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The Implications of Strategic Financial Management of Shipping Companies on the Potential for Bankruptcy Due to the Financial Crisis in Indonesia

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Abstract

The decrease in demand and increase in availability in the shipping market have triggered a sharp decline in transportation and leasing rates in 2008, 2013, and 2020 due to the global financial crisis. All shipping companies suffered losses, including PT Arpeni Pratama Ocean Line Tbk (PT APOL) which faces financial problems. In addition to PT APOL, several other shipping companies also experienced poor financial conditions. This has led to speculation about the causes of the poor financial condition of shipping companies in Indonesia. This speculation is not unfounded, as PT APOL was still able to record a net profit of IDR 223 billion in 2007, but dropped dramatically by 95.56% in 2008. To address this problem, there are several reasons for company bankruptcy (financial distress) based on the analysis conducted. Simultaneously, Return on Asset (ROA), Return on Equity (ROE), Current Ratio (CR), Debt to Equity Ratio (DER), Net Present Margin (NPM), and Asset Turnover (ATO) have an impact on the financial distress condition represented by Altman Z-Score and Ohlson O-Score in all sample companies, both in poor financial condition (category 1) and good (category 2). However, all of these variables have different significance and correlations to the financial distress condition.

Keywords: Bankruptcy, Finance, Financial Crisis, Financial Distress, Financial Ratio, Shipping.

Abstrak

Penurunan permintaan dan peningkatan ketersediaan di pasar pelayaran telah memicu penurunan tajam tarif angkutan dan sewa pada tahun 2008, 2013, dan 2020 akibat krisis keuangan global. Seluruh perusahaan pelayaran mengalami kerugian, termasuk PT Arpeni Pratama Ocean Line Tbk (PT APOL) yang mengalami masalah keuangan yang berkelanjutan. Selain PT APOL, beberapa perusahaan pelayaran juga mengalami kondisi keuangan yang buruk, meskipun tidak sampai kebangkrutan. Hal ini menimbulkan spekulasi tentang penyebab buruknya kondisi keuangan perusahaan pelayaran di Indonesia. Spekulasi ini tidak terjadi tanpa alasan karena PT APOL masih mampu mencatatkan laba bersih sebesar 223 miliar rupiah pada tahun 2007 dan menurun drastis hingga 95,56% di tahun 2008. Dalam menghadapi masalah ini, terdapat beberapa penyebab kebangkrutan perusahaan (*financial distress*) berdasarkan analisis yang dilakukan. Secara simultan, *Return on Asset* (ROA), *Return on Equity* (ROE), *Current Ratio* (CR), *Debt to Equity Ratio* (DER), *Net Present Margin* (NPM), dan *Asset Turnover* (ATO) berpengaruh terhadap kondisi *financial distress* yang direpresentasikan dengan Altman Z-Score dan Ohlson O-Score pada seluruh perusahaan sampel, baik yang sedang dalam kondisi keuangan buruk (kategori 1) maupun yang baik (kategori 2). Namun, seluruh variabel tersebut memiliki signifikansi dan keterkaitan yang berbeda pada kondisi financial distress tersebut.

Kata Kunci: Kebangkrutan, Keuangan, Kesulitan Keuangan, Krisis, Pelayaran, Rasio Keuangan.

1. Background

The operational activities of a company that focus on revenue generation pose significant challenges to managing companies in any industrial sector, especially during global crises. For example, the global shipping industry has experienced a prolonged decline in revenue since 2008, exacerbated by the global economic crises of 2013 and 2020, which resulted in reduced export and import activities. Unstable economic conditions affect industries in general, including the shipping industry. According to Kavussanos (2021), the 2008 economic crisis resulted in inelastic demand and a slow supply response to the shipping of goods and passengers. PT Arpeni Pratama Ocean Line Tbk (APOL) is one of the shipping companies impacted by the global crisis. Despite APOL's ability to maintain good financial performance through important contract acquisitions, the increase in the company's revenue was offset by other expenses related to net losses from derivative instruments, reaching 99.52% or equivalent to IDR 361 billion. Previous research has identified several factors that contribute to poor financial performance in shipping companies, such as inadequate working capital (Shin et al., 2019). Furthermore, Song (2019) revealed that bankruptcy in the shipping industry often occurs in both domestic and international markets, with many cases attributed to macroeconomic factors such as oil price fluctuations and management strategy errors. One example of bankruptcy is U.S. Lines, which was caused by investment mistakes in assets (buying 12 Jumbo Econoships equivalent to 4482 TEU) and the global decline in oil prices in 1985. According to Chen (2018), strategic management can be a solution to address poor financial ratios in shipping companies. Findings from this study indicate that shipping companies that implement effective strategic management have better financial performance, including healthier financial ratios. To achieve effective strategic management, clear and measurable strategies, effective risk management, and innovative technology utilization to manage operational costs and improve efficiency are necessary. By implementing good strategic management, shipping companies can overcome external challenges such as fuel price fluctuations and intense competition, as well as internal factors such as poor management and inefficient fiscal policies.

2. Methodology

The research is conducted to identify the factors causing financial distress based on the financial condition of shipping companies. The data used in the study is secondary data obtained from the financial reports of shipping companies from 2007 to 2021 using documentary methods. Subsequently, descriptive analysis, analysis of financial ratios of the companies, and financial distress are conducted on the collected data. Further analysis will be carried out to explore the interrelationships and significance using classical assumption tests, multiple linear regression, canonical multivariate analysis, and hypothesis testing. The complete analysis process is detailed in Figure 1.

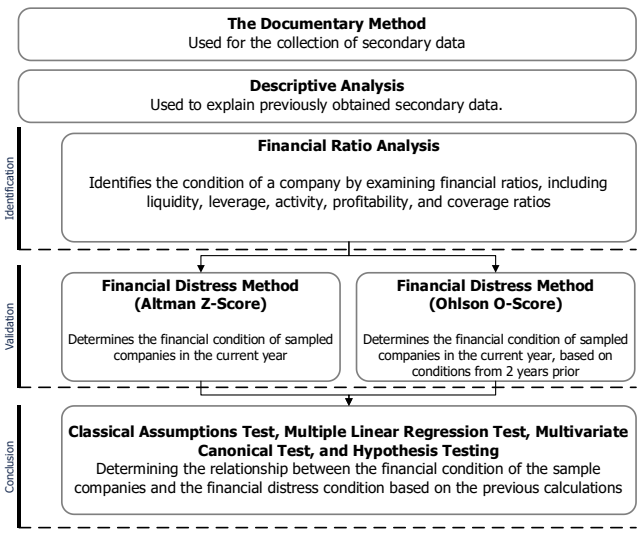

Figure 1. The method used in the analysis
Source: Mishra (2019), Greene (2021), Neeleman (1973), Kolmogorov (2018), MacKinnon (2008), Thompson (1984), Altman (2019), Ohlson (1980) dan Johnson & Wichern (2007).

3. Research Results

Based on the analysis conducted, there are 12 companies listed on IDXTRANS as shown in Table 1. This data is then used as a sample of companies in the study. When compared to previous research conducted by Woo (2021), it was found that there was no significant difference, indicating that the shipping industry in Indonesia is worse off compared to the global industry, as evidenced by the average revenue compared to capital, which is only 0.01. However, despite no significant difference between the national and global shipping industries, the debt-to-capital and asset ratios of the national shipping industry need to be cautioned. This is evidenced by the debt-to-capital ratio, which on average is close to 1. In this case, it can be said that in the event of default or a crisis causing the company to be unable to meet obligations with revenue, capital erosion will have a significant impact on the company's condition. When comparing the descriptive statistics of the 12 sample companies with the descriptive statistics of 47 shipping companies outside Indonesia (Global), there are some insignificant differences in terms of revenue represented by Return on Asset (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). However, there are significant differences in debt management between the sample of shipping companies in Indonesia and globally. The differences in each aspect are based on the descriptive statistics listed in Table 4.2.

Table 1. IDXTRANS Sample Data

EMITEN CODE	EMITEN NAME	IPO DATE
RIGS	Rig Tenders Indonesia Tbk	05-03-90
BLTA	Berlian Laju Tanker Tbk	26-03-90
HITS	Humpuss Intermoda Transportasi Tbk	15-12-97
SMDR	Samudera Indonesia Tbk	05-12-99
TMAS	Pelayaran Tempuran Emas Tbk	09-07-03
APOL	Arpeni Pratama Ocean Line Tbk	22-06-05
MBSS	Mitrabahtera Segara Sejati Tbk	06-04-11
BULL	Buana Lintas Lautan Tbk	23-05-11
PTIS	Indo Straits Tbk	12-07-11
NELY	Pelayaran Nelly Dwi Putri Tbk	11-10-12
BBRM	Pelayaran Nasional Bina Buana Raya Tbk	09-01-13
SOCI	Soechi Lines Tbk	03-12-14

Source: Processed independently based on data from the Indonesia Stock Exchange (BEI)

Table 2. Comparison of Descriptive Statistics for Financial Variables

	Shipping Industry (Indonesia)				Shipping Industry (Global)			
	Mean	Min	Max	SD	Mean	Min	Max	SD
Return on Asset	(0.01)	(0.76)	1.91	0.21	0.04	(0.66)	0.45	0.10
Return on Equity	0.05	(2.08)	5.24	0.55	0.06	(8.25)	0.93	0.43
Current Ratio	1.01	0.00	6.72	1.20	2.27	0.05	33.13	3.26
Debt to Equity Ratio	0.99	(32.19)	8.91	3.21	0.47	0.04	0.98	0.21
Debt to Asset Ratio	0.71	0.00	7.69	0.96	0.36	-	0.88	0.18
Net Profit Margin	(0.07)	(1.90)	0.74	0.46	0.08	(4.88)	1.62	0.42
Asset Turnover	0.45	0.11	2.50	0.30	0.59	-	2.48	0.43

Source: Company annual reports and Woo, S.-H., Kwon, M.-S., & Yuen, K. F. (2021). Financial determinants of credit risk in the logistics and shipping industries. Maritime Economics & Logistics, 23(2), 268–290. https://doi.org/10.1057/s41278-020-00157-4

3.1 Financial Ratios and Distress Analysis

The financial performance after the crisis can be assessed through the financial ratios reported in the annual financial statements. Previous research conducted by Amri (2019) showed that liquidity, profitability, solvency, and activity ratios have a significant impact on the financial performance of shipping companies in Indonesia. Moreover, the research also indicated an improvement in the financial performance of shipping companies in

Indonesia after the crisis in 2008. The performance of financial ratios based on the descriptive data of the sample is presented in Figure 2, with the following explanations:

1. The liquidity ratio is represented by the current ratio (CR). According to the research, from 2007 to 2009, the current ratio of the sample companies experienced a significant decrease from an average of 1.23 to a low point of 0.51. However, the financial statements of the sample companies in the current year show an improvement in liquidity conditions, with an increase in the current ratio reaching the highest point of 1.56 in 2021.
2. Leverage ratios represented by Debt to Equity Ratio (DER) and Debt to Asset Ratio (DAR). Based on the analysis conducted, it was found that the companies had a high level of debt in 2007, with a debt ratio that was 1.43 times larger than the equity. This debt level then increased and reached its highest point in 2009, with a debt value 2.87 times larger than the equity. This condition resulted in financial pressure on the companies in the period between 2008 and 2010, with debt values reaching two times larger than the equity. In fact, in 2010, many companies recorded negative equity compared to their debt. Meanwhile, the expense-to-asset ratio (DAR) increased from 2009 to 2010, indicating that the companies acquired assets paid for with debt.
3. Profitability ratios are represented by return on assets (ROA), return on equity (ROE), and net profit margin (NPM). Based on the analysis conducted, the ROA for the sample companies tended to be low and even recorded negative values in 2010–2012 and again in 2016–2020 before returning to positive income in 2013–2015 and 2021. Meanwhile, based on the analysis, it is also known that the highest ROA value reached only 0.12 times in 2015, which means that, on average, domestic shipping companies only managed to obtain a net profit of less than 12% compared to the valuation of their assets. As for ROE, on average, domestic shipping companies only managed to obtain a net profit of less than 16% (excluding abnormal increases in 2015) compared to the amount of equity held by the sample shipping companies, and recorded negative ROE in 2009, 2017–2018, and 2020–2021. Furthermore, there was a significant decrease in NPM values during the period from 2009 to 2011, which continued in 2016–2021. A low NPM indicates that the companies have difficulties generating net profit from sales (operations).
4. Activity ratios are represented by assets turnover (ATO). Based on the analysis conducted, the average ATO value is below 0.57 times, which means that the sample shipping companies are only able to generate service sales below or equivalent to 0.57 times the total valuation of assets owned by the company.

After obtaining the ratio values from the sample shipping companies, the next step is to conduct financial distress analysis using the Altman Z-Score and Ohlson O-Score. The financial distress analysis curve, compared to global companies, is shown in Figure 3 and can be interpreted as follows:

1. Based on the financial distress analysis using the Altman Z-Score method on 12 sample shipping companies representing the condition of the shipping industry in Indonesia, it was found that the average Altman Z-Score indicates that the domestic shipping companies experienced distress ($0.95 < Z < 2.9$) during the 2008 economic crisis. The economic crisis in 2008 caused a decrease in the average Z-score of 27% in 2008 and 215% in 2009 after the crisis. The financial condition of the companies continued to deteriorate, reaching its lowest point in 2012 with a score of -9.77.
2. Based on the financial distress analysis using the Ohlson O-Score method on 12 sample shipping companies representing the condition of the shipping industry in Indonesia, it was found that the average probability of default (POD) of domestic shipping companies tends to be stable or even improving, while global shipping companies show an increase in POD in 2007-2008. For illustration, domestic shipping companies had a POD value of 0.16 in 2007 and will gradually improve until 2021.

Based on the analysis of financial ratios and financial distress, the company will be divided into 2 categories based on the financial condition of the company. Category 1 companies are national shipping companies that provide cargo transportation services, issue financial reports, or are listed on the Indonesia Stock Exchange (IDX), have experienced a consecutive decline in net profit or loss, and have been in distress condition for at least 3 years and are considered problematic companies (Category 1). On the other hand, national shipping companies that provide cargo transportation services, issue financial reports, and are listed on the Indonesia Stock Exchange (IDX) during the period of 2007 to 2022, with good financial ratios and resilience to financial distress are classified as healthy and not problematic companies (Category 2), unless considered based on other ratios. The distribution of the data samples is shown in Table 3.

Table 2. Determination of Company's Category based on Sample Data

Perusahaan/ *Company*	Category	Average	Tahun / *Years*													
			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
TMAS	1	Distress	Distress	Grey	Distress	Distress	Distress	Distress	Distress	Distress	Grey	Distress	Distress	Distress	Distress	Distress	Safe
SMDR	2	Safe	Safe	Safe	Grey	Safe	Grey	Grey	Grey	Safe	Safe	Safe	Safe	Safe	Safe	Safe	Safe
HITS	1	Distress	Safe	Distress	Grey	Distress	Distress	Distress	Grey	Safe	Grey	Grey	Grey	Grey	Grey	Distress	Distress
BLTI	1	Distress	Distress	Distress	Distress	Distress	Distress	Distress	Distress	Distress	Safe	Distress	Distress	Distress	Distress	Distress	Grey
BULL	1	Distress	Grey	Safe	Distress	Distress	Distress	Distress	Distress	Distress	Grey	Distress	Distress	Distress	Safe	Distress	Distress
APOL	1	Distress	Safe	Safe	Distress	Distress	Distress	Distress	Distress	Distress	Distress	Distress	Distress	Distress	Distress		
MBSS	1	Distress	Distress	Distress	Distress	Distress	Distress	Grey	Safe	Safe	Safe	Safe	Safe	Safe	Safe	Safe	Safe
PTIS	1	Distress	Grey	Distress	Distress	Grey	Safe	Safe	Safe	Safe	Distress	Distress	Distress	Distress	Distress	Grey	Grey
RIGS	2	Safe	Safe	Grey	Grey	Safe	Safe	Grey	Safe	Safe	Safe	Grey	Distress	Distress	Grey	Safe	Safe
BBRM	1	Distress			Distress	Distress	Distress	Distress	Distress	Grey	Distress	Distress	Distress	Distress	Distress	Distress	Distress
NELY	2	Safe				Safe	Safe	Safe	Safe	Safe	Safe	Safe	Safe	Safe	Safe	Safe	Safe
SOCI	2	Safe					Safe	Safe	Safe	Distress	Safe	Grey	Distress	Safe	Safe	Safe	Safe

Source: Processed independently based on data from the Indonesia Stock Exchange (BEI)

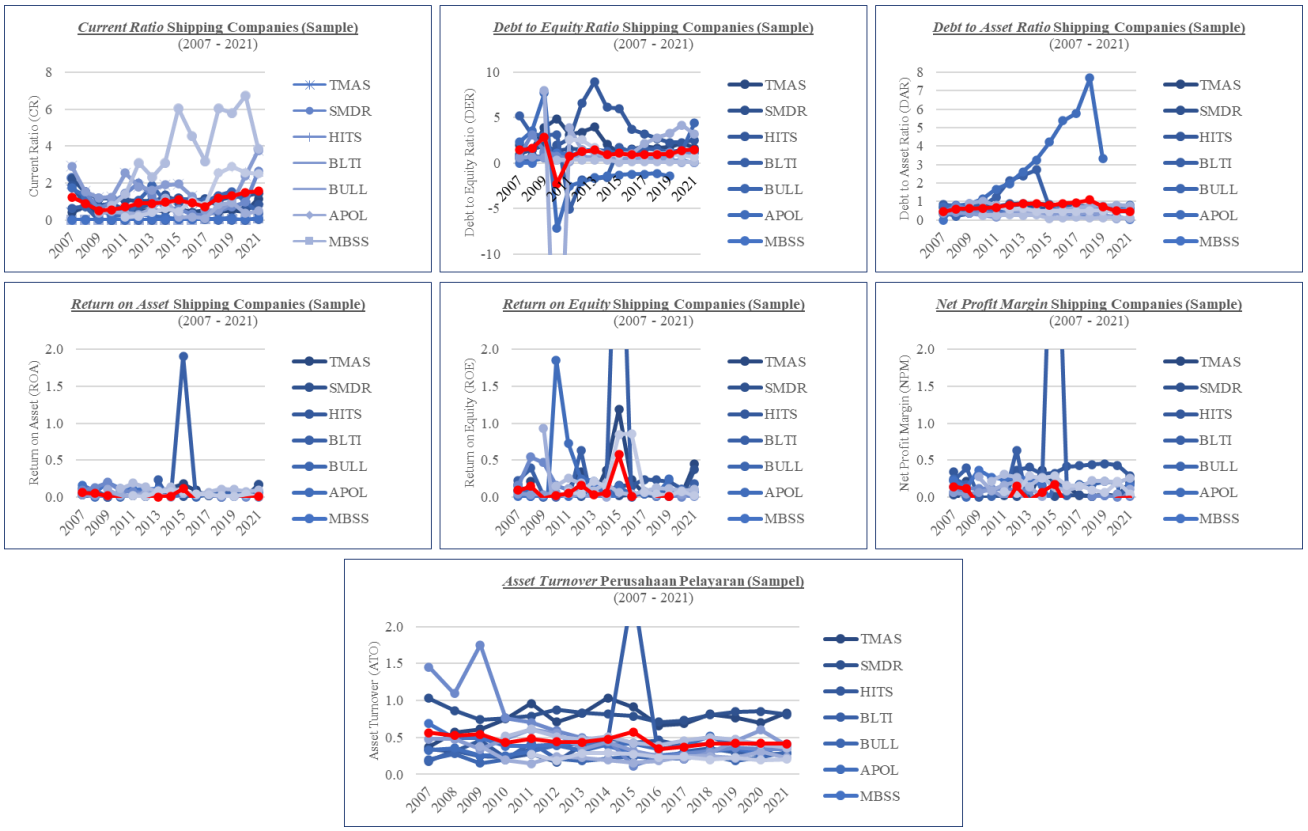

Figure 2. Analisis Rasio Finansial

Source: Processed independently based on data from the Company annual reports

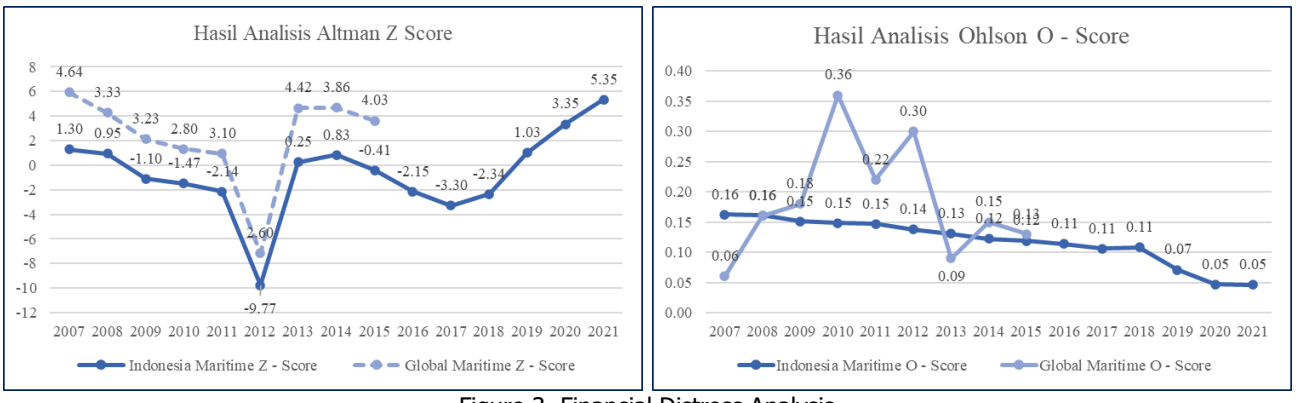

Figure 3. Financial Distress Analysis

Source: Company annual reports and Woo, S.-H., Kwon, M.-S., & Yuen, K. F. (2021). Financial determinants of credit risk in the logistics and shipping industries. Maritime Economics & Logistics, 23(2), 268–290. https://doi.org/10.1057/s41278-020-00157-4

3.2 Classical Assumptions Test, Regression Analysis, and Hypothesis Testing

The testing is carried out in several stages, starting with the classical assumptions test, which considers normality, heteroscedasticity, multicollinearity, and autocorrelation. The results obtained from the classical assumptions test showed that there were no signs of normality in all the data used for the study, as tested using the Kolmogorov-Smirnov method. Additionally, the Park-White analysis also showed no signs of heteroscedasticity in the data used in the study. Furthermore, the classical assumptions test also indicated that there were no symptoms of multicollinearity or autocorrelation in the data used in the study. After conducting the classical assumptions test, the analysis can proceed with multiple linear regression, multivariate canonical analysis, and hypothesis testing, which showed that all independent variables simultaneously affect the dependent variable, but with different significances according to the applicable category and case as follows:

1. For companies in category 1 (poor condition), the Return on Asset (ROA) variable has a positive and significant influence (rejecting Ho1 and accepting Ha1) on financial distress based on the Altman Z score (t-value (5.21) > t-table (1.981)). This is also supported by the canonical loading test with a loading value of 0.510 on Altman Z (Y1) and 0.656 on ROA (X1). However, ROA does not have a significant influence on the Ohlson O-Score for companies in category 1 or Altman Z and Ohlson O-Score for companies in category 2 (good condition). Therefore, it can be concluded that companies in category 1 tend to utilize ROA to avoid short-term problems (annually).
2. For companies in category 1 (poor condition), the Return on Equity (ROE) variable has a negative and significant influence (rejecting Ho2 and accepting Ha2) on financial distress based on the Altman Z score (absolute t-value (-3.996) > t-table (1.981)). However, ROE does not have a significant influence on financial distress based on the Ohlson O-Score for category 1 or the Altman Z and Ohlson O-Score for companies in category 2 (good condition). It can be concluded that the increase in revenue for the sample companies in Category 1 is not accompanied by an increase in equity. As a result, the decreasing equity increases the potential for financial distress for the sample companies in Category 1.
3. For companies in category 1 (poor condition), the current ratio (CR) does not have a significant influence (accepting Ho3) on financial distress based on Altman Z score or Ohlson O-Score. However, for companies in category 2, CR has a positive and significant influence (rejecting Ho3 and accepting Ha3) on financial distress based on the Altman Z-Score and a negative and significant influence on the Ohlson O-Score. In addition, for companies in categories 1 and 2, CR will have a positive correlation with the Altman Z-Score and a negative correlation with Ohlson O-Score. Therefore, it can be concluded that sample shipping companies in category 2 are able to effectively utilize their resources to gain profit or make investments, thus covering their current debts. Hence, it has a positive influence on avoiding financial distress.
4. For companies in category 1 (poor condition), the debt-to equity ratio (DER) does not have a significant influence (accepting Ho4) on financial distress based on the Altman Z score or Ohlson O-Score. However, for companies in category 2, DER has a negative and significant influence (rejecting Ho4 and accepting Ha4) on financial distress based on Ohlson O-Score. In addition, for companies in category 1, the debt-to-equity ratio (DER) will have a negative correlation with the Altman Z-Score and the Ohlson O-Score. It can be concluded that the sample companies in category 2 are able to manage their debts with their equity, thus reducing the potential for financial distress in the long run.
5. For companies in category 1 (poor condition), the debt-to-asset ratio (DAR) variable has a significant positive impact on financial distress as measured by Altman Z-Score (t-value of -7.063 > t-table value of 1.981), and a significant negative impact on Ohlson O-Score (t-value of 14.227 > t-table value of 1.981). Meanwhile, for companies in category 2 (good condition), DAR has a significant negative impact on financial distress as measured by the Ohlson O-Score (t-value of -3.584 > t-table value of 1.981), with Ho5 rejected and Ha5 accepted. There is a difference in the impact of debt usage on company assets (DAR). In the sample of category 1 companies, DAR tends to potentially increase the occurrence of financial distress, while in the sample of category 2 companies, DAR has the potential to reduce the occurrence of financial distress. This may be due to the fact that category 1 companies are unable to maximize the assets financed by debt to generate income, while category 2 companies are able to maximize their assets.
6. For companies in both category 1 (poor condition) and category 2 (good condition), the Net Profit Margin (NPM) variable does not have a significant impact on Altman Z-Score and Ohlson O-Score (Ho6 accepted). This is possible because NPM has a simultaneous impact on other variables. Therefore, it can be concluded that NPM does not have a significant impact but remains an important factor in the financial condition of category 1 and 2 companies to avoid potential short-term and long-term financial distress.
7. For companies in category 1 (poor condition), the asset turnover (ATO) variable does not have a

significant impact on financial distress as measured by Altman Z-Score and Ohlson O-Score (Ho7 accepted). However, in the sample of category 2 companies, ATO has a significant positive impact on Altman Z-Score (t-value of 2.941 > t-table value of 2.015). Therefore, it can be concluded that the sample companies in category 2 tend to effectively utilize their assets to generate sales and avoid potential short-term financial distress.

4 Conclusion

After conducting research, it was found that the financial crises of 2008 and 2013 had an impact on the financial condition of the sampled shipping companies. This is evident from the declining Altman Z-Score curve, which indicates financial distress and deteriorating financial ratios for the companies. However, when looking at the Ohlson O-Score, shipping companies tend to be in relatively stable condition, even during the 2008 crisis. The difference in interpretation between Altman Z-Score and Ohlson O-Score is due to the fact that Ohlson O-Score includes additional variables such as the financial condition of the company from 2 years prior and the Gross Domestic Product (GDP) of the home country of the company. Thus, it can be concluded that the companies experienced distress every year but tended to show improvement compared to two years prior. Additionally, it is known that all independent variables in each category and case have significant simultaneous effects on the dependent variable. This is proven through significance testing (F-test). However, the significance of the influence of each independent variable on the dependent variable varies across categories and cases.

References

Adland, R., Bjerknes, F., & Herje, C. (2017). Spatial efficiency in the bulk freight market. Maritime Policy & Management, 44(4), 413–425. https://doi.org/10.1080/03088839 .2017.1298864

Adland, R., & Jia, H. (2008). Charter market default risk: A conceptual approach. Transportation Research Part E: Logistics and Transportation Review, 44, 152–163. https://doi.org/10.1016/j.tre.2006.06.002

Altman, E. I. (1968). Financial Ratios, Discriminant Analysis And The Prediction Of Corporate Bankruptcy. The Journal of Finance, 23(4), 589–609. https://doi.org/10.1111/j.1540-6261.1968.tb00843.x

Altman, E. I., & Hotchkiss, E. (2005). Corporate Financial Distress and Bankruptcy: Predict and Avoid Bankruptcy, Analyze and Invest in Distressed Debt (1st ed.). Wiley. https://doi.org/10.1002/9781118267806

Altman, E. I., Hotchkiss, E., & Wang, W. (2019). Corporate Financial Distress, Restructuring, and Bankruptcy: Analyze Leveraged Finance, Distressed Debt, and Bankruptcy. John Wiley & Sons, Inc. https://doi.org/10.1002/9781119541929

Brigham, E. F., & Ehrhardt, M. C. (2011). Financial management: Theory and practice (13th ed). South-Western Cengage Learning.

Brigham, E. F., & Houston, J. F. (2019). Fundamentals of Financial Management (Edisi ke-15). Cengage Learning

Greene, W. H. (2021). Econometric analysis (8th ed.). Pearson

Jusuf, J. (2006). Analisis Kredit untuk Account Officer (Jakarta). Gramedia Pustaka Utama. //repository.unsimar.ac.id/index.php?p=show_detail&id=2877&keywords=

Karakitsos, E., & Varnavides, L. (2014). Maritime Economics. Palgrave Macmillan UK. https://doi.org/10.1057/9781137383419

Kavussanos, M. G., Tsouknidis, D. A., & Visvikis, I. D. (2021). Freight Derivatives and Risk Management in Shipping (2nd ed.). Routledge. https://doi.org/10.4324 /9780429343681

Kolmogorov, A. N., Bharucha-Reid, A. T., & Morrison, N. (2018). Foundations of the theory of probability (Second English edition, Dover edition). Dover Publications, Inc.

MacKinnon, J. G. (2008). Durbin-Watson Statistic. In Palgrave Macmillan (Ed.), The New Palgrave Dictionary of Economics (pp. 1–3). Palgrave Macmillan UK. https://doi.org/10.1057/978-1-349-95121-5_2200-1

Nguyen, D., Dang, T., Phan, T., & Tran, Q. (2021). The effect of financial leverage on corporate strategy: A review and future research agenda. Pacific-Basin Finance Journal, 67, 101514. doi:10.1016/j.pacfin.2021.101514

Ocvirk, G. (2018). Strategic Management of Market Niches. Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-20364-1

Ogendo, J. L. (2017). Emerging Economy MNEs. Springer International Publishing. https://doi.org/10.1007/978-3-319-52036-0

Ohlson, J. A. (1980). Financial Ratios and the Probabilistic Prediction of Bankruptcy. Journal of Accounting Research, 18(1), 109. https://doi.org/10.2307/2490395

Schmuck, M. (2013). Financial Distress and Corporate Turnaround. Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-01908-2

Shin, S.-H., Lee, P., & Lee, S.-W. (2019). Lessons from bankruptcy of Hanjin Shipping Company in chartering. Maritime Policy & Management, 46, 136–155. https://doi.org/10.1080/03088839.2018.1543909

Song, D.-W., Seo, Y.-J., & Kwak, D.-W. (2019). Learning from Hanjin Shipping's failure: A holistic interpretation on its causes and reasons. Transport Policy, 82, 77–87. https://doi.org/10.1016/j.tranpol.2018.12.015

Thompson, A. A. (2020). Crafting & executing strategy: The quest for competitive advantage: concepts and cases (22ND edition). McGraw-Hill Education.

Thompson, B. (1984a). Canonical Correlation Analysis. SAGE Publications, Inc. https://doi.org/10.4135/9781412983570

Thompson, B. (1984b). Canonical correlation analysis: Uses and interpretation (Issue 47). Sage.

Warren, C. S., Reeve, J. M., & Duchac, J. E. (2012). Financial accounting (12th ed). South-Western/Cengage Learning.

Woo, S.-H., Kwon, M.-S., & Yuen, K. F. (2021). Financial determinants of credit risk in the logistics and shipping industries. Maritime Economics & Logistics, 23(2), 268–290. https://doi.org/10.1057/s41278-020-00157-4

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