Financial Distress Analysis of PT Samudera Indonesia Tbk

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ABSTRACT

This study uses the Zmijewski (X-Score) and Grover (G-Score) techniques to analyze PT Samudera Indonesia Tbk's financial hardship from 2018 to 2023. Working capital, liquidity, profitability, and solvency ratios were used to examine financial distress, which is a prelude to bankruptcy. Quantitative processing was done on secondary data from the Indonesian Stock Exchange and financial reports. Except for 2019, when the Grover technique identified distress because of pandemic-induced economic disruptions, the results indicated that PT Samudera Indonesia was primarily not in a position of financial distress. Stability was constantly shown by the Zmijewski technique, which demonstrated excellent liquidity and leverage management. Zmijewski's emphasis on solvency and Grover's emphasis on profitability are the causes of the discrepancy in the results. In addition to providing stakeholders with insights on financial risk assessment and mitigation in unpredictabel markets, the findings demonstrate the company's resilience in the face of global difficulties such as trade wars and geopolitical crises.

INTRODUCTION

Based on information from the Directorate General of Sea Transportation, maritime transportation plays a strategic role in supporting national development in 2020, including uniting Indonesia despite its diversity. Based on data from United Nations Conference on Trade and Development (UNCTAD) in Review of Maritime Transport (2022) Indonesia is ranked 21st in terms of ownership. Based on the annual report of PT Samudera Indonesia, (2020) PT Samudera Indonesia Tbk's activities are generally in the logistics sector (general freight forwarding, energy logistics, project logistics, contract logistics,and cold chain logistics), cargo (container shipping, bulk goods and projects), shipping (national, international shipping, etc.), and shipping agencies, development and operation of ports and terminals.

Table 1 Financial Summary Table of PT Samudera Indonesia Tbk Period 2018-2023

YEAR	TOTAL ASSETS	SERVICE REVENUE	PROFIT FOR THE YEAR
2018	599.790.746	482.446.122	7.413.733
2019	553.714.758	438.865.360	(60.217.878)
2020	574.144.140	490.839.680	(2.320.680)
2021	829.181.216	672.918.136	139.077.164

| 2022 | 1.153.416.013 | 1.150.960.031 | 326.997.591 |
| 2023 | 1.256.963.375 | 772.404.229 | 109.996.540 |

Source: Financial Report of PT Samudera Indonesia Tbk (2018-2023)

Pratono, RH (2021) reported that increases in shipping rates at various Indonesian ports during the pandemic fluctuated. This hampered population mobility and global supply, leading to economic contraction. Cumulative GDP Growth Rate (2010 series) on 2020 recorded the transportation and warehousing sector experienced a decline of -15.05%. The declines in 2020 are quite complex when viewed globally. COVID-19 policies disrupted logistics flows, and the war in Ukraine led to the closure of Black Sea ports from the start. Reported from International Maritime Organization (IMO) (2020) in 2020 the emphasis on fuel use for shipping continued to increase to improve water quality levels.

The occurrence of global political invasions, namely the Ukraine Russia and Palestine-Israel wars and the increase in bunker prices which caused an increase in shipping operational costs, PT Samudera Indonesia Tbk recorded a profit for the current year of 109.997 million USD in 2023, a 65% drop from 326.998 million USD in 2022. A decline in net profit is one of the signs of a company in financial distress. PT Samudera Indonesia Tbk or with the issuer code (SMDR) postponed the stock split, the purpose of the stock split is to increase the liquidity of the company's stock trading and to increase the number of the company's shares in circulation.

Table 2 SMDR Fundamental Summary Table 2018-2023

SMDR	2018	2019	2020	2021	2022	2023
Last Price	310	254	284	995	1.930	320
EPS	32.08	-161.60	-14.28	402.23	204.02	70.11
PER	9.68x	-1.57x	-19.89x	2.47x	9.46x	4.56x
Market Cap.	1 T	831.9 B	930.1 B	3.3 T	6.3 T	5.2 T
PBV	0.23x	0.24x	0.27x	0.6x	0.62x	0.5x
ROE	2.38%	-15.54%	-1.38%	24.37%	32.9%	10.88%
ROA	1.22%	-7.42%	-58%	11.22%	18.44%	5.93%
DER	9,96	1,10	1,37	1,17	0,78	0,83

Source: Ipot, processed data (2025)

Based on the SMDR Fundamental Summary analysis of PT Samudera Indonesia Tbk also produces highly volatile results for stock investors. Market Cap which is on second liner with a market capitalization of between (500 B – 100 T) annually. With a PBV, ROA which decreased in 2019-2020.

Fatmawati, A. (2023) the analysis of Grover method is on grey area in 2018 and 2020, menwhile in 2019,2021, and 2022 was non financial distress, also according to Zmijewski method SMDR was indicated as non-financial distress from 2018-2022. Based on the research, the focus of this research is how PT Samudera Indonesia Tbk's financial problems were resolved using the Zmijewski and Grover methods during the 2018–2023 period, using the Zmijewski and Grover methods to analyze the financial situation of PT Samudera Indonesia Tbk for the years 2018–2023. The purpose of this study is to determine and analyze the level of financial distress at PT Samudera Indonesia Tbk during the 2018–2023 timeframe using the and Grover methods (Abidah et al., 2024; Iskamto et al., 2024).

LITERATURE REVIEW

Financial Reports

According to Minister of Finance Regulation Number 173 of 2023 concerning the Central Accounting and Financial Reporting System, financial reports are a form of accountability for the implementation of the state revenue and expenditure budget prepared by the government based on government accounting standards. As quoted by Astuti et al. (2021:5), financial reports are important reports for conveying information regarding a company's progress and can be used to evaluate the company's performance and achievements, both past, present, and future. Based on the definitions outlined above, it can be concluded that financial reports are a record of all transaction activities of a company to account for the activities carried out during a certain period, recorded according to its financial position. Financial reports are also the process of recording all company activity line transactions recorded in the form of numbers or rupiah (Benon et al., 2025; Iskamto et al., 2019; Isroin et al., 2025; Jayaprawira et al., 2022; Soesetio, 2023).

Financial Distress

Platt & Platt (2002) in Dirman (2020) before banckruptcy, there is a period of deteriorating financial circumstances known as financial distress. People use financial information while they are simultaneously with other people, in order for harm to occur and for those who play significant roles to attempt to participate in a life that is extremely destructive (Rama Nopiana & Rusmiati Salvi, 2022; Rohmawati & Utami, 2025; Soesetio, 2023).

Hipotesis Development

The hipotesis of this literature is to analyze financial distress using the Zmijewski and Grover method to determine the bankruptcy prediction at PT Samudera Indonesia with a time span of 2018-2023.

Research Framework

Figure 1 Research Framework

METHOD

This research use secondary data, which is use financial statements of PT Samudera Indonesia Tbk for the Period 2018-2023. The data used on this literature is quantitative research.

The sampling technique used was non-probability sampling. Determination non-probability sampling this uses purposive sampling. Descriptive analysis techniques are used to analyze financial distress at PT Samudera Indonesia in 2018-2023. This research was conducted to assess whether PT Samudera Indonesia Tbk suffered "Financial Distress" in the 2018-2023 timeframe utilizing the Zmijewski and Grover approach in order to analyze indicators of bankruptcy. The financial reports of PT Samudera Indonesia Tbk for 2018-2023 obtained directly from official webste PT Samudera Indonesia Tbk.The data will be processed using a formula that is computed in Microsoft excel in order to obtain the findings.

RESULT AND DISCUSSION
Results

Table 3 Summary of PT Samudera Indonesia Financial Report Tbk 2018-2023

Account	2018	2019	2020	2021	2022	2023
Total Assets	599.790.746	517.225.263	574.144.140	829.181.216	1.153.416.013	1.256.963.375
Amount Liabilities	293.158.278	270.403.389	332.373.687	447.391.043	506.933.368	571.449.588
Profit for the Year	7.413.733	-60.217.878	-2.320.880	139.077.164	326.997.591	109.996.540
Total Current Assets	220.642.568	223.248.644	248.654.972	429.449.055	652.053.930	589.655.846
Total Current Liabilities	201.448.507	176.004.127	192.089.546	296.637.740	318.955.610	245.618.976
Profit Before Income Tax	12.593.132	-55.055.359	340.633	142.386.132	332.452.384	118.551.482

Source: PT Samudera Indonesia Financial Report 2019-2023, Processed 2025

PT Samudera Indonesia's financial results throughout the 2018–2023 in table 3 period were highly variable. Profits before the pandemic in 2018–2019 were significantly different. During the 2020–2021 pandemic, the company's earnings started to increase. The business made a lot of money during the observation period after the outbreak. All economic actors were impacted by a number of exogenous shocks during the 2018–2019 period. Some less than satisfactory outcomes were the consequence of the contraction of all sectors, which also affected PT Samudera Indonesia. Numerous variables contribute to these growth spikes and setbacks. The US-China trade war, which still hangs over the world economy, has hampered economic growth and trade volume, according to the 2018 annual report (2018:8). Due to high fuel prices, the 2018 rise in services was not supported by a comparable increase in gross profit, resulting in a comparatively moderate gain. In 2019, external headwinds persisted, and the International Monetary Fund (IMF) (in Financial Report 2019: 8) predicted that world growth would fall to 2.9% per year in 2019. This situation also had an impact on the decline in performance across all shipping segments, according to the Bloomberg report (in the annual report, 2019:9), due to climate disasters (Cyclone Veronika in Australia) and OPEC's policy of lowering production oil prices. The COVID-19 pandemic in 2020–2021 raised concerns about the stability of the world economy. The IMF report (2020:9) states that the amount of trade in goods and services fell to 9.6%. The volume of international trade decreased by 4.1%, according to figures from Maritime Transport.

Container shipping companies were obliged to restrict and scale back their fleet operations in the market due to the economic slump that occurred in the second quarter of 2020. But throughout this downturn, trade for necessities increased, creating a high demand for container transportation services, which in turn caused container freight prices to rise sharply.The projected global economic growth in 2021 is also driven by several factors, such as high inflation in several countries (the United States and the European Union), global supply chain bottlenecks, and weakening activity in the Chinese economy. The shipping industry, which continues to benefit from rising freight rates, has not fully recovered from its current situation. Geopolitical challenges between Russia and Ukraine have created a potential energy crisis, and rising global oil prices and fuel prices for ships.2022-2023 marks two years after the COVID-19 outbreak, although recovery from the impact of COVID-19 and global geopolitical factors

continues. The WTO's 2022 Annual & Sustainability Report (2022:12) also predicts global trade growth of 3.5% in 2022. The significant impact of COVID-19 has accelerated technological development autonomous shipping which is widely explored by various countries has become a technological development agenda for companies.

Table 4 ROA Calculation Table

YEAR	PROFIT FOR THE YEAR	TOTAL ASSETS	ROA	ROA (%)
2018	7.413.733	599.790.746	0,012360532	1,2%
2019	-60.217.878	517.225.263	-0,116424858	-11,6%
2020	-2.320.880	574.144.140	-0,00404233	0,4%
2021	139.077.164	829.181.216	0,16772831	16,8%
2022	326.997.591	1.153.416.013	0,283503599	28,4%
2023	109.996.540	1.256.963.375	0,087509741	8,8%

Source: Processed data, 2025

During the 2018–2023 timeframe in table 4, the highest ROA was 28% in 2022, while the lowest was -10% in 2019. The ROA was just 1.2% in 2018. The ROA interpretation reached 16.8% in 2021, continuing the tremendous rise and strengthening that took place in 2020, with a ROA of 0.04. In 2022, the rise persisted as well. In 2023, PT Samudera Indonesia's expansion did not yield the same outcomes the upper limit is merely 8.8%.

Table 5 Debt Ratio Calculation Table

YEAR	TOTAL ASSETS	AMOUNT LIABILITIES	DEBT RATIO	DEBT RATIO (%)
2018	599.790.746	293.158.278	0,488767591	48,9%
2019	517.225.263	270.403.389	0,522796175	52,3%
2020	574.144.140	332.373.687	0,578902864	57,9%
2021	829.181.216	447.391.043	0,539557619	54,0%
2022	1.153.416.013	506.933.368	0,439506095	44,0%
2023	1.256.963.375	571.449.588	0,454627079	45,5%

Source: Processed data, 2025

In table 5 2018 debt ratio recorded by PT Samudera Indonesia provided quite high results 48.9%. In 2019, the interpretation results were still far from the standard, but increased again from 2018 with the results obtained in 2019 amounting to 52.3%. The steadily increasing results continued into 2020 with a return of 57.9%. Value movementdebt ratioIn 2021, there was a modest decline, with a result of 54.0%. The decline continued into 2022, reaching 44% This movement resulted in a 10% decrease compared to the previous year, 2021 In 2023, the interpretation results again increased, but only by 1.5% from 2022.

Table 6 Current Ratio Calculation Table

YEAR	TOTAL CURRENT ASSETS	TOTAL CURRENT LIABILITIES	CURRENT RATIO	CURRENT RATIO (%)
2018	220.642.568	201.448.507	1,095280235	110%
2019	223.248.644	176.004.127	1,268428461	127%
2020	248.654.972	192.089.546	1,294474255	129%
2021	429.449.055	296.637.740	1,447722245	145%
2022	652.053.930	318.955.610	2,044340684	204%
2023	589.655.846	245.618.976	2,400693365	240%

Source: Processed data, 2025

Results of interpretation: current ratio During the observation period (2018–2023) in table 6, the company's current assets were at their lowest point in 2018, at 110%. Although the interpretation's results in 2019 are remain modest, they have increased by 127% over 2018. The sustained expansion in 2018–2019 also predicted a 129% increase in 2020. In 2021, the growth that took place in 2020 persisted. ratio of acquisition to current The business had a respectabel outcome in 2022, hitting 204%. The acquisition-current ratio offers a reasonably consistent value of 240% in 2023.

Table 7 EBITTA Calculation Table

YEAR	TOTAL ASSETS	EBIT	EBITTA	EBITTA (%)
2018	599.790.746	12.593.132	0,020995876	2,1%
2019	517.225.263	-55.055.359	-0,106443677	-10,6%
2020	574.144.140	340.633	0,000593288	0,1%
2021	829.181.216	142.386.132	0,171718955	17,2%
2022	1.153.416.013	332.452.384	0,288232849	28,8%
2023	1.256.963.375	118.551.482	0,094315781	9,4%

Source: Processed data, 2025

According table 7 2018 The EBITTA interpretation from the recorded calculations is 2.1%, which is still a low number that suggests there is still room for improvement in the efficiency of asset usage to produce business profits. Additionally, during the monitoring period (2018–2023), 2019 was the poorest year. The EBITTA for this year dropped sharply by -10.6%.

The worst year during the 2018–2023 monitoring period was also 2019. EBIT was recorded at a disadvantage, with total assets valued at USD 517,225,263. There was a sharp drop of -10.6% in the EBITTA this year. This outcome was also brought on by outside variables that PT Samudera Indonesia had to deal with, like the early COVID-19 outbreak and the US-China trade war. A negative EBITTA value suggests that the company's finances are being significantly impacted by outside causes.

In 2020, the signal returned to a positive value albeit only by a few points, at 0.1%. The increase and growth experienced in 2020 also continued in 2021 based on the increase in total assets and EBIT, the EBITTA also delivered satisfactory results and increased significantly by 17.2% this year.

In 2022, the growth grew even faster, reaching 28.8%. These outcomes show that the business may increase asset productivity and operational efficiency. Although PT Samudera Indonesia's interpretation of the findings in 2023 also revealed a drop, it was a significant one, with a positive score of 9.4%.

Table 8 WCTA Calculation Table

YEAR	TOTAL CURRENT ASSETS	TOTAL CURRENT LIABILITIES	WORKING CAPITAL	TOTAL ASSETS	WCTA
2018	220.642.568	201.448.507	19.194.061	599.790.746	0,032001262
2019	223.248.644	176.004.127	47.244.517	517.225.263	0,091342246
2020	248.654.972	192.089.546	56.565.426	574.144.140	0,098521298
2021	429.449.055	296.637.740	132.811.315	829.181.216	0,16017164
2022	652.053.930	318.955.610	333.098.320	1.153.416.013	0,288792869
2023	589.655.846	245.618.976	344.036.870	1.256.963.375	0,273704769

Source: Processed data, 2025

In table 8 the statistics indicate an improvement in PT Samudera Indonesia's performance between 2018 and 2023. The findings computed between 2021 and 2022 show a notabel increase. The working capital to total assets (WCTA) score in 2018 was as high as 0.032, while the 2019 score of 0,091 suggested efforts to increase the company's liquidity.

Additionally, growth persisted, with a working capital to total assets (WCTA) ratio of 0.98 in 2020. In 2021, this rise persisted and showed encouraging promises, reaching 0.16. Growth also saw a positive uptick in 2022, with working capital to total assets (WCTA) reaching 0.28. Although it saw a drop to 0.27 in 2023, PT Samudera Indonesia once more reported favorable results.

Intepretation Zmijewski Metohod

Table 9 *Cut Off* Zmijewski Method

Score Value	Coefficient
Z ≤ - 0	*Non Financial Distress*
Z ≥ 0	*Financial Distress*

Cut-off Signal prediction can be determined using the Zmijewski model. Signal prediction is done using the Zmijewski approach a corporation in financial difficulties. Considering the computation the Zmijewski method's variables have two cut-off points. The company in question will be classified as being in good shape if the Z score is ≥0 financial distress, If the Z score is ≤ - 0 however, it is anticipated that the business would face non-financial distress. This approach is used as a limiter to aid in predictive analysis. While non-financial distress suggests that the company is still in a stabel financial position and can meet its obligations, financial distress suggests that the company may be having some issues with its liquidity.

Intepretation Grover Method

Table 10 *Cut Off* Grover Method

Score Value	Coefficient
G < -0,02	*Financial Distress*
-0,02 < G <0,01	*Grey Area*
G > 0,01	*Non Financial Distress*

Cut off A technique for identifying signal predictions for the Grover method in detecting a company's financial crisis is the Grover model. Considering the computation Two points are chopped off in the Grover method's variables. The company will be classified as being in good shape if the G score is < -0.02. financial distress. These findings indicate that the company is at a somewhat high risk and is going through financial challenges, including reduced profitability, the inability to pay debts, and the possibility of bankruptcy. Grey or uncertain is the expected outcome for the company if the score is -0.02 < G < 0.01. To ascertain the company's health, this interpretation necessitates further investigation utilizing additional financial indicators or other techniques. According to the ultimate outcome, a situation non-financial distressor that is not going through bankruptcy is classified if G > 0.01. According to this understanding, the business has sound financial standing and can fulfill its commitments, both immediate and long-term.

DISCUSSION

Table 11 Results of the Zmijewski Method calculation for PT Samudera Indonesia 2018-2023

YEAR	ROA	*DEBT RATIO*	*CURRENT RATIO*	ZMIJEWSKI	INTEPRETATION
2018	1,2%	48,9%	109,5%	-1,574028249	*non financial distress*
2019	-11,6%	52,3%	126,8%	-0,801223655	*non financial distress*
2020	-0,4%	57,9%	129,4%	-0,987241088	*non financial distress*
2021	16,8%	54,0%	144,8%	-1,985089853	*non financial distress*
2022	28,4%	44,0%	204,4%	-3,078758816	*non financial distress*
2023	8,8%	45,5%	240,1%	-2,112022258	*non financial distress*

Source: Processed data, 2025

Based on table 11 in 2018, PT Samudera Indonesia Tbk had a Zmijewski value of -1.574, indicating that there was no financial distress based on the findings of the combined calculations utilizing the Zmijewski method formula. In 2019, the results were higher than in 2018, confirming the results, which were non-financial difficulty for the company. The findings, which pertain to non-financial suffering, are likewise consistent with Fitriyani, Y (2023) research which is non-financial distress.

Based on tabel 11 in 2020, the results obtained by PT Samudera Indonesia Tbk climbed to -0.987 and

approached zero, but remained negative. The surge in debt ratios in 2019 and 2020 was also spurred by economic uncertainty generated by Covid-19. However, a high current ratio suggests that the corporation is still capable of effectively managing its current liabilities, demonstrating its financial resilience in the face of global economic instability. The findings, which pertain to non-financial suffering, are likewise consistent with Fatmawati, A. et al (2023) research which is non-financial distress. Results of the financial difficulty prediction show that PT Samudera Indonesia's financial health has improved in 2021, as seen by a notabel reduction to -1.985. Once more, the outcomes of 2021 were in stark contrast to those of 2020. The expected global economic growth in 2021 was influenced by a number of issues, including as declining activity in China's economy, global supply chain restrictions, and rising inflation in some countries (the US and the EU). This position has not yet been fully recovered from by the shipping industry, which still benefits from higher shipping prices. In addition to raising the price of oil and ship fuel globally, geopolitical tensions between Russia and Ukraine have raised the possibility of an energy crisis. The findings, which pertain to non-financial suffering, are likewise consistent with Arafah, N., N., & Maria, E. (2024) research which is non-financial distress.

In 2022, PT Samudera Indonesia achieved its lowest score during the research period (2018-2019), reaching -3.079. The negative confirmation signal also confirms strong financial stability. This finding further supported by the transition from the COVID-19 pandemic to a new normal, which has contributed to the global economy's gradual recovery since 2021. Even though they are still low, the 2023 results are still in decent shape despite having climbed from 2022, specifically to -2,112. non-monetary hardship. The outcomes of the score that PT Samudera Indonesia achieved in 2023 are still governed by the ratios that have been shown. Additionally, a negative score indicates that the business is still safe and capable of managing its liquidity and financial difficulties in 2023.

According to Zmijewski method estimations, PT Samudera Indonesia maintained financial stability from 2018 to 2023. The Zmijewski value remained persistently negative (below the threshold). Financial distress reflects a company's ability to sustain financial health despite setbacks, such as declining asset returns in 2019 and 2020. This demonstrates the company's resilience in managing financial risks. The findings, which pertain to non-financial suffering, are likewise consistent with Arafah, N., N., & Maria, E. (2024) research which is non-financial distress.

Table 12 Results of the Grover Method

YEAR	ROA	WCTA	EBITTA	GROVER	INTEPRETATION
2018	1,2%	0,032001262	2,1%	0,181074275	*non financial distress*
2019	-10,5%	0,082286857	-10,6%	-0,131962136	*Financial distress*
2020	-0,4%	0,098521298	0,1%	0,221644373	*non financial distress*
2021	16,8%	0,16017164	17,2%	0,903130876	*non financial distress*
2022	28,4%	0,288792869	28,8%	1,510116796	*non financial distress*
2023	8,8%	0,273704769	9,4%	0,82826363	*non financial distress*

Source: Processed data, 2025

In 2018, PT Samudera Indonesia obtained an analysis score using the Grover method of 0.181 which is included in the category non-financial distress based on points cut-off Grover method. The limited liquidity of the WCTA signal and low EBITTA did not result in a drop in the score financial distress but was able to support the financial position of PT Samudera Indonesia in 2018. 2019 had a sharp drop in financial performance to (-0.132), which produced a final negative outcome and a signal that defied Zmijewski's research, specifically that Financial hardship was signaled by the company. Even if the recorded WCTA has increased to 0.082 EBITTA, which yields a result of -0.096, the calculation results fall, as evidenced by the sharp decline in ROA of -10.5%, which is one of the

reasons for the low earnings results.The drop that took place in 2019 was also an indication of operational   capacity   and   profitability. The WCTA provided liquidity, but the corporation still had certain challenges. With the Covid-19 virus gradually spreading over the world and upending global economic stability, 2019 was also a year of economic unrest. In 2020, PT Samudera Indonesia showed signs of recovery from the conditions financial distress experienced in 2019. The Grover value of 0.22 indicates that the company is in the category non-financial distress, and it was driven by operational efficiency and improved working capital management.In 2021, PT Samudera Indonesia witnessed a major growth surge, with a Grover score reaching 0.90 This implies that the company is not only immune from financial trouble but also accomplish exceptional performance. These results signal that PT Samudera Indonesia is experiencing non financial distress.

The revised results indicated that in 2022, PT Samudera Indonesia was in non-financial difficulty. The company's significant earnings in 2022 demonstrate that the shift to the post-COVID-19 era was a major factor in its success. Although the score value was significantly lower in 2023 than in 2022, it was still high at 0.82. External factors like the Russian and Ukrainian invasions caused sea lanes to close and reopen, which disrupted shipping distribution and freight transportation systems. This demonstrates 2023 resilience that results in an evaluation score non-monetary damages. PT Samudera Indonesia showed a trend toward improved financial performance between 2020 and 2023. From 0.22 in 2020 to a peak of 1.5 in 2022, the Grover value continuously rose before slightly decreasing in 2023. This shows how well the business can keep its finances stabel and steer clear of financial trouble. financial difficulty. PT Samudera Indonesia showed that company could bounce back from the 2019 financial crisis and have strong resilience between 2018 and 2023. Grover's worth increased from - 0.13 in 2019 to 1.51 in 2022, demonstrating the company's ability to successfully execute a recovery plan helpful to other corporate   actors   in   dealing   with   the   emergency. The epidemic and the worldwide economic recovery made the years 2020–2023 crucial. Due to successful performance throughout this time, Samudra Indonesia has shown that it can take advantage of possibilities even in the face of uncertainty, such as rising logistical demand brought on by shifting consumer trends. But the 2023 drop in ROA and EBIT also serves as a reminder that outside variables— like inflation or unstabel geopolitics—continue to have a big impact.

Recapitulation of intepretation Results of Zmijewski and Grover Method

The calculations for each year vary, according to the analysis done at PT Samudera Indonesia between 2018 and 2023. The computations' outcomes, derived from the interpretation, are as follows:

Table 13 Results of Interpretation of the Zmijewski and Grover Methods

YEAR	ZMIJEWSKI	GROVER
2018	*non financial distress*	*non financial distress*
2019	*non financial distress*	*financial distress*
2020	*non financial distress*	*non financial distress*
2021	*non financial distress*	*non financial distress*
2022	*non financial distress*	*non financial distress*
2023	*non financial distress*	*non financial distress*

Source: Processed data, 2025

It is evident from the analytical results of the Zmijewski and Grover methodologies of tabel 4.11 that PT Samudera Indonesia Tbk. between 2018 and 2023, with the exception of 2019, these Both approaches yielded the same conclusion, which is that the business is experiencing non-financial distress. This indicates that The company is able to maintain financial stability and withstand pressure both internally and externally.

There were inverse results in 2019 using the Grover method, namely the company experienced conditions financial distress and the Zmijewski method gives results non-financial distress. The difference arose due to slight differences in calculations that produced quite significant results.

Furthermore, the company also faced significant external pressures that year of worldwide economic unrest, as the COVID-19 pandemic gradually spread over the world, upending global economic stability.) the existence of climate catastrophes (such as Hurricane Veronika in Australia) and OPEC's (Organization of the Petroleum Exporting Countries) strategy of lowering oil production.

CONCLUSION

From 2018 to 2023, PT Samudera Indonesia demonstrated highly positive overall results in non-financial distress, according to the Zmijewski and Grover method calculations; but, in 2019, the results of the Grover method calculation indicated financial hardship. Another factor contributing to the disparity in results between the two methods is variations in the calculation variables. Because the Zmijewski strategy places more emphasis on liquidity and leverage ratios than the Grover method, which is more sensitive to business profitability, it produces quite different results in other years, such as 2019. These findings support Fatmawati, A.,et al (2023) analysis, which shows that the corporation did not face financial difficulties from 2018 to 2022 according to the Zmijewski technique. These outcomes also support those of Arafah, N., N., & Maria, E (2024) , who found that from 2018 to 2023, the Zmijewski technique yielded results related to non-financial distress. But in 2019 and 2021, the Grover Arafah, N., N., & Maria, E (2024) approach produced findings that indicated financial crisis, but Fatmawati, A.,et al (2023) produced non-distressed outcomes.
The research's background and findings have led to a number of recommendations that can be used to strengthen this report's shortcomings. The recommendation is to supplement the techniques for performing analytical computations. financial difficulties There is a longer time frame to view the projections because the current approach only considers short-term forecasts. financial hardship, and in order to ascertain health and forecasts, carry out industrial research in the shipping and logistics sector. corporation in financial difficulties.

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