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## FACTORS THAT AFFECT FINANCIAL DISTRESS IN INDONESIA

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## **ABSTRACT**

The results show that, it is proven that the variable liquidity and interest rates have a negative effect on financial distress. Meanwhile, the variables of Profitability, Leverage and Company Size have a positive effect on financial distress. While the Economic Stimulus variable is known to be the relationship between all variables of Liquidity, Profitability, Leverage, Company Size and Interest Rate on variables to Financial Distress. This means that company leaders must take into account liquidity, profitability, leverage, company size and interest rates to avoid financial distress.

Keywords: Liquidity, Profitability, Leverage, Company Size, Interest Rates, Financial **Distress** 

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#### 1. INTRODUCTION

A company can be categorized as experiencing financial distress if the company has a performance that shows negative net income. When firm experiences corporate financial distress, the operating conditions of the firm deteriorate thus leading to heavy financial burden on the firm resulting to inability of the firm in paying both secured, preferential and unsecured creditors (Garlappi and Yan, 2011; Benmelech et al., 2012) in Fredrick (2019).

Liquidity ratios show the entity's ability to meet its short-term liabilities, as the weakness of the value of these ratios indicates that the organization may face difficulties in meeting short-term financial liabilities (Amengor, 2010) in Durrah (2016).

Type of Financial Ratios Profitability Ratios Brigham and Houston (2010: 149) in Dai (2016) argues that the ratio of profitability is a group that shows the ratio of the combination of the effects of liquidity, asset management, and debt on operating results. From the above definition it is known that a ratio that provides information on a company's ability to benefit by utilizing the resources available within the company.

Leverage ratio is a ratio that measures the ratio of funds provided by the owner of funds borrowed from creditor companies. This ratio shows the company's ability to meet its financial obligations, both short and long term (Abdul:2013) in Makiwan (2018). In this study, leverage is measured by a debt asset ratio (DAR). Debt asset ratio (DAR) is the ratio of debt to total assets which can be called a debt ratio, which measures the percentage of funds originating from debt. What is meant by debt is all debts owned by the company, both short-



term debt and long-term debt. Creditors prefer a lower debt ratio because the security level of funds is getting better Sutrisno (2012).

Firm Size is scale to determine the size of a company which can be proxied in several ways, including total assets and total sales (Total Sales) (Saemargani, 2015) in Wufron (2017). The size of the company can also show how much information it contains, as well as reflect the awareness of management about the importance of information, both for external parties and for internal parties. The bigger the company size, the more information it contains.

The interest rate is the cost of borrowing, and is usually a percentage of the amount borrowed. In Indonesia, the interest rate is determined by Bank Indonesia as the central bank. The interest rate strategy implemented by BI to stabilize the rupiah exchange rate cannot be carried out continuously, considering that banks need to carry out the banking intermediary function more freely with low interest rates.

Table 1 Net Profit					
Indeks	Net Profit				
	2014	2015	2016	2017	
ADMG	2.819	34.437	10.863	(611)	
ARGO	(244.579)	(241.058)	(138.823)	415.265	
BATA	4.601	4.272	5.233	3.348	
ESTI	111	582	(4.667)	(6.671)	
HDTX	4.287	1.293	232	(16.354)	
IMAS	33.582	80.927	66.193	60.083	
INDR	26.000	8.000	1.000	1.600	
INTA	6.213	8.991	929	(18.596)	
LPIN	1.056	846	1.241	639	
MASA	13.158	6.943	320	3.601	
PRAS	2	529	3.091	6.500	
SRSN	732	1.787	1.263	1.192	
Indeks	Indeks Net Profit				
	2018	2019	2020		
ADMG	(25.491)	(22.886)	(22.309)		
ARGO	(30.333)	(11.021)	(25.344)		
BATA	5.264	9.727	3.172		
ESTI	(6.389)	(10.485)	3.127		
HDTX	(7.746)	(26.601)	(29.436)		
IMAS	597	(671)	(746)		
INDR	(200)	10.100	1.500		
INTA	(5.762)	(23.126)	(14.445)		
LPIN	(704)	(1.359)	(4.789)		
MASA	(311)	(27.120)	(6.483)		
PRAS	8.297	3.698	(2.286)		
SRSN	1.088	1.155	823		

Sumber: www.idx.co.id (in thousands USD)

The decline in operating profit occurred in several manufacturing companies, 12 of the 30 companies experienced a decrease in operating profit. There are 8 manufacturing companies including PT Polychem Indonesia (ADMG), PT Indo Acidatama Tbk (ARGO), PT Panasia Indosyntec Tbk (HDTX), PT Indo Mobil Sukses Internasional Tbk (IMAS), PT Intraco Penta Tbk (INTA), PT Multi Prima Sejahtera Tbk (LPIN), PT Multstrada Prima Sarana Tbk (MASA), and PT Prima Alloy Steel Tbk (PRAS). A company that is categorized as experiencing financial distress is if the company experiences negative operating profit for two consecutive years.

Menurut hasil penelitian Sudaryo et al. (2021), Hasan (2008) hasil penelitian ini menemukan bahwa likuiditas, profitabilitas, leverage, dan suku bunga

berpengaruh signifikan terhadap Financial Distress. Sedangkan menurut Sudaryo et al. (2021), The results showed that (1) Financial Distress calculated by the Altman Zscore formula averaged 1,895, which means that the company is in a vulnerablecondition and is experiencing financial problems and must immediately handle propermanagement management. (2) Current Ratio (CR) an average of 117.63% <200%, thisercentage indicates that they have a low enough ability to pay their short-termobligations. (3) Debt to Equity Ratio (DER) an average of 116.59% > 80% indicates alow company's ability to pay its long-term debt. (4) Net Profit Margin (NPM) anaverage of 15.37% <20% indicates that the company cannot generate higher profits. (5) Current Ratio (CR) has a significant effect on Financial Distress. (6) Debt to Equity Ratio (DER) has a significant effect on Financial Distress. (7) Net Profit Margin (NPM)has no significant effect on Financial Distress. (8) Current Ratio (CR), Debt to Equity Ratio (DER) and Net Profit Margin (NPM) have a significant effect on FinancialDistress.

### 2. METHOD

The method used in this research is a quantitative method with a descriptive and verification method approach. Quantitative research methods according to Sugiyono (2014) The method used in this research is a quantitative method with a descriptive and verification method approach. Quantitative research methods according to Sugiyono (2014) What is meant by descriptive analysis method is as follows: "Descriptive analysis method is a statistic used to analyze data by describing or describing the collected data as it is looking for a relationship between two or more variables." The verification method according to Hasan (2008) is "a research method that aims to test the truth of something in a previously existing field".

Tab	Tabel 2 Journal and Publisher Distribution				
No	Article Name	Author(s)	Journal Publisher		
1	Predicting Nursing Home Financial Distress Using the Altman Z-Score		INQUIRY: The Journal of Health Care Organization, Provision, and Financing		
2	Financial distress prediction using support vector machines: Ensemble vs. individual	Souri et al. (2018)	Elsevier		
4	Bank power, block ownership, boards and financial distress likelihood: An investigation of Spanish listed firms		Elsevier		
5	Combining corporate governance indicators with stacking ensembles for financial distress prediction	Liang et al. (2020)	Elsevier		
6	Going concern modifications and related disclosures in the Italian stock market: do regulatory improvements help investors in capturing financial distress?		Journal of Management and Governance		
7	The Effect of Financial Distress and Growth Opportunities on Accounting Conservatism with Litigation Risk as Moderated Variables in Manufacturing Companies Listed on BEI	Sari (2020)	Budapest International Research and Critics Institute-Journal (BIRCI- Journal)		
8	Earnings Management and Financial Distress: An Analysis of Indian Textile Companies	Paul and Rakshit (2020)	NMIMS Journal Of Economics And Public Policy		

9	Financial Distress: The Impacts Of Profitability, Liquidity, Leverage, Firm Size, And Free Cash Flow	Dirman (2020)	International Journal of Business, Economics and Law
10	The Impact of CSR and Financial Distress on Financial Performance—Evidence from Chinese Listed Companies of the Manufacturing Industry		Sustainability
11	Predicting Financial Distress of Slovak Enterprises: Comparison of Selected Traditional and Learning Algorithms Methods	Gregova et al. (2020)	Sustainability
12	Financial Distress Prediction and Feature Selection in Multiple Periods by Lassoing Unconstrained Distributed Lag Non-linear Models		Mathematics
13	Return Premium of Financial Distress and Negative Book Value: Emerging Market Case	Kakinuma, (2020)	Journal of Asian Finance Economics and Business
14	Effect of financial distress on firm's performance of non-financial firms registered with Pakistan Stoke Exchange.		International Journal of Business and Management Sciences
15	Firm specific determinants of financial distress: Empirical evidence from Nigeria	Fredrick (2019)	Journal of Accounting and Taxation
16	How Indonesia Economics Works: Correlation Analysis of Macroeconomics in 2010 - 2019		Journal of Asian Finance, Economics and Business
17	The Great Lockdown and The Big Stimulus: Tracing the Pandemic Possibility Frontier for The U.S.	Kaplan et al. (2020)	NBER Working Paper Series
18	How did U.S. Consumers use their stimulus payments?		NBER Working Paper Series
19	Spatial impacts of fiscal stimulus policies during the 2009 global financial crisis in Indonesia	Resosudarmo et al. (2020)	Asia-Pacific Journal of Regional Science
20	Banking credit restructuring policy on the impact of COVID-19 spread in indonesia	Disemadi and Shaleh. (2020)	Jurnal Inovasi Ekonomi

# 3. RESULT AND DISCUSSION

Table 3 Results of Multiple Regression Analysis						
Model	В	Uji t		Adj R <sup>2</sup>	Uji F	
		t hitung	Sig		F hitung	Sig
(Constant)	.793	3.733	.000			
Liqudity	517	-2.253	.003			
Profitability	.152	3.619	.037	.459	4.568	.001b
Leverage	.562	3.346	.001			
Size	.230	1.861	.095			
Interest Rate	197	-2.735	.004			,

Liquidity tends to fluctuate for most of the companies sampled in the study. For the highest liquidity owned by PT. Indo Acidatama Tbk (SRSN), amounting to 328.13. The lowest liquidity of PT. PanasiaIndosyntec Tbk were amounted to 0.99.

The results of descriptive analysis of the Profitability variable showed that the minimum profitability value was -18.4% and the maximum profitability value was 16%.

The results of the descriptive analysis of the Leverage variable show that the minimum leverage value is 0.3% and the maximum leverage value is 93.50%.

The results of the descriptive analysis of the firm size variable show that the minimum value of company size is 6.33 and the maximum value of company size is 20.21.

The results of the descriptive analysis of the Interest Rate variable show that the minimum value of the Interest Rate is 5.75% and the maximum value of the Interest Rate is 7.75%.

The results of the descriptive analysis of the Financial Distress variable show that the minimum value of Financial Distress is -0.43 and the maximum value of Financial Distress is 1.81.

Hypothesis 1 in this study states that the liquidity variable has a negative effect on financial distress. Based on the results of regression analysis, the liquidity variable has a negative effect on the financial distress variable. In other words, it can be stated that Hypothesis 1 is accepted.

Hypothesis 2 in this study states that the profitability variable has a positive effect on financial distress. Based on the results of the regression analysis, the Profitability variable shows a positive influence on financial distress. In other words, it can be stated that Hypothesis 2 is accepted.

Hypothesis 3 in this study states that the leverage variable has a positive effect on financial distress. Based on the results of the regression analysis, the leverage variable shows a positive effect on financial distress. In other words, it can be stated that Hypothesis 3 is accepted.

Hypothesis 4 in this study states that the firm size variable has a negative effect on financial distress. Based on the results of the regression analysis, the firm size variable does not show a significant effect on the financial distress variable. In other words, it can be stated that Hypothesis 4 is rejected.

Tabel 4 Residual Test Results				
Variabel Dependen	t	Sig.		
Likuiditas	-4.783	.005		
Profitability	-3.795	.001		
Leverage	-3.264	.000		
Size	-2.653	.005		
Interest Rate	-3.523	.002		

Hypothesis 5 in this study states that the interest rate variable has a negative effect on financial distress. Based on the results of regression analysis, the Interest Rate variable shows a negative effect on Financial Distress. In other words, it can be stated that Hypothesis 5 is accepted.

Based on the results of the residual test, it can be seen that the t value for the second regression model is -4,783, with a significance level of 0.005. While the standard beta coefficient value is -0.372. Because the parameter coefficient value is negative, and the significance value is below 0.05, it can be concluded that the Economic Stimulus moderating variable is able to moderate the relationship between the Liquidity variable and the Financial Distress variable. This means that

this is in accordance with the initial hypothesis which states that the moderating variable Economic Stimulus is able to moderate the relationship between the Liquidity variable and the Financial Distress variable. Therefore, it can be concluded that Hypothesis 6a is Proven.

Based on the results of the residual test, it can be seen that the t value for the third regression model is -3,795, with a significance level of 0.001. While the standard beta coefficient value is -0.273. Because the parameter coefficient value is negative, and the significance value is below 0.05, it can be concluded that the Economic Stimulus moderating variable is able to moderate the relationship between the Profitability variable and the Financial Distress variable. This means that this is in accordance with the initial hypothesis which states that the moderating variable Economic Stimulus is able to oderate the relationship between the Profitability variable and the Financial Distress variable. Therefore, it can be concluded that Hypothesis 6b is Proven.

Based on the results of the residual test, it can be seen that the t value for the fourth regression model is -3,264, with a significance level of 0.000. While the standard beta coefficient value is -0.224. Because the parameter coefficient value is negative, and the significance value is below 0.05, it can be concluded that the Economic Stimulus moderation variable is considered to be able to moderate the relationship between the Leverage variable and the Financial Distress variable. This means that this is in accordance with the initial hypothesis which states that the moderating variable Economic Stimulus is able to moderate the relationship between the Leverage variable and the Financial Distress variable. Therefore, it can be concluded that Hypothesis 6c is Proven.

Based on the results of the residual test, it can be seen that the t value for the fifth regression model is -2,653, with a significance level of 0.005. While the standard beta coefficient value is -0.160. Because the parameter coefficient value is negative, and the significance value is below 0.05, it can be concluded that the Economic Stimulus moderating variable is considered to be able to moderate the relationship between the Firm Size variable and the Financial Distress variable. This means that this is in accordance with the initial hypothesis which states that the moderating variable Economic Stimulus is able to moderate the relationship between the Firm Size variable and the Financial Distress variable. Therefore, it can be concluded that Hypothesis 6d is Proven.

Based on the results of the residual test, it can be seen that the t value for the sixth regression model is -3,523, with a significance level of 0.002. While the standard beta coefficient value is -0.248. Because the parameter coefficient value is negative, and the significance value is below 0.05, it can be concluded that the Economic Stimulus moderation variable is considered to be able to moderate the relationship between the Interest Rate variable and the Financial Distress variable. This means that this is in accordance with the initial hypothesis which states that the moderating variable Economic Stimulus is able to moderate the relationship between the Interest Rate variable and the Financial Distress variable. Therefore, it can be concluded that Hypothesis 6e is Proven.

#### 4. CONCLUSION

The results of this study indicate that, from the variables studied, it is proven that the liquidity variable and the interest rate have a negative effect on financial distress. Meanwhile, the variables of Profitability, Leverage and Company Size have a positive effect on financial distress. Meanwhile, the Economic Stimulus variable is

known to moderate the relationship between all variables of Liquidity, Profitability, Leverage, Company Size and Interest Rate on variables to Financial Distress. This means that company leaders must take into account liquidity, profitability, leverage, company size and interest rates to avoid financial distress. However, it is also necessary to pay attention to the Economic Stimulus which can moderate the relationship of these variables.

#### 5. RESEARCH IMPLICATION

The results of this study are expected to contribute policy implications to company management, investors and potential investors as well as other related parties. This implication is considered very important because it can be used as a reference in making decisions related to financial distress that occurs in companies by considering financial ratios such as liquidity, profitability, leverage, company size and interest rates against conditions driven by economic stimuli.

## 6. RESEARCH LIMITATION

In this study, there are several limitations of the study, including the following:

- 1) The research period used in this study is relatively short, from 2014 to 2020.
- 2) This research only focuses on the company's internal performance variables in the form of financial ratios which may be expanded by paying more attention to company macro factors or other economic risk factors outside the company's performance.
- 3) The study involved a limited number of research subjects, so that the results could not be generalized to a large number of subjects.

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