

Financial Distress Prediction of Indonesian State-Owned Construction Firms Across the COVID-19 Period Using the Altman Z-Score Method

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ABSTRACT

The COVID-19 pandemic, which began in early 2020, significantly disrupted global and national economies, with the construction sector in Indonesia experiencing notable contraction. This study aims to predict the financial distress of Indonesian state-owned construction companies (BUMN Karya) listed on the Indonesia Stock Exchange before (2018–2019), during (2020–2021), and after (2022–2023) the pandemic, using the Altman Z-Score model for non-manufacturing firms. Secondary data were obtained from audited annual financial statements and analyzed using descriptive quantitative methods. The findings show that, in the pre-pandemic period, most companies were in the grey zone, except Waskita Karya in 2019, which was in the distress zone. During the pandemic, most companies fell into financial distress, except PT PP, which remained in the grey zone. In the post-pandemic period, PT Adhi Karya and PT PP remained in the grey zone, while PT Wijaya Karya and PT Waskita Karya continued to be in financial distress. These results indicate that the COVID-19 pandemic worsened the financial health of BUMN Karya, with uneven recovery across firms in the subsequent years. The study offers practical implications for corporate management, policymakers, and investors in developing risk mitigation strategies for strategic infrastructure enterprises.

Keywords: Altman Z-Score, financial distress, state-owned construction companies, COVID-19 pandemic, Indonesia

ABSTRAK

Pandemi COVID-19 yang dimulai pada awal 2020 telah mengganggu perekonomian global dan nasional, dengan sektor konstruksi di Indonesia mengalami kontraksi yang signifikan. Penelitian ini bertujuan memprediksi tingkat *financial distress* pada perusahaan BUMN Karya yang terdaftar di Bursa Efek Indonesia sebelum (2018–2019), selama (2020–2021), dan setelah pandemi (2022–2023) menggunakan model Altman Z-Score untuk perusahaan non-manufaktur. Data sekunder diperoleh dari laporan keuangan tahunan yang telah diaudit dan dianalisis menggunakan metode deskriptif kuantitatif. Hasil penelitian menunjukkan bahwa pada periode pra-pandemi, sebagian besar perusahaan berada pada kategori *grey zone*, kecuali Waskita Karya pada 2019 yang masuk kategori *distress*. Selama pandemi, mayoritas perusahaan berada dalam kondisi *financial distress*, kecuali PT PP yang tetap berada di *grey zone*. Pada periode pasca-pandemi, PT Adhi Karya dan PT PP tetap berada di *grey zone*, sedangkan PT Wijaya Karya dan PT Waskita Karya masih berada pada kategori *financial distress*. Temuan ini mengindikasikan bahwa pandemi COVID-19 memperburuk kesehatan keuangan BUMN Karya dengan pemulihan yang belum merata pada tahun-tahun berikutnya. Studi ini memberikan implikasi praktis bagi manajemen perusahaan, pembuat kebijakan, dan investor dalam merumuskan strategi mitigasi risiko pada perusahaan infrastruktur strategis.

Kata Kunci: Altman Z-Score, *financial distress*, BUMN Karya, pandemi COVID-19, Indonesia

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INTRODUCTION

Global conditions are not good because a virus called Corona virus disease 2019 (Covid-19) first appeared at the end of 2019 in the city of Wuhan, China. While in Indonesia the first case findings were in March 2020 (CNN Indonesia, 2021). The impact of handling Covid-19 has also affected the Indonesian economy. Indonesia's GDP growth from 2018 has decreased, its growth has decreased from 5.17% in 2018 to 5.02% in 2019. Even in 2020 Indonesia's GDP growth fell to -2.07%.

By sector, the transport and trade sector was the sector that experienced the highest contraction at -13.42%, followed by the accommodation & food supply sector at -8.91%, the corporate services sector at -7.02%, and the construction sector itself experienced a contraction of -5.67%. The decline in the construction sector also affected construction companies in Indonesia, including state-owned companies. The performance of state-owned companies continues to decline. When viewed from revenue per year, all state-owned companies have continued to decline from 2018 to 2023. This decline in performance and revenue is inseparable from the decline in the number of new contract awards obtained by the company, the decline in the government's infrastructure spending budget which was diverted to handling the Covid-19 pandemic also had an impact on the company's new contract awards.

This condition is exacerbated when infrastructure development that continues to run during the pandemic is the cause of the increasing debt of state-owned enterprises. In addition, the planned increase in the benchmark interest rate will further burden the financial condition of state-owned companies whose capital is mostly funded by debt. The large increase in debt, cash flow disruptions, and delays in project implementation during the pandemic have put state-owned enterprises at risk of financial distress. This will certainly have an impact on the condition of the company's financial difficulties and has the potential to experience financial distress. Research conducted by Resfitasari et al (2021) on PT Waskita Karya (Persero) shows that in 2019 and 2020 it is projected to experience financial difficulties because the Z-scores are below 1.81.

The company's financial condition that is experiencing difficulties is one of the signs or signals for investors to be more careful in investing in the company. Signaling theory was first coined by Spence (1973), where the owner of the information provides a sign or signal in the form of financial statement information to parties who need this information, be it potential investors or creditors. Whatever the form or type of signal, everything is intended to imply what the market wants or outsiders will make changes to the company's valuation. Signal theory is used when the Altman Z-Score method as an analytical tool can provide signals, whether good or bad signals, to investors and other stakeholders to estimate the condition of the company whether it is in danger of experiencing financial difficulties or not.

Financial distress or financial difficulty is where the company's financial condition is difficult (Dewi et al, 2019) financial distress conditions are conditions when there is a decrease in the company's financial performance such as negative cash flow or excessive liabilities so that it can be an early sign of bankruptcy. Platt & Platt (in Rezeki, 2021) define financial distress as a weakening of financial performance in a company before liquidation occurs. Meanwhile, Yati (2021) defines financial distress as a company condition that cannot carry out the company's operations properly due to liquidity difficulties.

There are many analytical methods commonly used to predict financial distress such as the Altman Fulmer method, Z-Score, Zmijewski, Springate, Grover, and so on (Anderson, 2020). Seto (2022) who examined PT Garuda Indonesia using the Altman, Grover, Springate, Ohlson and Zmijewski methods showed the result that PT Garuda Indonesia was projected to experience financial difficulties or financial distress. The Altman Z-Score method was also used by Ullah et al (2021) to predict financial difficulties in banking companies in Pakistan for the period 2013-2017 which showed good predictions for the local banking industry, while most of Pakistan's foreign banks were found to be in financial difficulty with a Z-score below 1.1, while Pertiwi & Putri (2021)

conducted research using the Altman Z-Score method on retail companies in 2018-2020, the results of this study stated that there were several companies experiencing a decline from the grey zone to the distress zone.

This study only focuses on using the Altman Z-Score method because according to Amalia (2019) the Altman Z-Score method is the method that has the highest level of accuracy when compared to other methods to be applied to construction companies. Likewise, Jean Elia, et al (2021), Manh and Nguyen (2024) state that the Altman score model is effective for predicting financial distress. In addition, the Altman Z-Score method has 3 formulas that can be used based on the criteria of the company and researchers use the 3rd formula which is used for companies other than manufacturing, whether they go public or not. In addition, this study also uses data before, during and after the Covid-19 pandemic, so that it can be seen how much influence Covid-19 has on the financial performance of state-owned work companies in Indonesia and this study also aims to predict financial distress in state-owned work companies before the pandemic, during the pandemic and after the pandemic using the Altman Z-Score method.

Despite the extensive application of the Altman Z-Score in prior studies, most existing research in the Indonesian context has limitations in scope and depth. Many focus on a single company (e.g., Resfitasari et al., 2021, on PT Waskita Karya), a narrow time frame (typically two to three years), or only one economic phase—either before or during the pandemic—without capturing the transition into the post-pandemic recovery stage. Furthermore, comparative longitudinal analyses across multiple *BUMN Karya* are scarce, particularly those integrating three distinct macroeconomic periods: pre-crisis stability, pandemic-induced downturn, and post-crisis adjustment. This lack of comprehensive, multi-period analysis reduces our understanding of how prolonged economic shocks and subsequent recovery phases influence financial distress dynamics in state-owned construction enterprises. Addressing this gap, the present study offers a complete six-year evaluation, enabling a more holistic assessment of the resilience and recovery trajectories of *BUMN Karya* in Indonesia.

METHOD

This research was conducted with data from Indonesia Stock Exchange (IDX). The research period used is a period of 6 years from 2018 to 2023. The type of research used is descriptive quantitative research, which is research aimed at identifying the characteristics of the variables being investigated in a particular situation. The object of this research is the research carried out on the IDX, and the subjects of this research are the state-owned Karya companies listed on the Indonesia Stock Exchange (IDX).

The researcher used descriptive analysis as a data analysis technique with method to analyse the prediction of Financial Distress, namely calculating using the Altman method (Z-Score) based on the data report to the BUMN Karya which is listed on the IDX website (<http://www.idx.co.id>) which is used to measure the final performance of the company, the following is the formula for the Altman method which is used to obtain the Z-Score value, namely:

$$Z = 6,56 X_1 + 3,26 X_2 + 6,72 X_3 + 1,05 X_4 \text{ Rudianto (2013: 257)}$$

1. Working capital to total assets (Working capital to total assets)

$$X_1 = \frac{\text{Current Asset} - \text{Current Liabilities}}{\text{Total Asset}}$$

2. Retained Earnings to Total Assets

$$X_2 = \frac{\text{Retained Earning}}{\text{Total Asset}}$$

3. Earning Before Interest and Taxes to Total Assets

$$X_3 = \frac{\text{EBIT}}{\text{Total Asset}}$$

4. Book Value Equity to Book Value of Total Debt

To calculate the Book Value of Total Debt by calculating it:

Book Value of Total Debt = Total Current Debt + Total Non-Current Debt

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

After getting the total score, the next step is to calculate the results using the Z-score formula to form different scores between companies. A benchmark of whether a company is in financial distress is displayed after receiving the Z-score results. It is possible to use these results to classify healthy and insolvent companies based on their Z-score values. Modification of the Altman model, namely (Rudianto 2013: 257):

1. If the value of $Z > 2.60$ is categorised as Safe Zone in the capitalisation of a company that is so healthy that it is categorised as a company that is not bankrupt.
2. If the value of $1.10 < Z < 2.60$ is categorised as Grey Zone, the signal originates in the ralwaln where the company is not determined whether it is a bankrupt company or not.
3. If the Z-value < 1.10 is categorised as Distress Zone, the company has a high degree of financial difficulty and is at risk of bankruptcy.

RESULTS

The author conducted research on BUMN Karya companies for 3 periods, the first period was before the 2018-2019 pandemic, the second period during the 2020-2021 pandemic and the third period after the 2022-2023 pandemic. The company's financial statements obtained from the website of each company are the source of data for calculating the Altman Z-Score method. The following is a tabulation of data in this study:

Table 1. Research Data on State-Owned Enterprises Listed on the IDX 2018 to 2023

Code	Year	Ca	CL	RE	EBIT	BV	TL	Ta
In Billion Rupiah								
ADHI	2018	25.430	18.964	2.993	654	6.285	23.883	30.119
	2019	30.315	24.493	3.397	708	6.834	29.682	36.516
	2020	30.091	27.083	1.990	689	5.575	32.519	38.094
	2021	31.601	31.127	2.041	800	5.658	34.243	39.900
	2022	29.594	24.618	2.115	928	8.824	31.163	39.986
	2023	28.581	24.981	2.337	1.384	9.219	31.273	40.492
PTPP	2018	37.534	26.523	5.274	2.047	16.316	36.234	52.549
	2019	41.705	30.491	5.904	1.271	17.326	41.839	59.166
	2020	30.952	27.043	4.148	1.291	13.906	39.503	53.409
	2021	33.732	30.146	3.390	1.574	14.330	41.244	55.574
	2022	32.392	26.764	3.662	1.363	14.821	42.791	57.612
	2023	31.291	26.992	4.143	1.160	15.143	41.382	56.525
WIKA	2018	43.555	28.252	5.480	2.644	17.215	42.015	59.230
	2019	42.335	30.349	7.261	2.957	19.216	42.895	62.111
	2020	47.981	44.213	4.390	298	16.657	51.452	68.109
	2021	37.187	36.970	4.457	179	17.435	51.951	69.386
	2022	39.635	36.135	331	340	17.493	57.576	75.070
	2023	30.652	38.437	-6.865	-7.707	9.572	56.410	65.981
WSKT	2018	66.989	56.800	10.347	6.453	28.887	95.504	124.392
	2019	49.038	45.023	10.233	1.628	29.118	93.471	122.589
	2020	28.755	48.565	5.861	-8.762	11.429	89.389	100.768
	2021	42.589	27.300	-5.961	-334	15.461	88.140	103.602
	2022	33.430	21.453	-8.215	-809	14.245	83.988	98.232
	2023	22.722	22.838	-11.985	-3.533	11.602	83.994	95.596

Table 2 Calculation of PT Adhi Karya Persero Tbk Coefficient

	Koefisien	2018	2019	2020	2021	2022	2023
X₁	6,56	0,2147	0,1594	0,0790	0,0119	0,1244	0,0889
X₂	3,26	0,0994	0,0930	0,0522	0,0512	0,0529	0,0577
X₃	6,72	0,0217	0,0194	0,0181	0,0200	0,0232	0,0342
X₄	1,05	0,2637	0,2303	0,1714	0,1652	0,2832	0,2948
Nilai Z-Score		2,1457	1,1732	0,9838	0,5470	1,4319	1,3002

Based on the results of the ratio values in the table above, the Altman Z-Score method formula can be calculated to identify the possibility of financial distress seen from these ratios.

Table 3 Calculation of PT PP Persero Tbk Coefficient

	Koefisien	2018	2019	2020	2021	2022	2023
X ₁	6,56	0,2095	0,1895	0,0732	0,0645	0,0977	0,0761
X ₂	3,26	0,1004	0,0998	0,0777	0,0610	0,0636	0,0733
X ₃	6,72	0,0390	0,0215	0,0242	0,0283	0,0237	0,0205
X ₄	1,05	0,4503	0,4141	0,3520	0,3475	0,3464	0,3659
Nilai Z-Score		2,4207	2,1333	1,2531	1,1652	1,3586	1,2472

Table 4 Calculation of PT Wijaya Karya Persero Tbk Coefficient

	Koefisien	2018	2019	2020	2021	2022	2023
X ₁	6,56	0,2584	0,1930	0,0553	0,0031	0,0466	-0,1180
X ₂	3,26	0,0925	0,1169	0,0645	0,0642	0,0044	-0,1040
X ₃	6,72	0,0446	0,0476	0,0044	0,0026	0,0045	-0,1168
X ₄	1,05	0,4097	0,4480	0,3237	0,3356	0,3038	0,1697
Nilai Z-Score		2,7124	2,4217	0,9311	0,5879	0,6590	-1,7259

Table 5 Calculation of PT Waskita Karya Persero Tbk Coefficient

	Koefisien	2018	2019	2020	2021	2022	2023
X ₁	6,56	0,0819	0,0327	-0,1966	0,1476	0,1219	-0,0012
X ₂	3,26	0,0832	0,0835	0,0582	-0,0575	-0,0836	-0,1254
X ₃	6,72	0,0519	0,0133	-0,0870	-0,0032	-0,0082	-0,0370
X ₄	1,05	0,3025	0,3115	0,1279	0,1754	0,1696	0,1381
Nilai Z-Score		1,4642	0,8924	-1,5545	0,9369	0,6441	-0,5249

DISCUSSION

Altman Z-Score Calculation & Analysis Results

Using the Altman Z-Score method, variables X₁–X₄ are multiplied by their respective coefficients (6.65, 3.26, 6.72, and 1.05) to determine each company's score. In 2018, three of the four SOEs were in the grey zone (1.46–2.71). PT Wijaya Karya recorded the highest score (2.7124, safe zone), followed by PT PP (2.4207), PT Adhi Karya (2.1457), and PT Waskita Karya with the lowest (1.4642).

In 2019, all four SOEs saw a decline in Z-Scores. PT Waskita Karya fell to 0.8924 (distress zone), while the others stayed in the grey zone: PT Wijaya Karya (2.4217), PT PP (2.1333), and PT Adhi Karya (1.7132). In 2020, performance declined sharply. Three firms entered distress: PT Waskita Karya (–1.5545), PT Wijaya Karya (0.9311), and PT Adhi Karya (0.9838). Only PT PP stayed in the grey zone (1.2531).

In 2021, three firms remained in distress: PT Adhi Karya (0.5470), PT Wijaya Karya (0.5879), and PT Waskita Karya (0.9369). PT PP stayed in the grey zone (1.1652). In 2022, PT Wijaya Karya (0.6590) and PT Waskita Karya (0.6441) were in distress. PT Adhi Karya (1.4319) and PT PP (1.3586) remained in the grey zone. In 2023, PT Wijaya Karya (–1.7259) and PT Waskita Karya (–0.5249) were in distress, while PT PP (1.2472) and PT Adhi Karya (1.3002) stayed in the grey zone.

Classification of State-Owned Enterprises Based on the Altman Z-Score Method

In order to predict the financial distress of a company based on classification, it is necessary to calculate the Z-Score. After obtaining the results, we can classify them into 3 categories, namely:

1. If the Z-Score value is > 2.60, the company is classified as being in the Safe Zone.
2. If the Z-Score is between 1.10 and 2.60, the company is classified as being in the Grey Zone.
3. If the Z-Score is < 1.10, the company is classified as being in financial distress (Distress Zone).

At PT Adhi Karya Persero Tbk, based on financial statement data and Z-Score calculations, the company's financial condition is projected to decline from 2018 to 2023. Specifically, during the pre-pandemic period (2018–2019), the company was in the grey zone, but during the pandemic period (2020–2021), it moved into the distress zone. However, its condition improved again after the pandemic period (2022–2023). As seen

from the Z-Score values, Z-Score of the company, which was in the range of 1.3–2.6 before the pandemic, then dropped below 1.1 during the pandemic. Looking at each variable, it is evident in variable X1 that net working capital has been decreasing annually due to the increasing current liabilities of the company each year. The stagnant value of variable X2 also indicates that the company faced difficulties in improving profitability from its total assets during the pandemic.

With low profitability and a significant decline in 2020-2021, this variable X3 shows a low value, meaning that the company is struggling to generate profits before interest and tax deductions. The increase in the amount of debt that must be repaid immediately also identifies the company as being in financial difficulty and at risk of bankruptcy if not properly managed. Additionally, variable X4 shows a decline each year, indicating the company's inability to meet its obligations from its own market capitalisation. This can also be seen from the company's share price, which has continued to decline since 2018. At PT PP Persero Tbk, the company's financial condition is predicted to remain poor during 2018-2023, with the company almost always in the grey zone both before the pandemic (2018-2019) and during the pandemic (2020-2021). Even after the pandemic (2022-2023), the company's Z-Score, which falls within the range of 1.2–1.3, indicates that the company is in a less than healthy condition. Furthermore, after the pandemic (2020-2023), the company's net working capital has declined significantly. The low value of variable X2 indicates that the company is experiencing difficulties in increasing the profitability of its total assets during this pandemic. With low profitability and a significant decline in 2020-2023, the low value of variable X3 means that the company is struggling to generate profits before interest and tax deductions. The amount of debt that is higher than the value of the company's equity seen in variable X4 also makes the company in a state of financial difficulty, where during the pandemic and PPKM the company's activities were temporarily stopped making the company's cash flow poor. This condition makes investors less interested so that the company's share price continues to decline until this research is made.

Table 6 : Classification of Companies Based on Altman's Z-Score Method

No	Code	Year	Z-Score	Classification	Altman Z-Score
1	ADHI	2018	2,1457	<i>Grey Zone</i>	
		2019	1,7132	<i>Grey Zone</i>	
		2020	0,9838	<i>Distress Zone</i>	
		2021	0,5470	<i>Distress Zone</i>	
		2022	1,4319	<i>Grey Zone</i>	
		2023	1,3002	<i>Grey Zone</i>	
2	PTPP	2018	2,4207	<i>Grey Zone</i>	
		2019	2,1333	<i>Grey Zone</i>	
		2020	1,2531	<i>Grey Zone</i>	
		2021	1,1652	<i>Grey Zone</i>	
		2022	1,3586	<i>Grey Zone</i>	
		2023	1,2472	<i>Grey Zone</i>	
3	WIKA	2018	2,7124	<i>Safe Zone</i>	
		2019	2,4217	<i>Grey Zone</i>	
		2020	0,9311	<i>Distress Zone</i>	
		2021	0,5879	<i>Distress Zone</i>	
		2022	0,6590	<i>Distress Zone</i>	
		2023	-1,7259	<i>Distress Zone</i>	
4	WSKT	2018	1,4642	<i>Grey Zone</i>	
		2019	0,8924	<i>Distress Zone</i>	
		2020	-1,5545	<i>Distress Zone</i>	
		2021	0,9369	<i>Distress Zone</i>	
		2022	0,6441	<i>Distress Zone</i>	
		2023	-0,5249	<i>Distress Zone</i>	

Source: Data compiled by researcher

The Altman Z-Score analysis across the 2018–2023 period reveals a consistent deterioration in the financial health of *BUMN Karya* during the COVID-19 pandemic, with only partial and uneven recovery in the post-pandemic years. Prior to the pandemic

(2018–2019), most companies were in the grey zone, suggesting moderate financial risk, except for Waskita Karya in 2019, which had already entered the distress zone. During the pandemic (2020–2021), three of the four companies shifted into financial distress, with only PT PP maintaining a grey-zone classification. This shift was driven by declining working capital, reduced profitability, and increasing leverage, reflecting the combined effects of delayed projects, reduced contract acquisition, and pandemic-related operational disruptions.

In the post-pandemic period (2022–2023), PT Adhi Karya and PT PP remained in the grey zone, indicating some stabilization but not a return to the safe zone. In contrast, PT Wijaya Karya and PT Waskita Karya continued to record distress-level Z-Scores, with Waskita Karya showing particularly severe financial strain, including negative equity in certain years. These patterns suggest that while some *BUMN Karya* have managed to contain further deterioration, structural challenges such as high debt dependency, low profitability, and volatility in government infrastructure spending continue to weigh heavily on their recovery.

The findings of this study corroborate and extend the results of previous research on financial distress in the Indonesian construction sector. Similar to the results reported by Resfitasari et al. (2021), which identified PT Waskita Karya as being in financial distress during 2019–2020, this study also confirms a persistent distress condition in the company through to 2023, with no signs of recovery. However, unlike studies by Pertiwi and Putri (2021) on retail companies—where several firms recovered from the distress zone post-crisis—our analysis shows that recovery among *BUMN Karya* has been uneven, with PT Adhi Karya and PT PP showing partial improvement while PT Wijaya Karya and PT Waskita Karya remain in distress. This divergence suggests that the structural and operational characteristics of state-owned construction enterprises, including heavy reliance on debt financing and exposure to government project cycles, may hinder post-pandemic recovery compared to other sectors. Furthermore, the sustained grey-zone classification for PT PP throughout the period aligns with Ullah et al. (2021), who found that certain firms maintain borderline financial health despite macroeconomic shocks, emphasizing the importance of proactive financial restructuring.

From a signaling theory perspective, the decline in Z-Scores serves as a negative signal to investors and creditors, potentially influencing capital access and cost of borrowing. Companies in the grey zone may still attract investment if they demonstrate credible turnaround strategies, while those in distress will likely face increased financing constraints. These results underscore the need for targeted interventions by both corporate management and policymakers. For management, strategies such as debt restructuring, diversification of revenue sources, and improved project selection could help mitigate financial vulnerability. For policymakers, revisiting infrastructure funding models and providing conditional financial support could accelerate recovery, particularly for strategic enterprises critical to national development.

Overall, this study highlights that the financial resilience of *BUMN Karya* remains fragile, with long-term implications for Indonesia's infrastructure development agenda. Addressing these vulnerabilities requires a coordinated approach that balances short-term financial stabilization with long-term structural reforms to strengthen the sector's ability to withstand future economic shocks.

CONCLUSION

During the pre-pandemic period (2018-2019), the state-owned construction company with the highest Z-Score was Adhi Karya with a Z-Score of 2.1457 in 2018, while the lowest Z-Score was Waskita Karya with a score of 0.8924 in 2019. During the pandemic (2020-2021), the *BUMN Karya* company with the highest Z-Score value is PT PP with a Z-Score value of 1.2531 in 2020, while the one with the lowest Z-Score value is Waskita Karya with a score of -1.5545 in 2020. In the post-pandemic period (2022-2023), the state-owned company with the highest Z-Score value is Adhi Karya with a Z-Score value of 1.4319 in 2022, while the lowest Z-Score value is Wijaya Karya with a score of -1.7259 in

2023. During the pre-pandemic period (2018-2019), all BUMN Karya companies were in the grey zone classification, except for Waskita Karya in 2019 which was in the financial distress zone classification. During the pandemic (2020-2021), all BUMN Karya companies were in the financial distress zone classification, except for PT PP in 2020. In the period after the pandemic (2022-2023) two BUMN Karya companies that are in the grey zone, namely Adhi Karya and PT PP and BUMN Karya companies that are in the financial distress zone, namely Wijaya Karya and Waskita Karya.

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