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Springate Analysis in Measuring Financial Distress on Company Performance in The Property and Real Estate Sector Listed on The Indonesia Stock Exchange Period 2018 - 2022

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Abstract: This research aims to determine the effect of financial distress on company performance in the property and real estate sector listed on the Indonesia Stock Exchange for the 2018-2022 period, which is measured using the Springate analysis method. The performance of the property sector has been greatly impacted by the Covid-19 pandemic. Along with paralyzed economic activity, especially in 2020, the performance of the property sector was also paralyzed. Financial distress is a situation where a company experiences financial difficulties. Financial difficulties if they continue can result in the company going bankrupt. Financial distress can be considered an early warning of the company's poor condition so that the company can prepare itself to face this and improve its financial condition and improve company performance. Measurement of the financial distress variable uses the Springate Method.

Introduction

A company is an organization formed by individuals or groups engaged in the production of goods or services continuously with the primary aim of making a profit, and its continuous objective is to enhance the company's value. Financial reports are used as a form of accountability to the public to monitor performance and evaluate management, provide a basis for observing trends over time periods, achieving established goals, and comparing them with similar organizations' performances, if any. It also allows external parties to obtain cost information for goods and services received and to assess the efficiency and effectiveness of organizational resource utilization. Financial reports also serve to assist companies in providing a basis for planning policies and activities in the future, especially supporting information for fund usage and organizational viability. Every company is established with the hope of generating a profit so that it can sustain and grow in the long term. It is assumed that the company will continue to exist and is not expected to undergo liquidation. In practice, such assumptions are not always realized. Often, companies that have been operating for a certain period are forced to dissolve due to financial distress, leading to bankruptcy.

The value of a company is one of the factors that provide an insight into a company's performance. Good company performance reflects stability and a positive image for the company, so investors looking to invest their capital are expected to gain trust and be attracted to the company. Company performance is directly related to the company's goal of increasing profits in the future as a measure of company performance and aims to influence investors in the company. The property sector's performance has been heavily impacted by the Covid-19 pandemic. Along with the paralyzed economic activities, especially in 2020, the property sector's performance was also affected.

According to signaling theory, investors react to new signals provided by companies to the market, which typically come in the form of corporate earnings announcements (José García et al., 2014). If the signal given by the company is negative, it will cause an increase in stock price volatility compared to positive or neutral signals (tending to be the same, neither significantly good nor bad), which decrease stock price volatility, as people tend to focus more on losses than gains (Yasar et al., 2020).Thus, if there is a business failure or financial difficulty evident from the financial statements, it will affect the stock price in the future. However, company management often withholds such negative information simultaneously to prevent the company's stock price from falling (Andreou et al., 2021). This management action can be detrimental to shareholders (investors). However, it is known that this event aligns with agency theory (Donaldson & Davis, 1991), which states the divergence of interests between company management (agents) and shareholders (investors).

One of the factors influencing company performance is financial distress. The emergence of financial distress results from the company's inability to meet obligations, especially short-term obligations. Financial statements are a source of all information regarding a company's financial position, performance, and changes in financial position issued to support decision-making. This research was conducted on property and real estate

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sector companies listed on the Indonesia Stock Exchange for the period 2018-2022, where economic conditions weakened due to the Covid-19 pandemic affecting the financial performance of companies and potentially causing financial distress, resulting in companies facing operational difficulties.

Financial statements reflecting good performance serve as signals or indicators that the company has been operating effectively. A positive signal will be well-received by external parties because market response heavily depends on the fundamental signals issued by the company. Investors will only invest their capital if they perceive the company capable of providing greater value for the invested capital compared to other investment options. Therefore, investor attention is directed towards the profitability of the company, which is reflected in the financial statements published by the company.

Financial distress is defined as a stage of deteriorating financial condition that occurs before bankruptcy or liquidation. Financial distress is manifested by the company's inability or lack of funds to meet its obligations that have fallen due. Common signs of financial distress involve difficulties in paying debts, depreciation of assets, difficulty in obtaining additional funding, or even the threat of liquidation or bankruptcy. In a business context, financial distress can affect day-to-day operations, limit the ability to invest or grow, and harm relationships with creditors and shareholders.

It is important to manage finances wisely and detail good financial planning to prevent financial distress. For companies, effective risk management and financial planning can help identify potential financial problems and take necessary actions before reaching a crisis level. For individuals, having a solid financial plan, managing debts wisely, and having an emergency fund can help reduce the risk of personal financial distress.

The development of a Financial Distress model is crucial as it is expected to take actions to anticipate conditions leading to bankruptcy, such as converting assets into cash to meet short-term financial obligations, calculating the company's investment in working assets to generate revenue, issuing shares to raise capital, and borrowing capital from creditors. This helps companies avoid the worst-case scenario of bankruptcy. Bankruptcy prediction methods are models used to assess when a company will go bankrupt by combining a set of financial ratios that provide an overview of the company's financial condition or performance. One of the factors supporting a company to continue operating is financial factors or the company's financial condition, prompting many researchers to develop bankruptcy prediction models.

Analysis of the Springate Prediction Model by Rudianto (2013:262) explains that Springate is an analysis style for predicting industry profitability by combining several common financial indicators with different weights. Springate is a method developed in 1978 by Gordon L.V. Springate. Called the Springate S-Score, it defines a threshold (by default) in the form of different balances in each section to predict the company's condition, whether it may survive or not (prudently stated). Springate explains that the cutoff value applied in the formula above is 0.862, divided into two categories where if the S-value is greater than 0.862, then the company is considered to be in good condition and not potentially facing bankruptcy.

If the S value is less than 0.862, then the company can be classified as experiencing financial distress and potentially facing bankruptcy.

Research Method

In this study, the researchers selected all property and real estate companies listed on the Indonesia Stock Exchange (BEI) during the period 2018-2022. They employed purposive sampling technique with the aim of ensuring unbiased data usage. The determination of the sample using this purposive sampling technique involved applying several criteria, namely:

1. Property and real estate companies listed on the Indonesia Stock Exchange during the period 2018-2022.
2. Property and real estate companies that regularly and fully disclose their financial statements for five consecutive years, from 2018 to 2020.
3. Property and real estate companies that provide researchers with complete data information to fulfill the variables used in this study.
4. Property and real estate companies ranking within the top 10 in terms of total assets.

There are various methods that can be used to predict financial distress leading to bankruptcy. Financial ratio analysis is one of the most commonly used methods for predicting financial distress. Many studies have been conducted to identify financial ratios that can be used to predict financial distress. One of the models used is the Springate Model developed by Gordon L. V. Springate in 1978, following the procedures used by Altman (1968). Springate uses 4 out of 19 financial ratios and employs a multidiscriminant analysis with 40 companies as samples. This model can be used to predict bankruptcy for manufacturing companies with an accuracy rate of 92.5%. The formula for the Springate Method is as follows: [the formula is not included in the question].The relationship among those concepts has to be depicted in a figure of conceptual framework as example below.

$$S= 1{,}03X1 + 3{,}07X2 + 1{,}66X3 + 0{,}4X4$$

Explanation:
X1 = Working capital divided by Total Assets
X2 = Earnings Before Interest and Taxes divided by Total Assets
X3 = Earnings Before Taxes divided by Current Liabilities
X4 = Sales divided by Total Assets

Based on the obtained S value, the assessment of bankruptcy potential is divided into two categories:

1. If the value of $S < 0.862$, then the company is predicted to potentially experience financial difficulties and potential bankruptcy.
2. If the value of $S \geq 0.862$, then the company's financial condition is healthy and does not potentially experience financial difficulties or bankruptcy.

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Result and Discussion

The research results using Springate analysis on property and real estate sector companies during the period 2018 - 2022.

Table 1. Springate Socre

No	Nama Perusahaan	*Sprigate S-Score*					Rata rata Industri	Predikat
		2018	2019	2020	2021	2022		
1	PT Agung Podomoro Land Tbk.	0,108	0,181	0,274	0,158	0,616	1,337	Sehat
2	PT Alam Sutera Realty Tbk.	0,211	0,264	- 0,206	0,048	0,261	0,578	Rawan Bangkrut
3	PT Sentul City Tbk.	0,209	0,122	- 0,029	0,260	0,119	0,680	Rawan Bangkrut
4	PT Bumi Serpong Damai Tbk.	0,341	0,394	0,350	0,435	0,505	2,025	Sehat
5	PT Ciputra Development Tbk.	0,335	0,496	0,450	0,564	0,580	2,424	Sehat
6	PT Intiland Development Tbk.	0,030	0,228	0,103	0,068	0,138	0,567	Rawan Bangkrut
7	PT Lippo Karawaci Tbk.	0,615	0,656	0,539	0,557	0,528	2,896	Sehat
8	PT PP Properti Tbk.	0,279	0,313	0,328	0,304	0,318	1,542	Sehat
9	PT Pakuwon Jati Tbk.	0,335	0,358	1,337	0,380	0,402	2,813	Sehat
10	PT Summarecon Agung Tbk.	0,242	0,281	0,263	0,404	0,355	1,545	Sehat
	Tingkat Kebangkrutan Perusahaan sektor properety dan real estate						**1,641**	**Sehat**

Springate Analysis: **S= 1,03X1 + 3,07X2 + 1,66X3 + 0,4X4**

Where:
X1 = Working capital divided by Total Assets
X2 = Earnings Before Interest and Taxes divided by Total Assets
X3 = Earnings Before Taxes divided by Current Liabilities
X4 = Sales divided by Total Assets

Based on the obtained S value, the assessment of bankruptcy potential is divided into two categories:

1. If the value of S < 0.862, then the company is predicted to potentially experience financial difficulties and potential bankruptcy.
2. If the value of S > 0.862, then the company's financial condition is healthy and does not potentially experience financial difficulties or bankruptcy.

Based on the statistical data analysis using the Springate analysis method, it is indicated that there are 3 companies at risk of bankruptcy, namely ASRI, BKSL, and DILD, because they have an S value < 0.862. These companies are predicted to potentially experience financial difficulties due to the impact of the Covid-19 pandemic, leading to global economic uncertainty and income decline, causing investors to be reluctant to invest and companies unable to expand their businesses and experiencing revenue decline. However, on average, the property and real estate sector over the past 5 years shows a healthy Springate analysis figure of 1.641, where the S value > 0.862, indicating that the financial condition of the companies is healthy and not potentially experiencing financial difficulties or bankruptcy.

Conclusion

The results of the data analysis conducted indicate that the Springate analysis method can predict bankruptcy and financial difficulties of a company. This method is based on financial ratio analysis, which identifies early signs of a company's inability to meet its financial obligations. The Springate analysis combines these ratios using statistical methods to provide scores or predictions about the risk of corporate bankruptcy.

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