ISSN: 2338-8412 e-ISSN : 2716-4411

**Ekombis Review – Jurnal Ilmiah Ekonomi dan Bisnis**
Available online at : https://jurnal.unived.ac.id/index.php/er/index
**DOI:** https://doi.org/10.37676/ekombis.v12i2

# The Effect of Market Value Ratio and Activity Ratio on Financial Distress in Technology Sector Companies Listed on The IDX 2021 - 2023

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***How to Cite :***
Nofita, C.N., Darmansyah, A. (2024). The Effect of Market Value Ratio and Activity Ratio on Financial Distress in Technology Sector Companies Listed on The IDX 2021 - 2023. EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis, 12(2). doi: https://doi.org/10.37676/ekombis.v12i2

**ARTICLE HISTORY**
*Received [14 December 2023]*
*Revised [20 March 2024]*
*Accepted [22 April 2024]*

***KEYWORDS***
Altman Z-Score, Financial Distress, EPS, PBV, TATO, FATO



**ABSTRACT**
Technological developments in Indonesia have encouraged the growth of the technology sector, however the tech winter phenomenon in 2022 caused a decline in investor interest, resulting in funding difficulties and potential financial distress for technology companies. This can be seen from the significant decline in the ROA profitability ratio. The decline in ROA indicates that technology companies are increasingly inefficient in managing assets to generate net profits. This condition has certainly received attention and the author wants to evaluate it in depth to prevent more severe negative impacts in the future. The aim of this research is to examine the influence of Earning Per Share (EPS), Price Book Value (PBV), Total Asset Turnover (TATO), and Fixed Asset Turnover (FATO) on predicting financial distress using the Altman Z-Score model in sector companies technology listed on the Indonesia Stock Exchange (IDX) for the period 2021Q1 to 2023Q2. This research uses 13 samples of technology sector companies listed on the IDX with a study period of 3 years. The company's financial data was analyzed using panel data regression analysis techniques to determine the influence of the independent variables on the dependent variable. The results of this study show that TATO is partially significant and has a positive effect on financial distress. EPS, PBV, FATO are partially not significant effect on financial distress. For EPS, PBV, TATO, FATO simultaneously have a significant effect on financial distress in technology sector companies. The findings of this research are expected to provide valuable insights for investors, creditors and other stakeholders in assessing the financial risks of technology companies and help them reduce the risk of losses.

## INTRODUCTION

In 2022, Indonesia is experiencing a tech winter phenomenon, a decrease in investor interest in technology companies (IDXChannel.com, 2023). This decrease in interest leads to obstacles in funding operations, causing technology sector companies to struggle financially. According to (Tempo.com, 2023) The impact of tech winter causes companies to run out of

funds, resulting in such in falling stock prices, decreasing innovation, slowing technology adoption, hiring freezes, and massive layoffs. In this case, bankruptcy can occur in companies, and investors are forced to tighten their investment choices to maximize returns and lower risks.

The goal of a company is to increase revenue. Companies should take early warnings and follow up when financial problems decline. Likewise, if the company is late in doing this, the greater the chance of the company going bankrupt (Usmany & Loupatty, 2021). One way to assess outcomes is a financial ratio study (Chandio J & Anwar, 2020). Financial ratios, liquidity, profitability, solvency, and activity ratios are essential indicators to results of financial condition (Fitri et al., 2022). Proactive monitoring of these ratios is crucial to prevent signs of financial distress. Ultimately, integrating a comprehensive financial distress model with strategic planning and decision-making processes can maintain a company's revenue flow and secure long-term financial health. Companies with high profitability are less likely to experience financial distress due to their large profits from operational activities (Handayati et al., 2022).

Financial distress models are important tools for a variety of stakeholders, including investors, bankers, asset managers, rating agencies, and financially distress businesses (Altman et al., 2017). Financial distress refers to a decline in a company's financial condition before bankruptcy, which can take up to three years (Ashraf et al., 2019). Financial distress occur when a company violates loan contracts, experiences continuous losses, or fails to fulfill obligations (Isayas, 2021). According to (Kazemian et al., 2017) Investors and creditors need to know the financial condition of a company in order to make informed decisions. Investors can also use financial distress to predict a company's ability to pay dividends, because companies with high financial risk may pay lower dividends or not pay dividends at all, thereby impacting their stock returns.

Altman Z-Score is a reliable analytical tool used to predict the potential bankruptcy of a company. This model is accurate, consistent, and has been tested both descriptively and statistically compared to other models (Eka Fauzi & Badawi Saluy, 2021). The Altman Z-score approach outperforms other methods in predicting company bankruptcy (Septyanto et al., 2022). The Altman Z-Score has been modified into two separate models to accommodate differences in characteristics between manufacturing and non-manufacturing companies. Five financial ratios are utilized by manufacturing companies to identify bankruptcy whereas a larger weighting ratio towards liquidity and profitability is used by non-manufacturing companies in replacement of the sales to total assets or activity ratio. The aim of these models is to better capture the characteristics of each sector, ensuring higher and more accurate predictions of potential financial distress.

## LITERATURE REVIEW

### Financial Ratio Analysis

Financial ratio analysis leverages a set of metrics derived from a company's financial statements to systematically evaluate its performance and overall financial health. These ratios help assess a company's ability to meet financial obligations, profitability, asset management efficiency, and overall financial stability. The five areas of financial ratio analysis are typically liquidity, activity, debt, profitability, and market ratios (Gitman & Zutter, 2015: 139). It aids stakeholders, investor, creditors, management, and analysts in making data-driven decisions and identifying strengths and weaknesses in the company.

### Market Value Ratio

Market value ratio is a type of financial ratio used to evaluate a company's stock price or market value. Through market ratios can determine whether a particular company's shares are overvalued or undervalued. According to (Gitman & Zutter, 2015: 131) Market ratios establish a connection between specific accounting values and a company's market value, as determined by

its stock price at the time. The market value ratio serves various functions, including stock valuation, investment decision making, company performance assessment, and identifying market sentiment. According to (Fahmi, 2020: 143) The most commonly used ratios include Earning Per Share (EPS), Price Earning Ratio (PER), Book Value per Share (BVS), Price Book Value (PBV), Dividend Yield Ratio, Dividend Payout Ratio, and Dividend Yield Ratio.

**Earning Per Share (EPS)**

Earning per share (EPS) is a profit given to shareholders from each share (Fahmi, 2020: 143). EPS represents the dollar amount earned during the period on behalf of each outstanding common share (Gitman & Zutter, 2015: 130). EPS is a commonly utilized accounting ratio, and the market value of a company's shares is significantly influenced by both the trend in EPS and the anticipated earnings in upcoming periods. EPS is closely watched by the investor community and is considered an important indicator of company success. The formula for EPS is as follows:

$$\text{EPS} = \frac{\text{Net income} - \text{Preferred Dividens}}{\text{Weighted Average Number of Share Outstanding}}$$

**Price Book Value (PBV)**

Price to Book Value (PBV) is one of the valuation ratios used to measure the market value of shares relative to their book value. PBV provides another indication regarding how investors view the company, companies that are viewed favorably by investors are those with low risk and have a high PBV value (Brigham & Houston, 2018: 144). The PBV ratio compares the market price of a stock to its book value per share, assessing whether a company's stock is overvalued or undervalued relative to its net assets. A lower PBV indicates a cheaper stock. The formula for PBV is as follows:

$$\text{Price Book Value} = \frac{\text{Market Price per Share}}{\text{Book Value per Share}}$$

**Activity Ratio**

Activity ratio is a measure of how much a business uses its resources to support its operations, whereby those operations are carried out to the fullest extent possible in order to yield the greatest possible results and In general, there are 4 activity ratios, namely Inventory Turnover (ITO), Account Receivable Turnover (ARTO), Fixed Asset Turnover (FATO) and Total Asset Turnover (TATO) (Fahmi, 2020: 137). The activity ratio calculates a company's efficiency in a number of areas, including billing, disbursements, and inventory control (Zutter & Smart, 2019: 141).

**Total Asset Turnover (TATO)**

Total Asset Turnover (TATO) is a ratio used to calculate how many sales are generated from each rupiah of assets owned by the company and to measure the turnover of all assets owned by the company (Kasmir, 2018: 185). This ratio sees the extent to which all assets owned by the company are effectively rotated (Fahmi, 2020: 140). According to (Zutter & Smart, 2019: 144) This ratio simply shows how many dollars of sales the company generates for every dollar of assets that have been invested in the business. A high value indicates efficient use of assets. The formula for TATO is as follows:

$$\text{Total Asset Turnover} = \frac{\text{Sales}}{\text{Total Asset}}$$

**Fixed Asset Turnover (FATO)**

The Fixed Asset Turnover (FATO) ratio is a profitability metric that assesses how well a company uses its fixed assets to support its operational activities and produce revenue. According to (Koh et al., 2014: 92) The fixed asset turnover ratio calculates the efficiency with which a company uses its plant and equipment. The higher the fixed asset turnover ratio, the more efficient and optimal the company is in utilizing its fixed assets to support the achievement of sales targets. The formula for FATO is as follows:

$$\text{Fixed Asset Turnover} = \frac{\text{Sales}}{\text{Fixed Asset}}$$

**Altman Z-Score**

The Altman Z-Score formula, created by Edward I. Altman in 1968, helps assess a company's bankruptcy risk. It differentiates between manufacturing and non-manufacturing companies, considering their different financial conditions.

Based on (Altman, 1968) that the Altman Z-Score model equation for manufactur company is as follows:

**Z-Score = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.0X5**

X1 = Working Capital / Total Assets (Liquidity Ratio)
X2 = Retained Earnings / Total Assets (Profitability Ratio)
X3 = Earnings Before Interest and Taxes (EBIT) / Total assets (Profitability Ratio)
X4 = Market value of equity / Book value of total liabilities (Solvency Ratio)
X5 = Sales / Total assets (Activity Ratio)
Z = Overall Index

**Table 1 Zone of Discriminant Manufacturing Company**

| Z Score | Zone of Discriminant |
|---|---|
| Z > 2,99 | Healthy Zone |
| 1,81 < Z < 2,99 | Grey Zone |
| Z < 1,81 | Bankruptcy Zone |

Based on (Altman, 1968) that the Altman Z-Score model equation for non manufactur company is as follows:

**Z-Score = 6.56X1 + 3.26X2 + 6.72X3 + 1.05X4**

X1 = Working Capital / Total Assets (Liquidity Ratio)
X2 = Retained Earnings / Total Assets (Profitability Ratio)
X3 = Earnings Before Interest and Taxes (EBIT) / Total Assets (Profitability Ratio)
X4 = Book Value of Equity / Total Liabilities (Solvency Ratio)
Z = Overall Index

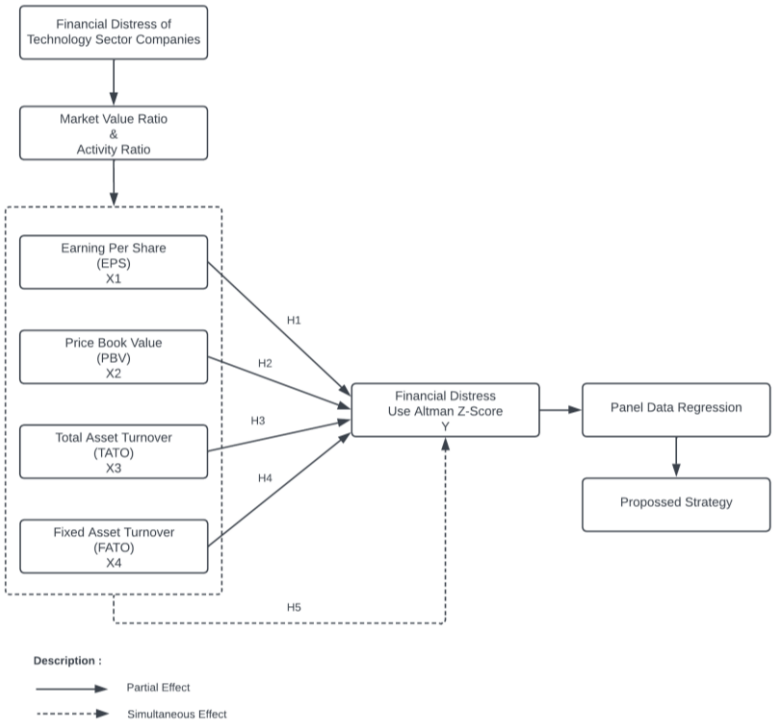
**Table 2 Zone of Discriminant Non Manufacturing Company**

| Z Score | Zone of Discriminant |
|---|---|
| Z > 2,6 | Healthy Zone |
| 1,1 < Z < 2,6 | Grey Zone |
| Z < 1,1 | Bankruptcy Zone |

## METHODS

### Conseptual Framework

**Figure 1 Conseptual Framework**




### Data Collection and Data Source

1. **Literature study**
   The literature study is the initial step in data collection, involving searching through written documents, journals, reference books, and digital sources to support the writing process.
2. **Secondary data collection**
   This study used secondary data from the IDX in the form of financial statement for the 13 companies that were sampled, covering the period 2021Q1–2023Q2.

**Table 3 List of Technology Sector Companies**

| No. | Code | Company |
|---|---|---|
| 1 | KIOS | Kioson Komersial Indonesia Tbk |
| 2 | MCAS | M Cash Integrasi Tbk. |
| 3 | DIVA | Distribusi Voucher Nusantara Tbk. |
| 4 | HDIT | Hensel Davest Indonesia Tbk. |
| 5 | DMMX | Digital Mediatama Maxima Tbk. |
| 6 | NFCX | NFC Indonesia Tbk. |
| 7 | EMTK | PT. Elang Mahkota Teknologi |
| 8 | ATIC | PT Anabatic Technologies Tbk |
| 9 | MLPT | PT Multipolar Technology Tbk |
| 10 | MTDL | PT Metrodata Electronics Tbk |
| 11 | LUCK | PT Sentral Mitra Informatika Tbk |
| 12 | DCII | PT DCI Indonesia Tbk |
| 13 | EDGE | PT Indointernet Tbk |

**Data Analysis Method**

**Descriptive Statistics**

Descriptive Statistics method are organizing, summarizing, and presenting data in an informative way (Lind D & Marchal W 2018: 4). The purpose of descriptive tests is to display basic data characteristics such as mean, median, maximum, minimum, standard deviation.

**Panel Data Regression**

Panel data regression is a statistical technique used to analyze the effect of one or more predictor variables on response variables over time and across observation units. This method combines the advantages of time-series and cross-sectional analysis to produce more accurate estimates.

$$Y = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + e$$

**Determination of The Estimation Model**

**Common Effect Model**

The Common Effect Model the most basic estimation method which assumes that time series and cross sectional are not correlated with independent variables in the context of panel data analysis. This model cannot differentiate time series and cross section variance because it has a fixed intercept.

**Fixed Effect Model**

The Fixed Effect Model incorporates entity heterogeneity by including individual intercepts for each entity. The fixed effect model has distinct intercepts for every subject or cross section; however, the intercepts for every subject remain constant over time (Gujarati & Porter, 2009: 242)

**Random Effect Model**

The Random Effects Model estimates panel data with residual variables that may be interconnected between time series and cross sections, and treats variation between entities as a model error component. Random effects models avoid the limitations of fixed effects models that rely on dummy variables.

**Determination of The Estimation Method**

**Chow Test**

The purpose of the Chow test is to evaluate the suitability of the Fixed Effect Model (FEM) vs the Common Effect Model (CEM) for panel data estimation. The significance of the link between the independent and dependent variables can be ascertained using this test

**Hausman Test**

The Hausman test has critical relevance in choosing between Fixed Effect Model (FEM) and Random Effect Model (REM) in panel data regression analysis. This test compares the consistency of the coefficients estimated by the random effects model with the fixed effects model.

**Lagrange Multiplier Test**

Lagrange Multiplier Test or also known as the Breusch-Pagan test, the Lagrange multiplier test is used to assess whether the Random Effect Model (REM) is more suitable to use compared to the Common Effect Model (CEM). The Lagrange Multiplier test is not used if the Chow test and Hausman test show that the most appropriate model is the Fix Effect Model (FEM) approach, therefore the Lagrange Multiplier Test can be ignored

**Classic Assumption Model**

According to (Basuki, 2016: 299) The classic assumption tests used by linear regression include Normality, Autocorrelation, Heteroscedasticity and Multicollinearity Tests, however in panel data regression Normality and Autocorrelation Tests are not carried out because the Normality Test is basically not a requirement for the Best Linear Unbias Estimator (BLUE) and the Autocorrelation Test only occurs in time series data, while panel regression data is time series and cross section.

**Multicollinearity Test**

The multicollinearity test is used in the regression model to ensure whether the independent variables have a linear relationship with each other. The variables in the worthy regression model are not correlated with each other (Basuki, 2016: 61).

**Heteroscedasticity Test**

The Heterodasticity test is a test conducted to determine the unequal variances of the residuals of all observations in the regression model, where the regression model must meet the requirements of the absence of heterodasticity (Basuki, 2016: 63)

**Hypothesis testing**

**T Test (Partial Test)**

T-test can be used to statistically evaluate its significance within the regression model (Anderson D, 2013: 702).

**F Test (Simultaneous Test)**

The F-test serves as a statistical tool to assess whether a statistically significant relationship exists between the dependent variable and the entirety of the independent variables collectively (Anderson D, 2013: 699).

**Coefficient of Determination Test**

R-squared or coefficient of determination, is a metric that expresses how much of the variance in the dependent variable Y is attributable to variations in the independent variable X. (Lind D & Marchal W 2018: 463).

## RESULTS AND DISCUSSION

**Altman Z-Score**

**Table 4 Altman Z-Score Results on Technology Sector Companies**

| Category | 2021 | | | | 2022 | | | | 2023 | | Percentage | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | |
| Healty Zone > 2.6 | 10 | 10 | 10 | 10 | 10 | 11 | 10 | 12 | 10 | 11 | 80.00 % | 104 |
| Grey Zone 1,1 < Z < 2,6 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | - | 2 | - | 10.77 % | 14 |
| Bankruptcy Zone Z < 1,1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 9.23% | 12 |

The Altman Z-Score table indicates that most technology sector companies are in the Healthy Zone, with minimal bankruptcy risk, while some in the Grey Zone dan Bankruptcy Zone.

**Descriptive Statistics**

**Table 5 Descriptive Statistics Result**

| | Y (Z-Score) | X1 (EPS) | X2 (PBV) | X3 (TATO) | X4 (FATO) |
|---|---|---|---|---|---|
| Mean | 7.876778 | 79.20054 | 921.2348 | 1.487514 | 28.87758 |
| Median | 5.766599 | 29.22000 | 411.7510 | 0.811114 | 8.217107 |
| Maximum | 42.27148 | 954.9600 | 11815.26 | 11.61054 | 257.2593 |
| Minimum | -1.504800 | -364.9300 | 14.45174 | 0.066122 | 0.076066 |
| Std. Dev. | 7.155562 | 163.4447 | 1814.594 | 1.842684 | 49.76835 |
| Observation | 130 | 130 | 130 | 130 | 130 |

For the Z-Score, the average is 7.87, indicating that the overall Z-score is above 2.6 which can indicate good financial health of the company.

**Chow Test**

**Table 6 Chow Test Result**

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

| Effect Test | Statistic | d.f | Prob. |
|---|---|---|---|
| Cross-section F | 12.791385 | (12,113) | 0.0000 |
| Cross-section Chi-square | 111.536585 | 12 | 0.0000 |

The Chow Test table indicates that the probability value is less than 0.05 due to the cross section probability value of 0.0000, indicating that the Fixed Effect Model is tested using the Chow Test.

**Hausman Test**

**Table 7 Hausman Test Result**

Correlated Random Effects – Hausman Test
Equation: Untitled
Test cross-section random effects

| Test Summary | Chi-Sq. Statistic | Chi-Sq d.f | Prob. |
|---|---|---|---|
| Cross-section random | 9.561068 | 4 | 0.0485 |

The Hausman Test indicates that the Fix Effect Model is supported by the data, since the random cross section probability value is 0.0485, and the probability value is less than 0.05. The Fixed Effect Model (FEM) approach is the most appropriate model if the Hausman and Chow tests indicate so, and the Lagrange multiplier test is not applied.

**Fixed Effect Model**

**Table 8 Fixed Effect Model Result**

Dependent Variable: Y
Method Panel Least Square
Date: 12/09/23 Time: 15:21
Sample: 2021Q1 2023Q2
Periods include: 10
Cross-sections included: 13
Total panel (balanced) observation

| Variable | Coefficient | Std. Error | t-Statistic | Prob |
|---|---|---|---|---|
| C | 6.758938 | 0.760539 | 8.887041 | 0.0000 |
| X1 (EPS) | -0.002535 | 0.002788 | -0.909232 | 0.3652 |
| X2 (PBV) | 0.000115 | 0.000511 | 0.226035 | 0.8216 |
| X3 (TATO) | 1.396959 | 0.528971 | 2.640897 | 0.0094 |
| X4 (FATO) | -0.029978 | 0.021712 | -1.380708 | 0.1701 |

Effects Specification

| Cross-section fixed (dummy variables) | | | |
|---|---|---|---|
| R-squared | 0.687895 | Mean dependent var | 7.876778 |
| Adjusted R-squared | 0.643704 | S.D. dependent var | 7.155562 |
| S.E. of regression | 4.271196 | Akaike info criterion | 5.863057 |
| Sum squared resid | 2061.472 | Schwarz criterion | 6.238042 |
| Log likelihood | -364.0987 | Hannan-Quinn criter | 6.015426 |

$$\mathbf{Y = 6.7558938 + -0.002535X_1 + 0.000115X_2 + 1.396959X_3 + -0.029978X_4}$$

| | | | |
|---|---|---|---|
| F-statistic | 15.56613 | Durbin-Watson stat | 2.355047 |
| Prob(F-statistic) | 0.000000 | | |

The above equation can be interpreted as follows:

$\beta_1$ EPS = -0.002535
An increase in EPS of one unit is associated with a decrease in financial distress of 0.002535 in technology companies listed on the Indonesia Stock Exchange between 2021Q1 to 2023Q2 assuming other variables are constant

$\beta_2$ PBV = 0.000115
An increase in PBV of one unit is associated with a increase in financial distress of 0.000115 in technology companies listed on the Indonesia Stock Exchange between 2021Q1 to 2023Q2 assuming other variables are constant

$\beta_3$ TATO = 1.396959
An increase in TATO of one unit is associated with a increase in financial distress of 1.396959 in technology companies listed on the Indonesia Stock Exchange between 2021Q1 to 2023Q2 assuming other variables are constant

$\beta_4$ FATO = -0.029978
An increase in FATO of one unit is associated with a decrease in financial distress of 0.029978 in technology companies listed on the Indonesia Stock Exchange between 2021Q1 to 2023Q2 assuming other variables are constant

**Multicollinearity Test**

**Table 9 Multicollinearity Test Result**

| | X1 (EPS) | X2 (PBV) | X3 (TATO) | X4 (FATO) |
|---|---|---|---|---|
| X1 (EPS) | 1.000000 | -0.035187 | -0.039593 | -0.032195 |
| X2 (PBV) | -0.035187 | 1.000000 | -0.201392 | -0.191401 |
| X3 (TATO) | -0.039593 | -0.201392 | 1.000000 | 0.718765 |
| X4 (FATO) | -0.032195 | -0.192401 | 0.718765 | 1.000000 |

We can observe from the above table that there is no correlation between the independent variables and that there is no multicollinearity because no independent variable has a correlation value larger than 0.8.

**Heteroscedasticity Test**

**Table 10 Heteroscedasticity Test Result**

Dependent Variable : RESABS
Method: Panel Least Square
Date: 12/09/23 Time: 15:27
Sample: 2021Q1 2023Q2
Periods included: 10
Cross-sections included: 13
Total panel (balanced) observation: 130

| Variable | Coefficient | Std. Error | t-Statistics | Prob |
|---|---|---|---|---|
| C | 3.919817 | 0.569016 | 6.888762 | 0.0000 |
| X1 (EPS) | -0.003772 | 0.002086 | -1.807999 | 0.0733 |
| X2 (PBV) | 9.94E-05 | 0.000382 | 0.260168 | 0.7952 |
| X3 (TATO) | 0.614742 | 0.395763 | 1.553308 | 0.1231 |
| X4 (FATO) | -0.007281 | 0.016245 | -0.448191 | 0.6549 |

Effect Specifications

| Cross-section fixed (dummy variables) | | | |
|---|---|---|---|
| R-squared | 0.503811 | Mean dependent var | 4.416853 |
| Adjusted R-squared | 0.433555 | S.D. dependent var | 4.245939 |
| S.E. of regression | 3.195603 | Akaike info criterion | 5.282820 |
| Sum squared resid | 1153.942 | Schwarz criterion | 5.657806 |
| Log likelihood | -326.3833 | Hannan-Quinn criter | 5.435189 |
| F-statistic | 7.170998 | Durbin-Watson stat | 2.088371 |
| Prob(F-statistic) | 0.000000 | | |

Based on the table above, it can be seen that the probability value of the variables X1 (EPS), X2 (PBV), X3 (TATO), X4 (FATO) have value above 0.05, where there is no heteroscedasticity problem residual of this regression model.

**T Test (Partial Test)**

**Table 11 T Test (Partial Test) Result**

| Variable | Coefficient | Std. Error | t-Statistic | Prob |
|---|---|---|---|---|
| C | 6.758938 | 0.760539 | 8.887041 | 0.0000 |
| X1 | -0.002535 | 0.002788 | -0.909232 | 0.3652 |
| X2 | 0.000115 | 0.000511 | 0.226035 | 0.8216 |
| X3 | 1.396959 | 0.528971 | 2.640897 | 0.0094 |
| X4 | -0.029978 | 0.021712 | -1.380708 | 0.1701 |

The formulation of t-Table as follows :
t-table = (α / 2; n-k-1)
t-table = (0.05 / 2; 130 – 4 – 1 )
t-table = (0.025; 125)
t-table = 1.98

**X1 Earning Pershare (EPS)**
EPS has no partial effect of the Financial Distress. From the eviews output, the regression transformation t-statistic test value is -0.909232 with significant value is 0.3652. It means t-statistic < t-table and probability value > 0.05. Where EPS has not a partial significant effect to the Financial Distres

**X2 Price Book Value (PBV)**
PBV has no partial effect of the Financial Distress. From the eviews output, the regression transformation t-statistic test value is 0.226035 with significant value is 0.8216. It means t-statistic < t-table and probability value > 0.05. Where PBV has not a partial significant effect to the Financial Distress

**X3 Total Asset Turnover (TATO)**
TATO has partial effect of the Financial Distress. From the eviews output, the regression transformation t-statistic test value is 2.640897 with significant value is 0.0094. It means t-statistic > t-table and probability value < 0.05. Where TATO has a partial significant and positive effect on the Financial Distress

**X4 Fixed Asset Turnover (FATO)**
FATO has no partial effect of the Financial Distress. From the eviews output, the regression transformation t-statistic test value is -1.380708 with significant value is 0.1701. It means t-statistic < t-table and probability value > 0.05. Where FAT has not a partial significant effect to the Financial Distress

**F Test (Simultaneous Test)**

**Table 12 F Test (Simultaneous Test)**

| Effects Specification | | | |
|---|---|---|---|
| Cross-section fixed (dummy variables) | | | |
| R-squared | 0.687895 | Mean dependent var | 7.876778 |
| Adjusted R-squared | 0.643704 | S.D. dependent var | 7.155562 |
| S.E. of regression | 4.271196 | Akaike info criterion | 5.863057 |
| Sum squared resid | 2061.472 | Schwarz criterion | 6.238042 |
| Log likelihood | -364.0987 | Hannan-Quinn criter | 6.015426 |
| F-statistic | 15.56613 | Durbin-Watson stat | 2.355047 |
| Prob(F-statistic) | 0.000000 | | |

The formulation of F-table as follows :
F-table = (k; n-k)
F-table = (4; 130-4)
F-table = (4; 126)
F-table = 2.45

From the table show that ouput eviews the F-statistic is 15.56613 with the F-Statistic 15.56613

and Prob(F-statistic) is 0.000000. It means F-statistic > F-table and Prob(F-statistic) < 0.05. It can be concluded that the coefficient EPS, PBV, TATO, FATO simultaneously significant effect to the Financial Distress.

**Coefficient of Determination Test**

**Table 13 Coefficient of Determination Test**

| Effects Specification | | | |
|---|---|---|---|
| Cross-section fixed (dummy variables) | | | |
| R-squared | 0.687895 | Mean dependent var | 7.876778 |
| Adjusted R-squared | 0.643704 | S.D. dependent var | 7.155562 |
| S.E. of regression | 4.271196 | Akaike info criterion | 5.863057 |
| Sum squared resid | 2061.472 | Schwarz criterion | 6.238042 |
| Log likelihood | -364.0987 | Hannan-Quinn criter | 6.015426 |
| F-statistic | 15.56613 | Durbin-Watson stat | 2.355047 |
| Prob(F-statistic) | 0.000000 | | |

According to the table, the percentage influence of the independent variables EPS, PBV, TATO, and FATO on financial distress is 68.78%, while the remaining 31.22% is influenced by other variables not examined in this research. This implies that EPS, PBV, TATO, and FATO explain the majority of the variation in financial distress, despite the fact that other unexplored factors were not considered in this study.

## CONCLUSION

1. EPS partially does not have a significant and positive effect on Financial Distress in Altman Z-Score of technology sector companies listed in Indonesia Stock Exchange 2021 – 2023
2. PBV partially does not have a significant and positive effect on Financial Distress in Altman Z-Score of technology sector companies listed in Indonesia Stock Exchange 2021 – 2023
3. TATO partially has a significant and positive effect on Financial Distress in Altman Z-Score of technology sector companies listed in Indonesia Stock Exchange 2021 – 2023
4. FATO partially does not have a significant and positive effect on Financial Distress in Altman Z-Score of technology sector companies listed in Indonesia Stock Exchange 2021 – 2023
5. EPS, PBV, TATO, FATO simultaneously significant effect on Financial Distress.
6. Panel data regression result show the Financial Distress can be explained 68.78% by EPS, PBV, TATO, and FATO while the remaining 31.22% can be explained by other reason outside the model.

## Suggestion

1. Technology sector companies should maintain and increase asset utilization efficiency to increase sales and profitability.
2. Investors should focus on companies with efficient asset optimization and consider the Total Asset Turnover ratio in analyzing financial statements.
3. Future researchers should consider adding other variables to account for financial distress, as 68.78% can be explained by EPS, PBV, TATO, and FATO while the remaining 31.22% can be explained by other factors outside the model.

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