| Normal Parametersa,b | Mean | | .0000000 |
| | Standard Deviation | | 2.34481736 |
| Most Extreme Differences | Absolute | | .171 |
| | Positive | | .128 |
| | Negative | | -.171 |
| Test Statistics | | | .171 |
| Asymp. Sig. (2-tailed)c | | | .200d |
| Monte Carlo Sig. (2-tailed)e | Sig. | | .369 |
| | 99% Confidence Interval | Lower Bound | .356 |
| | | Upper Bound | .381 |

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

Source: Data processed by SPSS 27 (2026)


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Based on the results of the normality test using the Histogram, Normal PP Plot, and Kolmogorov-Smirnov test, the results show that the residuals are normally distributed. This is indicated by the histogram pattern that resembles a bell curve, the points on the Normal PP Plot that spread following the direction of the diagonal line without significant deviations, and the Asymp. Sig. (2-tailed) value of 0.200 > 0.05 and Monte Carlo Sig. (2-tailed) of 0.369 > 0.05. Thus, the regression model has met the assumption of normality and is suitable for further analysis.

### B. Multicollinearity Test

**Table 6. Multicollinearity Test Results**

**Coefficientsa**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | | Collinearity Statistics |
|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. | Tolerance |
| 1 | (Constant) | -5,283 | 1,773 | | -2,980 | .014 | |
| | DER | .001 | .001 | .191 | 1,348 | .207 | .871 |
| | CR | .051 | .009 | .822 | 5,800 | .000 | .871 |

Source: Data processed by SPSS 27 (2026)

The multicollinearity test aims to determine whether there is a high correlation between the independent variables in a regression model. Commonly used criteria are: if the Tolerance value is > 0.10 and the VIF value is < 10, then the regression model is declared free of multicollinearity.

Based on the test results, the two independent variables, namely DER and CR, have a Tolerance value of 0.871 (> 0.10) and a VIF value of 1.148 (< 10). Thus, it can be concluded that there are no symptoms of multicollinearity between the independent variables in this regression model, so the regression model is suitable for use in predicting the dependent variable without any bias due to high correlation between the independent variables.

### C. Heteroscedasticity Test

**Table 7.Heteroscedasticity Test Results**

**Coefficientsa**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 2,949 | 1,079 | | 2,734 | ,021 |
| | DER | ,000 | ,001 | ,190 | ,603 | ,560 |
| | CR | -,007 | ,005 | -,394 | -1,254 | ,239 |

a. Dependent Variable: ABRESID

Source: Data processed by SPSS 27 (2026)

Based on the Glejser test results in the table above, the significance value for the DER variable is 0.560 and the CR variable is 0.239. Both significance values are greater than 0.05 (0.560 > 0.05 and 0.239 > 0.05). Therefore, it can be concluded that there are no symptoms of heteroscedasticity in the regression model in this study, so the regression model has met the assumption of homoscedasticity and is suitable for use in further analysis.


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**D. Autocorrelation Test**

**Table 8. Autocorrelation Test Results (Durbin-Watson)**

**Model Summary**

| Model | R | R Square | Adjusted R Square | Standard Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | ,908a | ,825 | ,790 | 2,56837 | 1,202 |

a. Predictors: (Constant), CR, DER
b. Dependent Variable: Financial Distress
Source: Data processed by SPSS 27 (2026)

Because the DW value of 1.202 is between dU (0.8612) and dU (1.5621), namely:

**0.8612 < 1.202 < 1.5621**

Therefore, it can be concluded that the regression model in this study is inconclusive, so it cannot be definitively concluded whether or not autocorrelation exists in this regression model. Therefore, additional tests, such as the Run Test, were conducted to strengthen the conclusions. The results are presented in the following table:

**Runs Test**

| | Unstandardized Residual |
|---|---|
| Test Value[a] | ,70744 |
| Cases < Test Value | 6 |
| Cases >= Test Value | 7 |
| Total Cases | 13 |
| Number of Runs | 6 |
| Z | -,561 |
| Asymp. Sig. (2-tailed) | ,575 |

a. Median
Source: Data processed by SPSS 27 (2026)

Based on the results of the Runs Test, the Asymp. Sig. (2-tailed) value was obtained at 0.575, which means that the value is greater than 0.05 (0.575 > 0.05). Thus, it can be concluded that the residuals in this regression model are random, so there is no autocorrelation symptom between the residuals in the regression model.

The results of this Runs Test reinforce the conclusion that there is no autocorrelation, considering that the previous Durbin-Watson test result (DW = 1.202) was inconclusive and therefore could not provide a definitive conclusion. With these significant Runs Test results, it can be confirmed that the regression model in this study has met the non-autocorrelation assumption and is suitable for use in regression analysis and further hypothesis testing.

**3. Linear Regression Analysis**

**Table 9. Results of Multiple Linear Regression Analysis**

**Coefficientsa**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | | Collinearity Statistics |
|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. | Tolerance |
| 1 | (Constant) | -5,283 | 1,773 | | -2,980 | .014 | |
| | DER | .001 | .001 | .191 | 1,348 | .207 | .871 |
| | CR | .051 | .009 | .822 | 5,800 | .000 | .871 |


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Source: Data processed by SPSS 27 (2026)

Based on the results of multiple linear regression analysis in the Coefficients table, the following regression equation is obtained:

**Y = -5.283 + 0.001 DER + 0.051 CR**

Based on the regression equation, it can be interpreted that:

A. The constant (α) of -5.283 shows that if the Debt to Equity Ratio (DER) and Current Ratio (CR) variables are considered constant or have a value of zero, then the Financial Distress value is -5.283
B. The Debt to Equity Ratio (DER) regression coefficient of 0.001 indicates that every one unit increase in DER will increase the Financial Distress value by 0.001, assuming other variables remain constant (ceteris paribus).
C. The Current Ratio (CR) regression coefficient of 0.051 indicates that every one unit increase in CR will increase the Financial Distress value by 0.051, assuming other variables remain constant (ceteris paribus).

## 4. Hypothesis Testing

### A. t-test (Partial Test)

The t-test (partial) is one of the tests in regression analysis which is used to determine the influence of each independent variable.
(independent variable) individually or partially against the dependent variable (bound variable). The criteria in this test are: Based on the significance value (Sig.):

1) If the Sig. value is < 0.05, then the independent variable has a significant effect on the dependent variable ($H_0$ is rejected, $H_a$ is accepted).
2) If the Sig. value > 0.05, then the independent variable does not have a significant effect on the dependent variable ($H_0$ is accepted, $H_a$ is rejected).

Based on the comparison of t count and t table:

3) If t count > t table, then $H_0$ is rejected and $H_a$ is accepted.
4) If t count < t table, then $H_0$ is accepted and $H_a$ is rejected.

**Table 10. Results of the t-Test (Partial Test)**
**Coefficientsa**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | -5,280 | 1,773 | | -2,978 | ,014 |
| | DER | ,001 | ,001 | ,191 | 1,350 | ,207 |
| | CR | ,051 | ,009 | ,822 | 5,799 | ,000 |

a. Dependent Variable: Financial Distress

Source: Data processed by SPSS 27 (2026)

Based on Table 4.12 above, it can be seen that the t-table value with degrees of freedom (df) = n – k – 1 = 13 – 2 – 1 = 10 at a significance level of 0.05 is 2.228.

**a. The Influence of DER (Debt to Equity Ratio) on Financial Distress**

The calculated t value for the DER variable is 1.350 with a significance value of 0.027. Since the calculated t (1.350) > t table (2.228) and the Sig. value (0.027) < 0.05, it can be concluded that DER has a positive and significant effect on Financial Distress at PT Sepatu Bata Tbk. Thus, the hypothesis stating that DER has an effect on Financial Distress is rejected.

**b. The Effect of CR (Current Ratio) on Financial Distress**

The calculated t value for the CR variable is 5.799 with a significance value of 0.000. Since the calculated t (5.799) > t table (2.228) and the Sig. value (0.000) < 0.05,


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it can be concluded that CR has a positive and significant effect on Financial Distress at PT Sepatu Bata Tbk. Thus, the hypothesis stating that CR has an effect on Financial Distress is accepted.

**c. F Statistical Test (Simultaneous Significance Test)**

The F test (simultaneous) is a statistical test in regression analysis which is used to determine whether all independent variables (dependent variables) are independent variables) simultaneously have a significant influence on the dependent variable (bound variable). The basis for decision making in this test is:

Based on the significance value (Sig.):

a. If Sig. < 0.05, then $H_0$ is rejected and $H_a$ is accepted, meaning that the independent variables simultaneously have a significant effect on the dependent variable.
b. If Sig. > 0.05, then $H_0$ is accepted and $H_a$ is rejected, meaning that the independent variables simultaneously do not have a significant effect on the dependent variable.
c. Based on the comparison of F count and F table:
d. If F count > F table, then $H_0$ is rejected and $H_a$ is accepted.
e. If F count < F table, then $H_0$ is accepted and $H_a$ is rejected.

The F test is used to determine the effect of all independent variables simultaneously on the dependent variable. The F table value in this study with df1 = k = 2 and df2 = n – k – 1 = 10 at a significance level of 5% is 4.10.

**Table 11. Simultaneous F-Test Results**

**ANOVA**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 311,312 | 2 | 155,656 | 23,597 | ,000b |
| | Residual | 65,965 | 10 | 6,597 | | |
| | Total | 377,277 | 12 | | | |

a. Dependent Variable: Financial Distress
b. Predictors: (Constant), CR, DER

Source: Data processed by SPSS 27 (2026)

Based on table 11. above, the calculated F value is 23.597 with a significance value of 0.000. Because the calculated F (23.597) > F table (4.10) and the significance value (0.000) < 0.05, then H3 is accepted, which means that simultaneously (together) the DER and CR variables have a significant effect on Financial Distress. Thus, the regression model used in this study is suitable (fit) to predict the effect of the two independent variables on Financial Distress.

**5. Correlation Coefficient Test**

**Table 12. Correlation Coefficient Test Results**

**Model Summary**

| Model | R | R Square | Adjusted R Square | Standard Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | ,908a | ,825 | ,790 | 2,56837 | 1,202 |

a. Predictors: (Constant), CR, DER
b. Dependent Variable: Financial Distress

Source: Data processed by SPSS 27 (2026)


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The R value obtained was 0.908, which is in the interval 0.80 - 1.000, which means that there is a very strong relationship between the independent variables (DER and CR) together with the dependent variable (Financial Distress).

The R value approaching 1 indicates that the higher/lower the DER and CR values together, the more closely related they are to the increase/decrease in the level of Financial Distress at PT Sepatu Bata Tbk. Thus, it can be concluded that the two independent variables in this study have a very close and relevant relationship in explaining the company's Financial Distress condition.

**A. Coefficient of Determination ($R^2$) Test**

**Table 13. Results of the Coefficient of Determination ($R^2$) Test**

**Model Summary**

| Model | R | R Square | Adjusted R Square | Standard Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | ,908a | ,825 | ,790 | 2,56837 | 1,202 |

a. Predictors: (Constant), CR, DER

b. Dependent Variable: Financial Distress

Source: Data processed by SPSS 27 (2026)

The Adjusted R Square value of 0.790 indicates that the independent variables in this study, namely DER (Debt to Equity Ratio) and CR (Current Ratio), together are able to explain the variation that occurs in the dependent variable (Financial Distress) by 79%. Meanwhile, the remaining 21% (100% - 79%), is explained by other variables outside this research model that are not examined, such as profitability ratios, company size, operating cash flow, or other macroeconomic factors.

**Discussion of Analysis Results**

**1. The Influence of Debt to Equity Ratio on Financial Distress of PT Sepatu Bata Tbk**

In the SPSS output from the partial t-test results, the calculated t-value was 1.350 with a significance level of 0.207. This significance value is greater than 0.05 (0.207 > 0.05), so $H_0$ is accepted and $H_1$ is rejected. Thus, it can be concluded that the Debt to Equity Ratio (DER) does not have a significant effect on Financial Distress. This means that the increase or decrease in the proportion of debt to equity in the sample companies does not significantly explain changes in Financial Distress conditions. This result is inconsistent with the trade-off theory, which states that excessive debt will increase interest expenses and principal obligations that must be paid regularly, so that the cost of financial distress also increases. Based on this theory, the higher the DER, the greater the risk of a company experiencing Financial Distress.

This differs from the research conducted by Idarti & Hasanah (2018) entitled "Analysis of the Effect of Ownership Structure, Debt Policy, and Liquidity on Financial Distress," which showed that debt policy has a positive effect on increasing the risk of financial distress. The greater the amount of debt to equity, the higher the likelihood of a company experiencing financial distress. These results also differ from research conducted by Rizky & Lisdawati (2025) and Wahyuningtiyas & Retnania (2020), which both showed that debt and leverage policies have a positive and significant effect on increasing the risk of financial distress. These differences in results indicate that the effect of debt on financial distress is not always consistent, but can vary depending on the object, period, and characteristics of the data studied.

However, the results of this study are in line with the research conducted by Aji & Anwar (2022) entitled "The Effect of Leverage, Profitability, Liquidity, Sales Growth and Firm Size on Financial Distress in Pulp & Paper and Plastic & Packaging Companies Listed on the Indonesia Stock Exchange in 2016-2020" which results show that leverage has a positive but insignificant effect on Financial Distress, as well as Setiyawan (2020) who found


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that the debt ratio has no effect on Financial Distress in companies listed on the IDX...

**2. The Effect of Current Ratio on Financial Distress of PT Sepatu Bata Tbk**

In the SPSS output from the partial t-test results, the calculated t-value is 5.799 with a significance level of 0.000. This significance value is smaller than 0.05 (0.000 < 0.05), so $H_0$ is rejected and $H_2$ is accepted. Thus, it can be concluded that the Current Ratio (CR) has a positive and significant effect on Financial Distress. This means that changes in the company's liquidity level significantly explain changes in Financial Distress conditions, and the direction of the positive influence indicates that the higher the CR, the further the company's financial condition is from the risk of Financial Distress. This result is in line with signaling theory, because a high CR signals to investors and creditors that the company is able to meet its short-term obligations, while a decreasing CR is an early signal of a worsening company's financial condition.

This is in line with research conducted by Setiyawan (2020) entitled "The Effect of Ownership Structure, Profitability, Liquidity, Leverage, and Exchange Rates on Financial Distress in Companies Listed on the IDX in 2016-2017," which results indicate that the Current Ratio influences Financial Distress and supports signaling theory, in line with Altman's view in Maulidina (2014). These results are also in line with research conducted by Rochendi & Nuryaman (2022) and Rangga, Hapsari, Santoso, & Santoso (2025), which both show that liquidity has a significant effect on a company's Financial Distress. This indicates that companies with a good level of liquidity, namely having adequate ability to meet their short-term obligations, tend to have a healthier financial condition and thus avoid the risk of Financial Distress.

However, these results differ from those of Wahyuningtiyas & Retnania (2020), Elsa Yuda Pratiwi & Sudiyatno (2022), Indarti & Sapari (2020), and Idarti & Hasanah (2018), who found no significant effect of liquidity on financial distress, and those of Oktavia & Komara (2025), who found a negative effect. These differences in results may be due to differences in the research subjects, observation periods, and methods used to measure financial distress. In companies with relatively stable cash flow, liquidity may not be a major determining factor because short-term funding needs can still be met from other sources. Conversely, in companies whose performance continues to decline, liquidity is the factor most quickly impacted and most crucial for the company's ability to survive.

**3. The Influence of Debt to Equity Ratio and Current Ratio on Financial Distress of PT Sepatu Bata Tbk**

In the SPSS output from the simultaneous F Test results, the calculated F value was 23.597 with a significance level of 0.000. This significance value is smaller than 0.05 (0.000 <0.05), so $H_0$ is rejected and $H_3$ is accepted. Thus, it can be concluded that Debt to Equity Ratio (DER) and Current Ratio (CR) simultaneously have a significant effect on Financial Distress. This is in line with research conducted by Oktavia & Komara (2025) entitled "The Effect of ROA, Sales Growth, and Current Ratio on Financial Distress with Firm Size as a Moderator: Panel Data Regression Approach" whose results show that simultaneously, the independent variables studied have a significant contribution to Financial Distress.

Although DER partially has no significant effect on Financial Distress, when combined with CR in a single regression model, both variables are simultaneously able to explain the variation in Financial Distress significantly, with an Adjusted R Square value of 0.790 or 79%. This condition indicates that the Current Ratio plays a dominant role that drives the overall significance of the model, while DER still provides additional contributions in the Financial Distress prediction model even though its influence is not significant individually.


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## Conclusion

Based on the research results, it can be concluded that Debt to Equity Ratio (DER) does not have a significant effect on financial distress at PT Sepatu Bata Tbk for the period 2013–2025, with a significance value of 0.207. Meanwhile, Current Ratio (CR) has a positive and significant effect on financial distress, with a significance value of 0.000. Simultaneously, DER and CR have a significant effect on financial distress, as indicated by the calculated F value of 23.597 and a significance of 0.000. The research model has an Adjusted R Square value of 0.790, which indicates that the two independent variables are able to explain 79% of the variation in financial distress, while the remaining 21% is explained by other factors outside the model. This finding confirms that liquidity has an important role in describing a company's financial condition, especially when the ability to meet short-term obligations decreases. Although DER does not show a significant effect partially, these results do not mean that debt policy can be ignored in company financial management.

This study is limited by its single company, 13-year observation period, and the use of two independent variables. Therefore, the results cannot be generalized to other companies. Furthermore, negative equity in 2024 and 2025 resulted in extreme DER values, which should be considered when interpreting the regression results. Future research is recommended to use a broader sample of companies, extend the observation period, and include other variables, such as profitability, operating cash flow, sales growth, and company size, to obtain a more comprehensive picture of the factors influencing financial distress. Practically, PT Sepatu Bata Tbk needs to strengthen liquidity management by controlling current liabilities, optimizing current assets, and periodically evaluating cash flow. The company also needs to review its funding strategy and undertake equity recovery to improve its capital structure. For investors and creditors, the results of this study can be used as considerations in evaluating a company's ability to meet its obligations and identifying the risk of financial distress before making economic decisions.

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