



Original Article

Analysing the Financial Distress at PT. Telekomunikasi Indonesia Tbk: An Application of Springate Approach

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Abstract: In global market, every company needs to specific, measurable, achievable, relevant, and time-bound (SMART) goals that a company sets to achieve its overall mission and vision. In finance, the company might include its goals related to revenue growth, profitability, cash flow, or return on investment. Thus, the present study aims to analyse the financial distress of the PT. Telekomunikasi Indonesia, Tbk using Springate approach. This study is designed using descriptive and comparative qualitative data analysis. The data retrieved from <http://www.idx.co.id>. The result indicates that PT. Telekomunikasi Indonesia, Tbk is in the healthy category, on the basis of data from 2016 to 2019. Also, the data in 2020 shows PT. Telekomunikasi Indonesia, Tbk is in the category prone to bankruptcy. It indicates that S value obtained in 2016 was 1.6084, 2017 was 1.5698, 2018 was 1.3364 and 2019 was 1.1846, where all S is greater than 1.062. For 2020, S value is 1.0380 was obtained which was $0.862 < S < 1.062$. Of these, several policies need to be taken to keep the company in good health, such as increase the profits, sales and reduce the amount of debt.

Keywords: financial distress; Springate approach; financial statement analysis.



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1. Introduction

The company was founded aiming to maximize the value of the company by maximizing profits and minimizing costs so that the company can continue its business in a sustainable period (Carroll & Shabana, 2010; Dyllick & Hockerts, 2002; Keay, 2008). The profit obtained from the company is used to assess the success of the management in running the business as well as a point of attention for investors for the capital invested in the company. To be able to survive in today's business world, companies must have good and healthy financial performance. One way to improve financial performance is where the company's management must always create ideas that can attract market interest (Barauskaite & Streimikiene, 2021; Kuratko et al., 2001; Low & Siesfeld, 1998). If the company is not able to attract market interest, then the company is not able to obtain maximum profit and will have a bad impact on the development of the company. If this continues to happen, it will cause various problems in the development of the company, one of which the company will experience financial difficulties called financial distress which will end in bankruptcy if the company's management does not immediately take effective and efficient decisions.

The financial difficulties experienced by business actors stem from the company's inability to pay off its short-term and long-term obligations, in other words, the debtor is unable to return its obligations to the creditor. One of the financial statement analyzes used to predict the company's financial distress is using the Springgate method. Springgate analysis has 4 formulas to predict bankruptcy, namely: working capital divided by total assets, EBIT divided by total assets, NRE divided by current debt and sales divided by total assets. On the basis of current issue, this study seeks to analyse the financial distress at PT. Telekomunikasi Indonesia, Tbk using the Springgate approach.

2. Literature Review

2.1. Financial Statement Analysis

The financial condition of a company will be known from the company's financial statements (Hasanaj & Kuqi, 2019). The financial report consists of a balance sheet, profit and loss and changes in capital (Singh, 2016). According Fahmi (2012), financial statements are information that describes the condition of a company, which in turn will become information that describes a company. The financial report is an analysis carried out to look at a company's financial situation, how the company's past, current and future successes have been achieved, the analysis of these financial statements will be used as a basis for decision making by interested parties (Sujarweni, 2017). Meanwhile according to Hanafi & Halim (2018) financial statement analysis is to determine the level of profitability (profit) and the level of risk or the level of soundness of a company's financial ratios. Based on the description above, it can be concluded that the analysis of financial statements is an information on the state of the company about how much profit/health and risk the company experiences in making decisions. According to Cashmere (2005), the objectives of financial statement analysis are (i) provide information about the type and amount of assets (assets) currently owned by the company. (ii) provide information about the types and amounts of liabilities and capital owned by the company at this time. (iii) provide information about the type and amount of income earned in a certain period. (iv) provide information about the amount of costs and types of costs incurred by the company in a certain period. (v) provide information about changes that occur to the company's assets, liabilities, and capital. (vi) provide information about the company's management performance in a period. (vii) provide information about the notes to the financial statements and (viii) other financial information.

2.2. Financial Distress

The increasingly competitive business world requires managers to have the ability to manage the company better, so that the company is able to continue to operate continuously in the long term (Kotabe & Murray, 2004; Teece, 2000). In managing the company, managers also sometimes experience financial distress (financial distress) which can lead to bankruptcy of the company. According to Putri (2021), financial distress is a condition when the company's operating cash flow is insufficient to meet current obligations and the company is required to take corrective action and Hery (2017) argues financial distress is a situation where a company has difficulty fulfilling its obligations, a situation where the company's income cannot cover the total costs and suffers losses. Thus, it can be concluded that financial distress is a condition of the company experiencing financial difficulties which resulted in bankruptcy. The factors that cause companies to experience financial distress according to Hery (2017) are: (1) Internal factors Financial Distress is a factor that arises from within the company, which is usually micro. These internal factors are: (a) the credit given to the customer is too great. (b) weak qualifications of human resources. (c) lack of working capital and (d) abuse of authority or fraud. (2) External factors Financial Distress is a factor that arises from within the company, which is usually macro are: (a) intense business competition. (b) reduced demand for the resulting product or service. (c) continuous decline in selling prices and (d) accidents or natural disasters that befall and harm the company so that it affects the course of the company's activities. There are many factors that cause companies to experience financial distress, but the main cause, either directly or indirectly, is due to repeated management errors that result in company failure/bankruptcy.

2.3. Springgate Approach

According to Rudianto (2013), there are several tools used to detect bankruptcy, one of the methods used to detect bankruptcy or financial distress is the Springgate method, which is a method for predicting the survival of a company by combining several common financial ratios given different weights one by one with others. So, the Springgate method can predict the possibility of a company's bankruptcy. To determine which ratios can detect the possibility of Financial Distress, Springgate uses MDA to select 4 ratios from 19 financial ratios that are popular in the literature, which are able to distinguish well between bankrupt and non-bankrupt business signals. This method emphasizes profitability as the most influential component of bankruptcy. The results of this study produce Springgate formulas for various types of companies, as shown below:

$$X_1 = \frac{\text{Working Capital}}{\text{Total Asset}} \quad (1)$$

$$X_2 = \frac{\text{Earning before Income Tax}}{\text{Total Asset}} \quad (2)$$

$$X_3 = \frac{\text{Earning before Tax}}{\text{Current Liabilities}} \quad (3)$$

$$X_4 = \frac{\text{Sales}}{\text{Total Asset}} \quad (4)$$

$$Z = 1.03X_1 + 3.07X_2 + 0.66X_3 + 0.4X_4 \quad (5)$$

The results of calculations using the Springate formula will produce different scores from one company to another. The score should be compared with the following scoring standards to assess the viability of the company: $Z > 0.862$ = Healthy company and $Z < 0.862$ = Potentially bankrupt company. If the Z value is above 0.862, then the company is classified as still in the healthy category. If the Z value is below 0.862, then the company is considered to be in danger of bankruptcy. One way to measure the health of a company with the Springate method is to analyze bankruptcy with a sample of 40 companies using the MDA method (Muzanni & Yuliana, 2021). Springate found 4 ratios out of 19 financial ratios that contributed to the prediction of company bankruptcy. Springate divides the company's bankruptcy assessment criteria into 3 (three) categories: (1) If the value of S < 0.862 , it indicates that the company is facing serious bankruptcy (bankruptcy). (2) If the value is $0.862 < S < 1.062$, it indicates that the management must be careful in managing the company's assets so that bankruptcy does not occur (bankruptcy-prone areas) and (3) If the value of S > 1.062 identifies the company in a healthy financial condition (not bankrupt).

3. Materials and Methods

The method used by the researcher is descriptive quantitative method. The descriptive method is selecting data that is important, new, unique and related to the formulation of the problem or researcher's question (Sugiyono, 2014). The Springate method of Financial Distress measurement is carried out to predict the survival of a company. Springate uses the same method as Altman, namely Multiple Discriminant Analysis (MDA) (in Equation 5). The type of data used in this research is quantitative data, where quantitative data is obtained from the financial data of PT. Telekomunikasi Indonesia, Tbk. The data sources used are secondary data obtained from the Indonesia Stock Exchange playing site www.idx.ci.id and other sources related to the title of this study. The data collection technique used by the researcher is documentation technique, by searching for data through journal books, financial reports, previous research on electronic media, literature studies and others. According to Siyoto & Sodik (2015), documentation techniques are looking for data about things or variables in the form of notes or transcripts, books, newspapers, magazines, inscriptions, meeting minutes, loggers, agendas, and so on. Sugiono (2019) stated the Library Research is collecting data by reading, studying and collecting books that have to do with the problem being studied."

4. Results

Analysis of Financial Distress Level PT. Telekomunikasi Indonesia Tbk can be seen from the calculation of the 2016-2020 A ratio value as follows:

Table 1. Result of X_1 (A): Working Capital divided by total assets, for PT. Telekomunikasi Indonesia, Tbk (in billions)

Year	Current Asset (Rp)	Current Liability (Rp)	Working Capital (Rp) (CA-CL)	Total Asset (Rp)	X_1 (A)
2016	47.701.000	39.762.000	7.939.000	179.611.000	0.0442
2017	47.561.000	45.376.000	2.185.000	198.484.000	0.011
2018	43.268.000	46.261.000	-2.993.000	206.196.000	-0.0145
2019	41.722.000	58.369.000	-16.647.000	221.208.000	-0.0752
2020	46.503.000	69.093.000	-22.590.000	246.943.000	-0.0914
Average					-0.0252

Table 1 shows that the average ratio " X_1 " PT. Telekomunikasi Indonesia, Tbk of - 0.0252 which means this company has a net working capital of - 2.52% of all assets owned. The maximum value of the " X_1 " ratio at PT

Telekomunikasi Indonesia, Tbk was in 2016 which was 0.0442, meaning that in 2018 PT Telekomunikasi Indonesia, Tbk had a net working capital of 4.42% of the total assets owned. Meanwhile, the minimum value of the "X₁" ratio of this company is in 2018 which is -0.0145 which means this company has a net working capital of -1.45% of all assets owned. Next, calculate the value of the "X₂" ratio by dividing EBIT with total assets The calculation of the value of the ratio "X₂" is presented in Table 2 below.

Table 2. Result of X₂ (B): Earning Before Income Taxes divided by Total asset, for PT. Telekomunikasi Indonesia, Tbk (in billions)

Year	EBIT (Rp)	Total assets (Rp)	X ₂ (B)
2016	39.195.000	179.611.000	0.2182
2017	43.933.000	198.484.000	0.2213
2018	38.845.000	206.196.000	0.1883
2019	42.394.000	221.208.000	0.1916
2020	43.505.000	246.943.000	0.1761
Average			0.1991

Table 2 shows that the average value of the "B" ratio of PT Telekomunikasi Indonesia, Tbk is 0.1991 which means this company is able to generate EBIT of 19.91% of the total assets owned. The maximum value of the "B" ratio of PT Telekomunikasi Indonesia, Tbk was in 2017 which was 0.2213, meaning that in 2017 the company was able to generate EBIT of 22.13% of the total assets owned. Meanwhile, the minimum value of the "B" ratio in 2020 is 0.1761 meaning that in 2020 the company's ability to generate EBIT is only 17.61% of the total assets owned. Next, calculate the value of the "C" ratio by dividing Earning Before Tax (EBT) with Current Liabilities. The calculation of the "C" ratio is presented in the following Table 3:

Table 3. Result of X₃ (C): Earning Before Taxes divided by Current Liabilities, for PT. Telekomunikasi Indonesia, Tbk (in billions)

Year	Earning before taxes (Rp)	Current liabilities (Rp)	X ₃ (C)
2016	38.189.000	39.762.000	0.9604
2017	42.659.000	45.376.000	0.9401
2018	36.405.000	46.261.000	0.7869
2019	37.908.000	58.369.000	0.6494
2020	38.775.000	69.093.000	0.5612
Average			0.7796

Table 3 shows that the average value of the "C" ratio of PT Telekomunikasi Indonesia, Tbk is 0.7796, which means that the NRE produced by the company is able to guarantee current debt of 77.96%. The maximum value of the "C" ratio occurred in 2016 which was 0.9604, meaning that the NRE produced by the company was able to guarantee current debt of 96.04%. The minimum value of the "C" ratio in 2020 is 0.5612, meaning that the NRE produced by the company can guarantee current debt of 56.12%. Then calculate the "D" ratio by dividing total sales by total assets. The calculation of the value of the "D" ratio is presented in Table 4 below:

Table 4. Result of X₄ (D): Total Sales divided by total assets, for PT Telekomunikasi Indonesia, Tbk (in billions)

Years	Total sales (Rp)	Total assets (Rp)	X ₃ (D)
2016	116.333.000	179.611.000	0.6476
2017	128.256.000	198.484.000	0.6461
2018	130.784.000	206.196.000	0.6342
2019	135.567.000	221.208.000	0.6128
2020	136.462.000	246.943.000	0.5526
Average			0.6187

Table 4 shows the average value of the "D" ratio of PT Telekomunikasi Indonesia, Tbk is 0.6187, which means that during 2016-2020 the company is able to generate revenue of 61.87% of its total assets. The maximum value of the "D" ratio was in 2016 which was 0.6476, which means that 2016 was the company's highest year in generating revenue, which was 64.76% of its total assets. The minimum value of the "D" ratio in 2020 is 0.5526, which means that in 2020 the company is only able to generate 55.26% of its total assets.

Table 5. Result of the S-Score for PT. Telekomunikasi Indonesia, Tbk (in billions)

Years	A	B	C	D	Nilai S-Score	Decision
2016	0.0442	0.2182	0.9604	0.6476	1.6084	Not bankrupt
2017	0.011	0.2213	0.9401	0.6461	1.5698	Not bankrupt
2018	-0.0145	0.1883	0.7869	0.6342	1.364	Not bankrupt
2019	-0.0752	0.1916	0.6494	0.6128	1.1846	Not bankrupt
2020	-0.0914	0.1761	0.5612	0.5526	1.0380	Prone to bankruptcy
Maximum value					1.6084	Not bankrupt
Minimum value					1.0380	Prone bankruptcy
Average					1.3474	Not bankrupt

Table 5 shows the average S-Score of PT Telekomunikasi Indonesia, Tbk is 1.3474, which means that the company is in the non-bankrupt zone or the company is in a healthy financial condition, the S-Score value is more than 1.062. The maximum value of PT Telekomunikasi Indonesia, Tbk occurred in 2016 which was 1.6084 which indicates the company is in the non-bankrupt zone or in a healthy financial condition. Because the S-Score value is greater than 1.062. The minimum value of S-Score occurs in 2020, which is 1.0380 which indicates the company's management must be careful in managing the company's assets so that bankruptcy does not occur in other words the company is in a bankruptcy prone zone in other words the company is in a bankruptcy prone zone because the value of the company is in a bankruptcy prone zone. The S-Score is between 0.862 and 1.062. The graph of the development of the S-Score value of PT Telekomunikasi Indonesia, Tbk is presented in Figure 5.1 below:

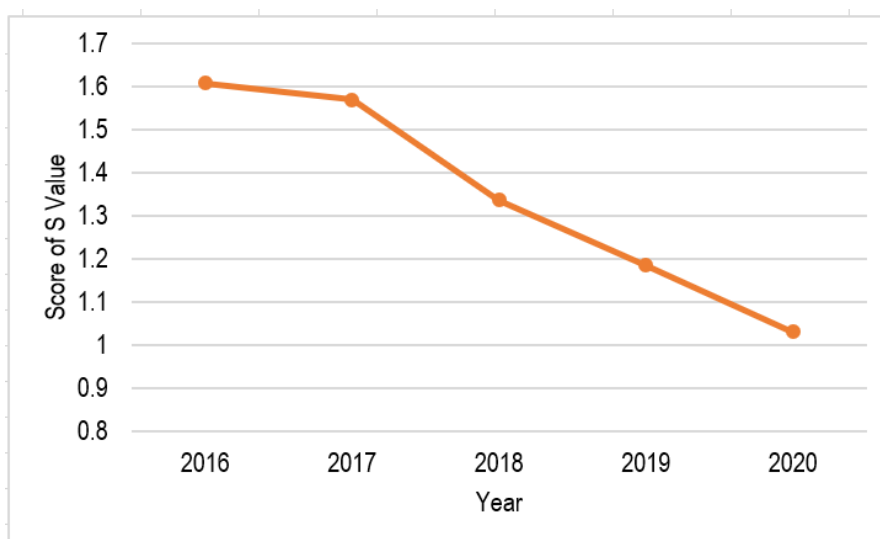


Figure 1. Result of S-Score value of PT Telekomunikasi Indonesia, Tbk Years 2016-2020

Figure 1 indicates the S-Score value of PT Telekomunikasi Indonesia, Tbk in 2016-2020 tends to decrease, the highest occurs in the ratios of "A", "B", "C" and "D" which tend to decrease but the decrease is significant. occurs at the "A" ratio. The reason for the decrease in the value of the "A" ratio is that the company's working capital has decreased due to the increase in long-term debt that must be paid by the company, however, this company is indicated to be in a healthy financial condition (not bankrupt) because the company is still able to generate operating profits. In 2016 the S-Score value of PT Telekomunikasi Indonesia, Tbk, which is 1.6084 which indicates the company is in a healthy financial condition (not bankrupt) because it is greater than 1.062. In 2017 the company was in a healthy financial condition or not bankrupt because the S-Score value in 2017 was 1.5698, meaning the S-Score value was greater than 1.062. In 2018 the company was in a healthy financial condition or not bankrupt because it was greater than 1.062, which was 1.3364. In 2019 the company was in a healthy financial condition or not bankrupt because the S-Score value in 2019 was greater than 1.062, namely, 1.1846. And in 2020 the company is in the red zone prone to bankruptcy because the S-Score value is between 0.862 and 1.062, namely, 1.0380 this is because the value of the "A" ratio in 2020 has decreased significantly due to an increase in short-term debt so that working capital has increased.

5. Discussion

The results of the evaluation of the financial distress level were carried out to find out why PT Telekomunikasi Indonesia, Tbk was in the non-bankrupt zone or the company's financial condition was healthy, but the company's S-Score value tends to decrease. The value of "A" ratio of PT Telekomunikasi Indonesia, Tbk fluctuated and decreased due to the increase in net working capital and total assets, but the increase in total assets was higher than net working capital. To increase net working capital, companies should improve their current asset management and reduce their current liabilities such as third-party trade payables and other current liabilities. Also, the value of "B" ratio has fluctuated and decreased, this is due to the increase in total assets being higher than EBIT or in other words this company has not been efficient in managing all of its assets so that the increase in EBIT is not as high as total assets. To increase EBIT, companies should be more efficient in managing assets to increase revenue and make overall cost savings such as selling expenses and general and administrative expenses.

Besides that, the fluctuating value of "C" ratio tends to decrease, this is because NRE decreases while current debt increases. The factor that caused the decline in NRE was an increase in interest expense caused by an increase in current debt. The company should immediately pay its maturing obligations in order to minimize the amount of interest paid later so that it can increase Earning Before Tax (EBT). The fluctuating "D" ratio tends to decrease. The factor that causes the "D" ratio of PT Telekomunikasi Indonesia, Tbk to decrease is the increase in total assets which is higher than sales. In this case, to increase revenue or sales, the company should maximize again in asset management, especially assets used in the company's operating activities. The average S-Score of PT Telekomunikasi Indonesia, Tbk indicates the company is in the non-bankrupt zone or the company's financial condition is healthy, but if not, immediately effective action is taken.

To improve its financial performance, it is likely that in the following years this company will experience Financial Distress which leads to bankruptcy considering the company's S-Score value tends to decline. To avoid the occurrence of financial distress, the company should improve its financial performance and be more efficient in managing all its assets to increase the value of the "B" ratio and "D" ratio. In 2016-2019 PT Telekomunikasi Indonesia, Tbk experienced a decline but the company's financial condition was not bankrupt/healthy, because PT Telekomunikasi Indonesia, Tbk could still guarantee to pay its current debt. In 2020 the S-Score value is 1.0380 which indicates the company's management must be careful in managing the company's assets so that there is no bankruptcy in other words the company is in a bankruptcy-prone zone in other words the company is in a bankruptcy-prone zone because the S-value The score is between 0.862 and 1.062.

6. Conclusions

This study identifies that the average S-Score at PT Telekomunikasi Indonesia, Tbk for 5 years is 1.3474, which means that the company is in the non-bankrupt zone or the company is in a healthy financial condition, but the S-Score value of PT Telekomunikasi Indonesia, Tbk tends to decrease due to the value of the ratio "A", "B", "C", and the ratio "D" tended to decrease, but the highest decline occurred in the ratio "A" which was caused by an increase in current debt but PT Telekomunikasi Indonesia, Tbk was indicated to be in a stable condition. sound financial condition (not bankrupt) because PT Telekomunikasi Indonesia, Tbk is still able to generate sales and NRE. In addition, factors causing PT Telekomunikasi Indonesia, Tbk's financial distress, a significant increase in third party trade payables, a decrease in cash and cash equivalents and an increase in operating expenses.

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