

Analysis of Financial Distress and Bankruptcy Using the Altman Z-Score Method on the Indonesia Stock Exchange (IDX) in 2020 - 2022

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Abstract

This research analyzes financial distress and bankruptcy using the Altman Z-Score method and its influence on share prices in construction service companies listed on the Indonesia Stock Exchange (IDX) for 2020 - 2022. The variables tested in this research consist of working capital to total assets, retained earnings to total assets, earnings before interest and tax to total assets, market value of equity to book value of debt, sales to total assets as independent variables, and share prices as dependent variables. The population in this research is construction services companies listed on the Indonesia Stock Exchange for 2020 - 2022. The sampling technique used in this research is purposive sampling, and a sample of 63 data from 21 construction services companies listed on the Indonesia Stock Exchange in 2020-2022 that meet specific criteria was obtained. The data analysis technique used in the research is panel data regression analysis and classical assumption testing using EViews version 13 statistical software. This research shows that in 2020, 18 construction service companies were in the distress zone and 3 companies were in the gray zone. In 2021, 17 construction service companies will be in the distress zone and 4 in the gray zone. In 2022, 17 construction service companies will be in the distress zone and 4 in the gray zone. The earnings before interest and tax to total assets have a significant effect and positive relationship with share prices. Working capital to total assets, retained earnings to total assets market value of equity to book value of debt, and sales to total assets do not have a significant effect and have a negative relationship to stock prices.

Keywords: Financial Distress, Stock Price, Altman Z-Score

JEL Codes: G01, G32, G33.

How to Cite:

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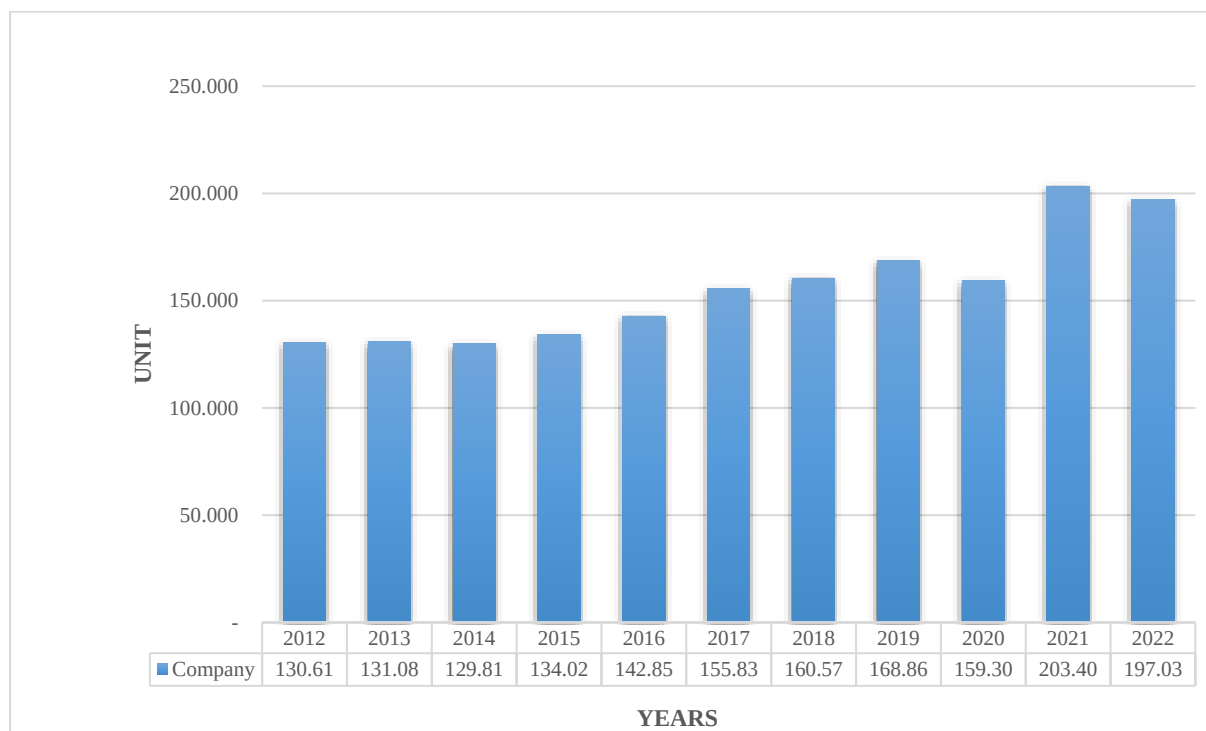
1. Introduction

The infrastructure sector is a sector that in recent years has become the focus of the Indonesian government. Infrastructure development is a vital aspect of accelerating the national development process. Infrastructure also has a significant role as one of the driving wheels of economic growth. The national economic growth rate cannot be separated from the availability of infrastructure, such as transportation facilities, energy, toll roads, ports, airports, and non-building construction. Therefore, this infrastructure development is the initial foundation for further economic development.

Performance in the construction services sector starkly contrasts share price movements. When construction issuers announced increases in performance, such as revenue and net profit, their share prices experienced a sharp decline. Negative issues began to emerge to justify the decline in share prices of construction issues.

Many construction issuers have recorded positive performance, but investors feel they don't care because the cash flow from the operations of construction issuers is negative.

Table 1. Number of Contractor Companies in Indonesia 2012-2022



From the table data above, the Central Statistics Agency (BPS) noted that the number of construction companies in Indonesia will be 197,030 units in 2022. This number was corrected by 3.13% compared to the previous year, which reached 203,403 units.

Construction service companies generally have unstable financial conditions. This instability can lead to financial difficulties. Financial distress is a stage of decline in financial conditions that occurs in a company before bankruptcy or liquidation according to Platt HD and Platt MB (2008:129-162).

Aghajani and Jouzbarkand (2012) formulated that financial distress is a situation where a company or person is in a weak financial position. This is because the company's income from

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sales has decreased, resulting in the company experiencing a decrease in funds, so the income obtained is smaller than the obligations and money due. If this situation continues continuously the company will be insolvent or bankrupt.

There are several financial analysis models to view potential financial distress that have been developed by many researchers. In this research the author tries to use Altman's Z-Score theory (1968), to see predictions of financial distress in each model. The development of this potential bankruptcy research method began when Beaver (1966:71-111) introduced a simple univariate analysis of financial ratios to see the potential for bankruptcy in the future. Altman's (1968) model uses a multivariate method. In statistics, determining this formula using Multivariate Discriminant Analysis (MDA) is an analytical tool for predicting company bankruptcy through a combination of liquidity, profitability, leverage, and activity ratio equations. Apart from being an analytical tool, Altman's Multivariate Discriminant Analysis (MDA) equation is also used to characterize or differentiate one group of companies from another group of companies. From the data analysis technique stage, the results obtained were that there were differences in financial performance between delist and non-delist companies based on Altman's Multivariate Discriminant Analysis (MDA) calculations and obtained the level of accuracy of Altman's Multivariate Discriminant Analysis (MDA) in predicting financial difficulties and bankruptcy of a company to discriminate 2 (two) groups of delist and non-delist companies have an average accuracy rate of 90%. So, it can be said that Altman's Multivariate Discriminant Analysis (MDA) equation examined in this research is suitable for predicting company difficulties and bankruptcy.

The Z-Score model is a bankruptcy prediction model discovered by Edward I. Altman in 1968. The Z-Score model uses the Multiple Discriminant Analysis (MDA) method with 5 (five) types of financial ratios. The Z-score model is a model that pioneered the Multi Discriminant Analysis Model and has been used widely throughout the world. According to Supardi & Mastuti (2003), the Z-Score method is a score determined from a standard calculation of times financial ratios which will indicate the level of probability of company bankruptcy. According to Hadi & Anggraeni (2008), the Altman or Z-Score prediction model is the best predictor among the three bankruptcy prediction models, namely the Zmijewski model and the Springate model. This Z-Score model aims to find the Z value, this value is a value that can indicate the financial condition of a company, whether it is in a healthy or unhealthy condition, and can show the company's performance. This opinion is also supported by several studies including McKeown (1991), while Emery (2004:844) states that the Multivariate Discriminates Analysis (MDA) Altman Model often called Altman's Z-Score is an analytical tool that can be used to assess performance.

One of the most famous financial distress analysis models is the Altman Z-score proposed by Edward I. Altman, a professor of finance from New York University in 1968. According to Hermanto and Agung (2015:241), the Altman Z-score analysis Score is a tool used to predict the level of bankruptcy of a company by calculating the value of several ratios and then entering them into a discriminant equation. Altman Z-score uses several ratios to create a difficulty prediction tool. Altman Z-score uses statistical techniques (multiple discriminant analysis) to produce a predictive tool that is a linear function of several explanatory variables. This predictive tool classifies or predicts the possibility of a company going bankrupt or not using the 5 (five) financial ratios used in the Z-score. According to Harahap (2015:353), the Altman Z-score is calculated as follows:

$$Z = 1,2 X1 + 1,4 X2 + 3,3 X3 + 0,6 X4 + 0,99 X5$$

Remark:

Z = Bankruptcy Index

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 debt

X5 = Sales to total assets

Table 2. Discriminant Zone

Z-Score Value	Remark
> 2,99	<i>Non-Distress Area</i>
1,81 - 2,99	<i>Grey Area</i>
< 1,81	<i>Distress Area</i>

Source: (Harahap, 2015)

2. Literature Review

2.1 Working capital

According to Kasmir (2016:251-252), working capital is capital used to carry out a company's operational activities. Working capital is defined as investment invested in current assets or short-term assets, such as cash, bank, securities, receivables, inventories, and other current assets.

2.2 Retained earnings

According to Hanafi and Halim (2014: 100), retained earnings show the company's ability to generate retained earnings from the company's total assets. Retained earnings are profits that are not distributed to shareholders. Retained earnings show how much of a company's income is not paid out in the form of dividends to shareholders. Retained earnings reported on the balance sheet are not cash and are not available for dividend payments or anything else.

2.3 Earnings Before Interest and Tax (EBIT)

Profit before interest and tax is profit that has not been deducted from the company's interest expense and income tax within a certain period. It is also the total profit obtained by the company in the current year before deducting interest expenses and income taxes.

According to Stice (2009:295), profit before interest and tax expenses is "operating profit (operating expense) is the difference between gross profit and operating expenses. In general, operating expenses are all operating expenses except interest expenses and income taxes. So operating profit can also be called profit before interest and taxes (Earnings before interest and taxes/ EBIT).

2.4 Book Value of Equity

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The market value of equity itself is obtained by multiplying the number of ordinary shares in circulation by the market price per ordinary share (close review). According to Arini and Triyonowati (2013), the book value of equity is obtained by adding up the company's capital with additional paid-in capital plus accumulated retained earnings and non-controlling ownership.

2.5 Book Value of Debt

According to Arini and Triyonowati (2013), the book value of debt is obtained by adding up current liabilities and long-term liabilities.

2.6 Sales

According to Carl S. Warren et al (2015), sales are the total amount charged to customers for merchandise sold, including cash and credit sales.

2.7 Total Assets

According to Carl S. Warren et al (2015), fixed assets are assets that are long-term or relatively permanent, such as equipment, machinery, buildings, and land.

2.8 Bankruptcy

Bankruptcy according to Raffles (2015) in Hanafi (2010:638) states "A company can be said to be bankrupt if the company experiences mild difficulties (such as liquidity problems) and more serious difficulties, namely solvable (debts are greater than assets)". According to Mukhlisah (2011), bankruptcy is usually defined as the failure of a company to carry out its operations to generate profits. Bankruptcy is also often called company liquidation company closure or instability.

2.9 Share price

The share price is the closing market price during the observation period for each type of stock sampled and movements are always observed by investors. The rise and fall in share prices are something normal. If a stock experiences high demand, then the price will rise, conversely, if supply is high then the price will fall.

According to Brigham and Houston (2015:7), share prices determine the wealth of shareholders. Maximizing shareholder wealth translates into maximizing the company's share price. The share price at any given time will depend on the cash flows expected to be received in the future by the average investor."

In research conducted by Yaofeng Hu, Zhan Qi, Di Wang, and Yansen Wu (2022), Under the premise of using the annual stock return rate as an indicator of stock returns, this paper finds that Z-scores have a positive correlation with the annual return rate of airline companies in the US market, i.e., a high Z-score implies better market performance in the US market.

3. Research Method

The research method used in this scientific research is descriptive quantitative.

Place and Time of Research

1. Research Place

Research was conducted on Construction Services Companies listed on the Indonesian Stock Exchange (IDX) for the 2020-2022 period, based on data obtained through the official website

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of the Indonesian Stock Exchange at www.idx.co.id. The object of this research.

2. Research Time

The time used in this scientific research is 3 (three) months, from July to September 2023.

Table 3. List of Company Names presented in the Population

No	Emiten Code	Name of Company	Date IPO	2020	2021	2022
1	ACST	Acset Indonusa	24 Jun 2013	✓	✓	✓
2	ADHI	Adhi Karya (Persero)	18 Mar 2004	✓	✓	✓
3	RONY	Aesler Grup Internasional	9 Apr 2020	✓	✓	✓
4	BUKK	Bukaka Teknik Utama	29 Jun 2015	✓	✓	✓
5	PTDU	Djasa Ubersakti	8 Des 2020	✓	✓	✓
6	IDPR	Indonesia Pondasi Raya	10 Des 2015	✓	✓	✓
7	JKON	Jaya Konstruksi Manggala Pratama	4 Des 2007	✓	✓	✓
8	TAMA	Lancartama Sejati	10 Feb 2020	✓	✓	✓
9	MTPS	Meta Epsi	10 Apr 2019	✓	✓	✓
10	MTRA	Mitra Pemuda	10 Feb 2016	✓	✓	-
11	DGIK	Nusa Konstruksi Enjiniring	19 Des 2007	✓	✓	✓
12	NRCA	Nusa Raya Cipta	27 Jun 2013	✓	✓	✓
13	PBSA	Paramita Bangun Sarana	28 Sept 2016	✓	✓	✓
14	PTPP	PP (Persero)	9 Feb 2010	✓	✓	✓
15	PPRE	PP Presisi	24 Nov 2017	✓	✓	✓
16	PTPW	Pratama Widya	7 Feb 2020	✓	✓	✓
17	SSIA	Surya Semesta Internusa	27 Mar 1997	✓	✓	✓
18	TOTL	Total Bangun Persada	25 Jul 2006	✓	✓	✓
19	TOPS	Totalindo Eka Persada	16 Jun 2017	✓	✓	✓
20	WSKT	Waskita Karya (Persero)	19 Des 2012	✓	✓	✓
21	WIKA	Wijaya Karya (Persero)	29 Okt 2007	✓	✓	✓
22	WEGE	Wijaya Karya Bangunan Gedung	30 Nov 2017	✓	✓	✓

Table 3 Research Sampling

Description	Total
All construction service companies registered on IDX	22
Inactive companies during the research period (2020 - 2022)	1
Number of samples for each year	21
Total observation data for 3 years (21 companies x 3 years)	63

Based on the type, the variables in this research are divided into:

Independent Variables

In this research, the independent variables used are:

1. Working capital to total assets (X_1)

This ratio evaluates the company's ability to fulfill its short-term obligations.

$$X_1 = \frac{\text{Working Capital}}{\text{Total Assets}}$$

2. Retained earnings to total assets (X_2)

This ratio is used to evaluate the company's ability to generate operating profits with the assets it owns.

$$X_2 = \frac{\text{Retained Earnings}}{\text{Total Assets}}$$

3. Earnings before interest and tax to total assets (X_3)

The aggregate amount of current and deferred taxes is considered in determining a company's profit or loss.

$$X_3 = \frac{\text{Earnings Before Interest and Tax}}{\text{Total Assets}}$$

4. Market value of equity to book value of debt (X_4)

This ratio evaluates the company's ability to guarantee its debt with capital.

$$X_4 = \frac{\text{Market Value of Equity}}{\text{Book Value of Debt}}$$

5. Sales to total assets (X_5)

This ratio is used to measure the Company's ability to use assets to generate sales.

$$X_5 = \frac{\text{Sales}}{\text{Total Assets}}$$

Dependent Variable

The dependent variable used in this research is stock price (Y).

The conceptual framework used to describe the relationship between working capital to total assets (X_1), retained earnings to total assets (X_2), earnings before interest and tax to total assets (X_3), market value of equity to book value of debt (X_4), sales to total assets (X_5) to share price (Y):

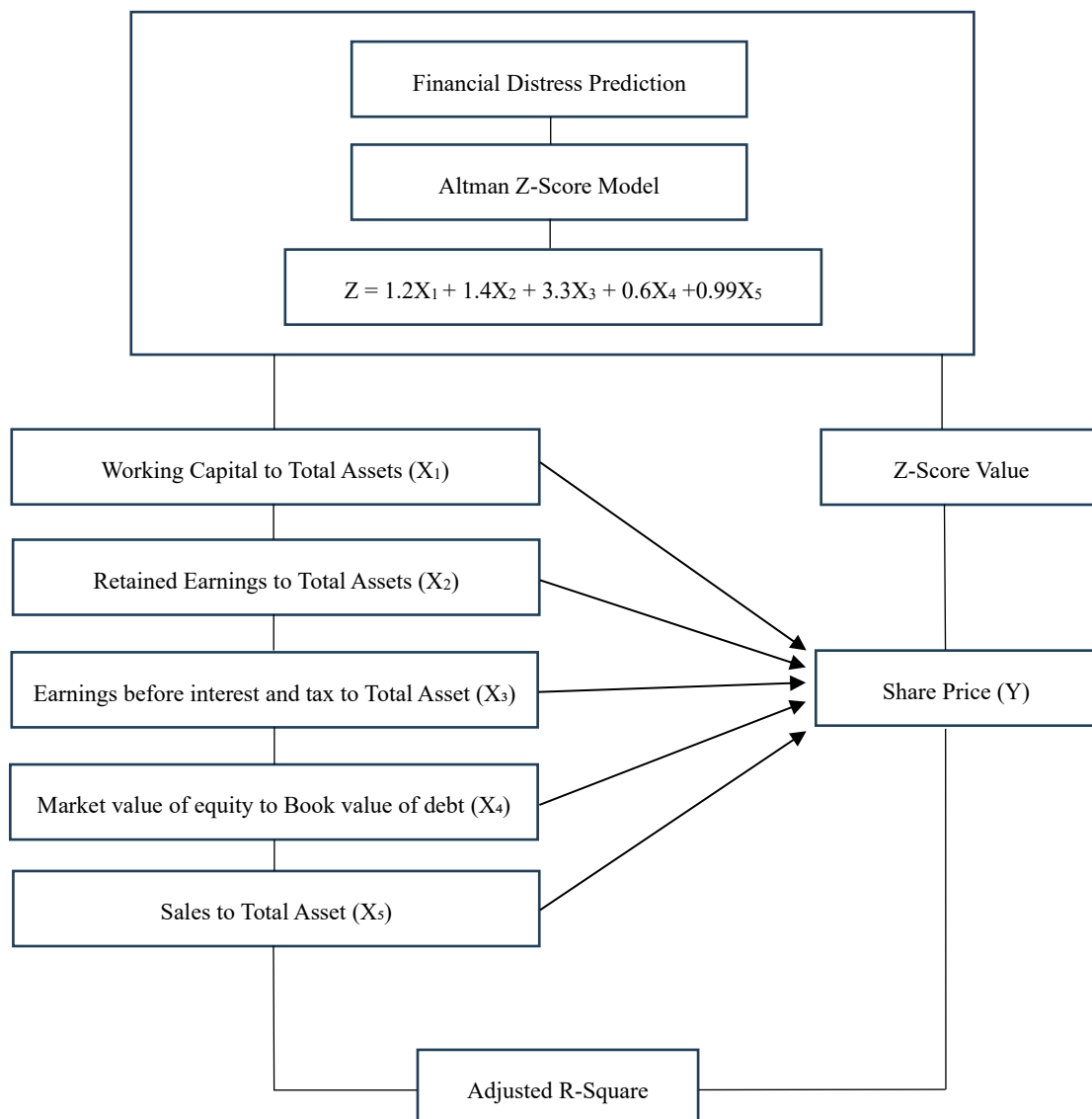


Figure 1. Research Model

The sample for this research is all construction service companies listed on the Indonesia Stock Exchange in 2020-2022. The research sample was obtained using a purposive sampling technique, with established criteria, criteria are as follows:

1. Companies that consistently operate during the research period 2020-2022.
2. Companies that have a financial year-end period as of December 31.

Based on these criteria, one of 22 companies cannot be used as a sample in this study. The tool used to manage data for this research is multiple linear regression analysis, which produces coefficients of determination and correlation coefficient values.

Multiple linear regression tests the influence of two or more variables.

The hypotheses in this research are:

Hypothesis 1:

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Ho1: There is no influence of working capital to total assets on share prices.

Ha1: There is an influence of working capital to total assets on share prices.

Hypothesis 2:

Ho2: There is no influence of retained earnings on total assets on share prices.

Ha2: There is an influence of retained earnings on total assets on share prices.

Hypothesis 3:

Ho3: There is no influence of earnings before interest and tax on total assets on share prices.

Ha3: Earnings before interest and tax on total assets influence share prices.

Hypothesis 4:

Ho4: There is no influence of the market value of equity to the book value of debt on share prices.

Ha4: The market value of equity influences the book value of debt on share prices.

Hypothesis 5:

Ho5: Sales do not influence total assets and share prices.

Ha5: There is an influence of sales to total assets on share prices.

4. Findings and Discussions

4.1 Findings

The data used is panel data so its use must meet panel data regression testing, namely:

1. Classic Assumption Test

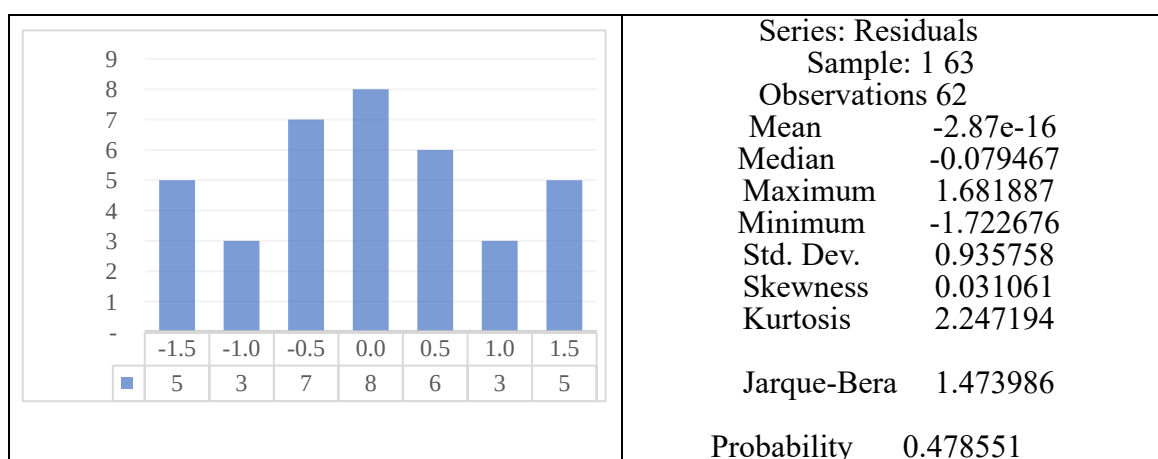
The following are the results of the classic assumption test:

Normality Test

The table below shows that the Jarque-Bera probability value is $0.478 > 0.05$, meaning that the residual research data is normally distributed.

The following are the results of the normality test:

Table 4 Normality Test



Source: Analyze results from secondary data

Multicollinearity Test

The following are the results of the multicollinearity test:

Table 5 Multicollinearity Test

	EBITTA	MVEBVD	RETA	WCTA	STA
EBITTA	1.000000	-0.491643	0.456487	-0.174445	-0.217412
MVEBVD	-0.491643	1.000000	-0.849934	0.110191	-0.229997
RETA	0.456487	-0.849934	1.000000	0.044868	0.088237
WCTA	-0.174445	0.110191	0.044868	1.000000	0.430833
STA	-0.217412	-0.029997	0.088237	0.430833	1.000000

Source: Analyze results from secondary data

Based on the Table, the results of the multicollinearity test above can be seen as that the correlation value is less than 0.8, so it can be concluded that there is no multicollinearity problem in the research variables.

Heteroscedasticity Test

The following are the results of the heteroscedasticity test:

Table 6 Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

Null hypothesis:

Homoskedasticity

F-statistic	1.161875	Prob. F (5,57)	0.3391
Obs*R-squared	5.827006	Prob. Chi-Square (5)	0.3234
Scaled explained SS	5.998586	Prob. Chi-Square (5)	0.3064

Test Equation:

Dependent variable: RESID^2

Method: Lease

Squares

Sample: 1 63

Include

observations: 63

Source: Analyze results from secondary data

The Table above shows the results of the heteroscedasticity test using the white method. The probability value is $0.3234 > 0.05$, so it can be concluded that there are no symptoms of heteroscedasticity.

Autocorrelation Test

The following are the results of the autocorrelation test:

Table 7 Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:

Null hypothesis: No serial correlation at up to 1 lag

F-statistic	0.119077	Prob. F (1,56)	0.7313
Obs*R-squared	0.133678	Prob. Chi-Square (1)	0.7146

Test Equation:

Dependent variable: RESID

Method: Lease

Squares

Sample: 1 63

Include

observations: 63

Presample missing value lagged residuals set to zero

Source: Analyze results from secondary data

Based on the Table above of the autocorrelation test, the probability value is $0.7146 > 0.05$, so it can be concluded that there are no symptoms of autocorrelation.

2. Hypothesis Testing

The following are the results of the hypothesis test:

1. T-test (Partial Test)

The following are the results of the t-test:

Table 8 T-test (Partial Test)

Dependent Variable: Share Stock

Method: Lease Squares

Sample: 1 63

Include observations: 63

Variable	Coefficient	Std. Error	t-Statistic	Prob.
WCTA	-1.126269	327.4889	-0.343911	0.7322
RETA	-241.3911	165.9956	-1.454202	0.1514
EBITTA	189.7508	76.66671	2.4750009	0.0163
MVEBVD	-543.4585	357.5825	-1.519813	0.1341
STA	99.48020	253.7617	0.392022	0.6965
C	557.2467	141.5800	3.935913	0.0002
R-squared	0.184696	Mean dependent var	481.7460	
Adjusted R-squared	0.113179	S.D. dependent var	465.3717	
S.E. of regression	438.2461	Akaike info criterion	15.09383	
Sum squared resid	10947397	Schwarz criterion	15.29794	
Log-likelihood	-469.4557	Hannan-Quinn criterion	15.17411	
F-statistic	2.582522	Durbin-Watson statistic	1.904180	
Prob (F-statistic)	0.035659			

Source: Analyze results from secondary data

Regression equation:

$$Y = 557,246 - 112,626X_1 - 241,391X_2 + 189,750X_3 - 543,458X_4 + 99,480X_5$$

Based on the results of the t-test in the table above, each variable shows different significance values, so the regression equation can be explained as follows:

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a. Constant (a).

Constant (a) = 557.246. If no effort is made to address the variables working capital to total assets, retained earnings to total assets, earnings before interest and tax, the market value of equity to book value of debt, and sales to total assets, then the price of the company's shares will rise by 557,247.

b. The effect of working capital on total assets on share prices

The results of testing the variable working capital to total assets on share prices have a probability significance value of 0.732, which means $0.732 > 0.05$, and the comparison of t-count is -0.343 and t-table 2.393. So, t-count < t-table means that H_0 is accepted and H_a is rejected, and this means that working capital to total assets has no significant effect and has a negative relationship with stock prices.

c. The effect of retained earnings on total assets on stock prices

The results of testing the retained earnings to total assets variable on share prices have a probability significance value of 0.151, which means $0.151 > 0.05$ and the comparison of t-count is -1.454 and t-table 2.393. So, t-count < from t-table means that H_0 is accepted and H_a is rejected, and this means that retained earnings to total assets have no significant effect and have a negative relationship with stock prices.

d. The effect of earnings before interest and tax on total assets on stock prices

The results testing the variables earnings before interest and tax to total assets on share prices have a probability significance value of 0.016, which means $0.016 < 0.05$ and the comparison of t-count is 2.475 and t-table 2.393. So, t-count > from t-table means that H_0 is rejected and H_a is accepted, and this means that earnings before interest and tax to total assets have a significant effect and have a positive relationship with stock prices. The regression coefficient value (B) of earnings before interest and tax to total assets is 189,750, meaning that for every increase of one unit, the share price will increase by 189,750 units.

e. The influence of the market value of equity on the book value of debt on share prices

The results of testing the variable market value of equity to book value of debt on share prices have a probability significance value of 0.134, which means $0.134 > 0.05$ and the comparison of t-count is -1.519 and t-table 2.393. So, t-count < from t-table means that H_0 is accepted and H_a is rejected, and this means that the market value of equity to book value of debt assets has no significant effect and has a negative relationship with stock prices.

f. The effect of sales on total assets on stock prices

The results of testing the sales to total assets variable on share prices have a probability significance value of 0.696, which means $0.696 > 0.05$ and the comparison of t-count is 0.393 and t-table 2.393. So, t-count < from t-table means that H_0 is accepted and H_a is rejected, and this means that sales to total assets have no significant effect and have a positive relationship with stock prices.

2. F-Test (Simultaneous Test)

The following are the results of the F statistical test in the table below as follows:

Based on Table 8 above, F-count = 2.582 and N = 63, F-table = 2.377. F-count > F-table, it can be concluded that the variables working capital to total assets, retained earnings to total assets, earnings before interest and tax to total assets, market value of equity to book value of debt, and sales to total assets simultaneously or jointly significantly influence the company's share

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price.

3. Coefficient of Determination Results

The following are the results of the hypothesis test:

Based on the table 8 of the coefficient of determination above, the Adjusted R-square is 0.113 or 11.3%. This means that the dependent variable of the company's share price is influenced by variations in the five independent variables, namely the variable working capital to total assets, retained earnings to total assets, and earnings before interest and tax to total assets, market value of equity to book value of debt, and sales to total assets. Meanwhile, the remaining 88.7% is influenced by other variables not discussed in this research.

4.2 Discussion

The Effect of Working Capital on Total Assets on Stock Prices

The results testing the variable working capital to total assets on share prices show that Ho1 is accepted and Ha1 is rejected, and this means that working capital to total assets has no significant effect and has a negative relationship with share prices. The test results are the results of research conducted by Lestari (2016), Indrawan (2018), Hidayanita and Zafrizal (2023), Oktaviani, Purwanto (2020), Priambodo (2021) and Nurcahyani, Wahono, Athia (2022), who explains that working capital to total assets has a negative influence which is not significant to stock prices.

The Effect of Retained Earnings to Total Assets on Stock Prices

The results testing the retained earnings to total assets variable on share prices show that Ho2 is accepted and Ha2 is rejected, and this means that retained earnings to total assets have no significant effect and have a negative relationship with the company's share price. The test results are the results of research conducted by Lestari (2016) and Prayugo, Yohani, Fithrayudi (2022) which stated that retained earnings to total assets did not have a significant effect on the company's share price level.

The Effect of Earnings Before Interest and Tax to Total Assets on Stock Prices

The results testing the variables earnings before interest and tax to total assets on stock prices show that Ho3 is rejected and Ha3 is accepted, and this means that earnings before interest and tax to total assets have a significant effect and have a positive relationship on stock prices. The test results are the results of research conducted by Lestari (2016), Radiyatama, Mustafa (2019), Oktaviani, Purwanto (2020), and Priambodo and Kurniasih (2021) which stated that the EBIT Ratio /TA has a significant positive influence on stock prices.

The Influence of Market Value of Equity to Book Value of Debt on Stock Prices

The results testing the variable market value of equity to book value of debt on stock prices show that Ho4 is accepted and Ha4 is rejected, and this means that the market value of equity to book value of debt has no significant effect and has a negative relationship on stock prices. The test results are based on research conducted by Andromeda Ardian, and Moh Khoiruddin. (2014), Lestari (2016), Hidayanita and Zafrizal (2023), and Priambodo and Kurniasih (2021) stated that the market value of equity to book value of debt does not have a significant effect on stock prices.

The Effect of Sales to Total Assets on Stock Prices

The results testing the sales to total assets variable on stock prices show that Ho5 is accepted and Ha5 is rejected, and this means that sales to total assets have no significant effect and have a positive relationship with stock prices. The test results are the results of research conducted by Oktaviani, Purwanto (2020), Prayugo, Yohani, Fithrayudi (2022), and Utami, Isnaini, Stiawan (2023) which stated that the Sales to Total Assets have a negative but significant influence on stock prices.

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5. Conclusion

Based on the results of research and discussion on financial distress analysis using the Altman Z-Score method and the influence of working capital to total assets, retained earnings to total assets, earnings before interest and tax to total assets, market value of equity to book value of debt, sales to total assets to share prices in construction service companies listed on the Indonesia Stock Exchange (IDX) for the 2020-2022 period, the following conclusions are obtained:

1. In 2020 there were 18 construction service companies listed on the Indonesia Stock Exchange (IDX) for the 2020-2022 period which were in the distress zone and 3 companies in the gray zone, namely PT. Bukaka Teknik Utama, PT. Nusa Raya Cipta and PT. Pratama Widya. In 2021, 17 construction service companies listed on the Indonesia Stock Exchange (IDX) for the 2020-2022 period are in the distress zone and 4 companies are in the gray zone, namely PT. Bukaka Teknik Utama, PT. Jaya Construction Manggala Pratama, PT. Nusa Raya Cipta and PT. Pratama Widya. In 2022, 17 construction service companies will be listed on the Indonesia Stock Exchange (IDX) for the 2020-2022 period which are in the distress zone and 4 companies in the gray zone, namely PT. Jaya Construction Manggala Pratama, PT. Nusa Raya Cipta, PT. Paramita Bangun Sarana and PT. Pratama Widya.
2. The variable working capital to total assets on share prices shows that H_01 is accepted and H_{a1} is rejected, and this means that working capital to total assets has no significant effect and has a negative relationship with share prices. The test results are the results of research conducted by Lestari (2016), Indrawan (2018), Hidayanita and Zafrizal (2023), Oktaviani, Purwanto (2020), Priambodo (2021) and Nurcahyani, Wahono, Athia (2022), who explains that working capital to total assets has a negative influence which is not significant to stock prices.
3. The variable retained earnings to total assets on share prices shows that H_02 is accepted and H_{a2} is rejected, and this means that retained earnings to total assets have no significant effect and have a negative relationship with the company's share price. The test results are the results of research conducted by Lestari (2016) and Prayugo, Yohani, and Fithrayudi (2022) which stated that retained earnings to total assets did not have a significant effect on the company's share price level.
4. The variables of earnings before interest and tax to total assets on stock prices show that H_03 is rejected and H_{a3} is accepted, and this means that earnings before interest and tax to total assets have a significant effect and have a positive relationship with stock prices. The test results are the results of research conducted by Lestari (2016), Radiyatama, Matroji H. Mustafa (2019), Oktaviani, Purwanto (2020), and Priambodo and Kurniasih (2021) which stated that the EBIT ratio /TA has a significant positive influence on stock prices.
5. The variable market value of equity to book value of debt on stock prices shows that H_04 is accepted and H_{a4} is rejected, and this means that the market value of equity to book value of debt has no significant effect and has a negative relationship with stock prices. The test results are based on research conducted by Ardian, Khoiruddin (2014), Lestari (2016), Hidayanita and Zafrizal (2023), and Priambodo and Kurniasih (2021) which stated that the market value of equity to book value of debt does not have a significant effect on stock prices.
6. The sales to total assets variable on stock prices shows that H_05 is accepted and H_{a5} is rejected, and this means that sales to total assets have no significant effect and have a positive relationship with stock prices. The test results are the results of research conducted by Oktaviani, Purwanto (2020), Prayugo, Yohani, Fithrayudi (2022), Utami, Isnaini, Stiawan (2023) which stated that the sales to total assets have a negative but significant influence on stock prices.

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