The Impact Of Capital Structure On The Risk Of Financial Distress In Telecommunications Firms Listed On The Indonesian Stock Exchange

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Abstract. This study aims to explore the effect of capital structure (DER) on potential financial distress as measured using Altman Z-Score. The research data was obtained from the annual financial statements of Indonesian telecommunication sector companies using data from the official IDX website (www.idx.co.id). The analysis method used is regression analysis using Statistical Product and Service Solution software application. The research findings show that capital structure has a positive and significant influence on the potential for financial distress. This suggests that an increase in capital structure could potentially reduce the level of financial distress.

Keywords: Capital structure, Risk of financial distress, Telecommunications firms, Indonesian Stock Exchange

1. Introduction

The crisis in Indonesia since mid-1998 started with a drastic fall in the rupiah exchange rate triggered by the high demand for US dollars. The crisis was influenced not only by a weak economic structure, but also by large amounts of private foreign debt. As a result, interest rates and inflation skyrocketed, while investment slumped, leaving many companies with financial difficulties and even the risk of bankruptcy.

In the current economic context, especially in the business world, competition is getting tougher where every company, both small and large, is trying to show their respective advantages. To increase competitiveness, companies must produce quality products and services, continue to innovate, and expand their operational reach in order to survive, grow, and be sustainable. This process is often faced with various challenges and risks, which can lead to financial difficulties and even potential bankruptcy.

In the Indonesian telecommunications sector, companies such as PT XL Axiata Tbk, PT Smartfren Telecom Tbk, PT Indosat Tbk, PT Telkom Indonesia Tbk, and PT Bakrie Telecom

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Tbk, offer a wide range of domestic and international telecommunications services. However, not all of these telecoms companies are able to book profits from their operations. Some even experienced declining profits or losses, which are indicators of bankruptcy. In this era of globalisation, telecommunication services have become an important key in the development of information and communication that plays an important role in the progress of a nation.

Competition to achieve the desired profitability through achieving certain targets not only focuses on consumer confidence, but also attracts the attention of investors, creditors, and regulators. To gain their trust, companies must demonstrate solid financial performance, which is reflected in published annual reports. These financial statements are not only a tool to report on company activities and evaluate success strategies, but also a basis for investors, potential investors, and management to make strategic decisions.

2. Literature Review

The effect of profitability and capital structure on firm value in the telecommunications sub-sector on the IDX. The results showed that ROE, Gross Profit Margin, and DER together had a significant effect on Tobin's Q. ROE has a positive effect on firm value, while capital structure has a negative effect [2]

The effect of capital structure, company growth, and profitability on financial distress. The results showed that together, DER, Sales Growth, and ROA had a significant effect on Financial Distress, with DER having a very positive influence [3],

The effect of profitability, activity, liquidity, leverage, and cash flow on financial distress in telecommunications companies. The results showed that ROA has a positive effect on financial distress, while Total Asset Turnover and Current Ratio are not significant. DER has a negative effect on financial distress, while cash flow has no effect [4].

The effect of profitability, capital structure, sales growth, and CEO turnover on financial distress with moderating corporate governance structure. The results showed that profitability affects financial distress, and corporate governance structure moderates the relationship between capital structure and financial distress. Sales growth and CEO turnover are not significant to financial distress [5].

The effect of financial ratios on financial distress with Corporate Social Responsibility (CSR) as a moderating variable. The results showed that profitability and leverage ratios affect financial distress, where high ROE indicates a safe financial condition, while high DER increases the risk of financial distress [6].

This study analyzed the effect of the financial performance of telecommunication companies on stock prices with the Price Earning Ratio (PER) as a moderating variable. The results showed that DER, ROA, and ROE together have a positive effect on stock prices [7].

Financial distress using the Altman, Springate, Zmijewski, and Internal Growth Rate methods in telecommunications companies on the Indonesia Stock Exchange. The results showed a significant difference between the Internal Growth Rate method and other methods, because it does not involve liabilities in the calculation [8].

The effect of profitability on capital structure in telecommunication companies. The results showed that profitability has a negative and significant effect on capital structure [9].

The effect of profitability, liquidity, and firm size on firm value in the telecommunications sub-sector on the Indonesia Stock Exchange. His research found that simultaneously, profitability has a significant effect on firm value, but liquidity and firm size have no significant effect [10].

Financial distress analysis using the Altman Z-Score and Springate methods in telecommunication sub-sector companies on the Indonesia Stock Exchange for the period 2018-2022. The results showed that PT Telkom Indonesia Tbk was the only company that was in a healthy condition, while PT XL Axiata Tbk, PT Smartfren Tbk, and PT Indosat Tbk showed indications of financial difficulties [11].

3. Research Method

In this study, a simple regression analysis method was used with the help of Statistical Product and Service Solution software to process the data collected. This research is a continuation of the quantitative approach that has been carried out previously by researchers.

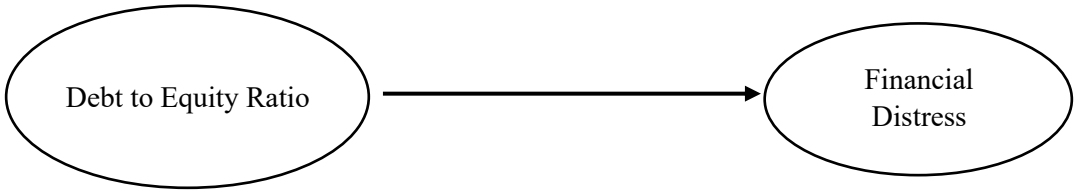

Figure 1. Conceptual framework

4. Result and Discussion

Descriptive statistics

The table below presents the test results of the descriptive statistics as follows:

Table 1. Descriptive Analysis

Variable	Mean	Std. Deviation	N
Financial Distress	-145442,0163	801605,66490	50
Capital Structure	1.4974	1.63714	50

Source: Processed with SPSS

Based on the descriptive statistical output above, it can be concluded that the Debt Equity Ratio (DER) variable has a value range from -0.61 to 5.15, with an average of 1.4974 from 50 data samples. This shows that the company's average debt to equity ratio is 1.4974, reflecting the proportion of total debt invested in the company's capital. The standard deviation of DER of 1.69786 indicates relatively low data variation.

Meanwhile, the Z-Score variable shows a value of -145442.0163 with an average of 50 out of 50 data samples. This value indicates the company's bankruptcy risk of -145442.0163 in this study, with a standard deviation of Z-Score of 801605.66490.

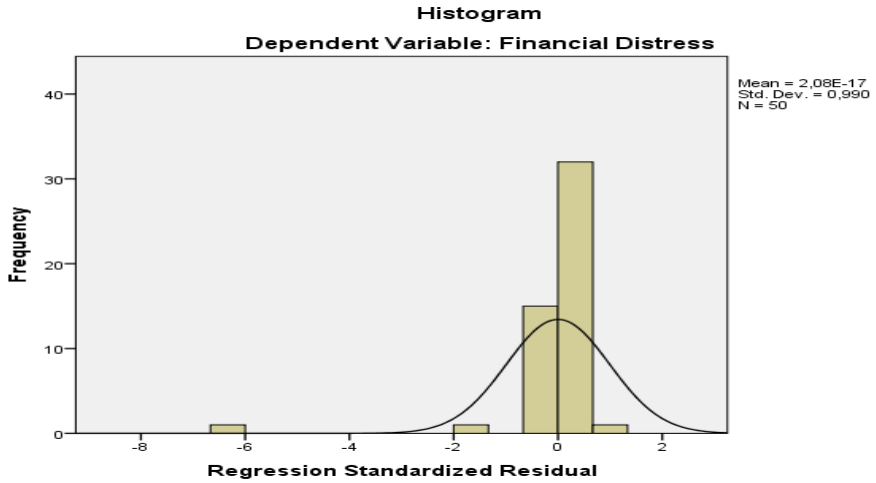

Figure 2. Histogram Normality Test

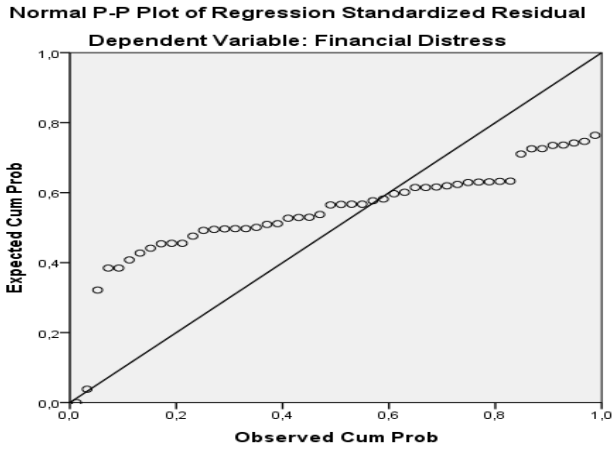

Figure 3. Normality Test Probability

The results of the study on the Nirma P-P diagram and plot show that there is unevenness in the residual value, as seen from the plot points that do not follow the line well.

Table 2. Autocorrelation Test

R	Rsquare Adjusted	R Square	Std. Error of the Estimate	Durbin-Watson
0.282[a]	80%	61%	776950.28459	1.590

Based on the test results above, it can be concluded that the Durbin-Watson value is 1.590. With a sample size of 20 and one independent variable, the DW value of 1.590 is between -2 and 2. This indicates that there are no signs of autocorrelation in the data.

Hypothesis test

Table 3 Simple Linear Regression Test

Model		**Unstandardized Coefficients**		**Standardized Coefficients**
		B	**Std. Error**	**Beta**
1	(Constant)	-352482.202	14956.729	
	Capital	138266,452	67796,977	0.282
	Structure			

The fixed number -352482.202 indicates that when the Capital Structure variable measured by Debt to Equity Ratio is constant, Z-Score will decrease by -352482.202.

The regression coefficient of 138266.452 for Debt to Equity Ratio indicates that a 1 unit increase in Capital Structure as measured by Debt to Equity Ratio will cause a decrease in Z-Score by 138266.452. The negative value of the regression coefficient indicates an inverse relationship between X and Y, which means that an increase in Capital Structure as measured by Debt to Equity Ratio will result in a decrease in Financial Distress as measured by Z-Score, and vice versa.

Table 4. Partial Test (t)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-352482,202	149596,729		-2,356	0 .023
	Capital	576.752	148.680	.675	3.879	0,047
	Structure					

It can be concluded that the hypothesis test shows a significant coefficient value, which is 0.023 < 0.05. This indicates the acceptance of the alternative hypothesis (Ha), which states that capital structure has a positive and significant influence on financial distress in telecommunications companies.

Table 5. Detemination Coefficient Test Results (R^2)

R	R Square	Adjusted R Square	Std. Error of estimate
.282[a]	.080	0.061	776950,28459

The R Square ($R2$) value or coefficient of determination is used to measure how well the model explains the variation in the dependent variable. The ($R2$) value ranges from 0 to 1. A low ($R2$) value indicates that the independent variables have limitations in explaining the variation in the dependent variable. Conversely, a value close to 1 indicates that the independent variable provides good information to predict the dependent variable.

In this study, the R Square ($R2$) value was obtained at 0.080. This shows that the variation in the independent variable, as measured by the Debt to Equity Ratio (X), has limitations in explaining Financial Distress as measured by Z-Score (Y).

5. Concluison

Based on the results of research on telecommunication companies on the Indonesia Stock Exchange in 2013-2022, ‘it can be concluded that capital structure has a positive and significant effect on financial distress in telecommunication companies during that period. Based on descriptive statistical analysis, the following conclusions can be drawn:

a. DER data on telecommunication companies on the Indonesia Stock Exchange during 2013-2022 has an average of 1.49 of the 50 samples studied. Of these samples, 27 samples were above average and 23 samples were below average. The maximum value of DER is 5.15, while the minimum value is -0.61. The standard deviation is 1.63714, indicating that the Capital Structure data in that period has limited variation.
b. Altman Z-Score data on telecommunication companies on the Indonesia Stock Exchange during 2013-2022 has a maximum value of 8,177 and a minimum value of -5804,244. Standard The conclusion is typed in the explanation. Conclusions use straightforward and clear language and do not give rise to double meanings or other interpretations. Conclusions do not repeat what is written in the results and discussion.

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