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### The Effect of Liquidity, *Leverage, Profitability*, and Company Size on Bond Ratings in Banking Sector Companies in Indonesia 2017-2020

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**ABSTRACT:** This study aims to detect empirical evidence regarding the effect of Liquidity, *Leverage*, Profitability and Company Size on bond ratings. The population in this study is banking companies listed on the Indonesia Stock Exchange in the period 2017-2020. The sampling method used was purposive sampling and the data used are secondary data in the form of the annual financial ratios. 13 banking companies that met the criteria were sampled. The data analysis method used is panel data regression analysis. Panel regression analysis model used is the Common Effect model. The results showed that Liquidity had a negative and significant effect on bond ratings, *Leverage had a* negative and not significant effect on bond ratings, Profitability and Company Size had a positive and significant effect on bond ratings.

KEYWORDS: Liquidity, Leverage, Profitability, Company Size, Bond Rating

### I. INTRODUCTION

The banking sectors are very important and vital to world economies, Its primary function is to safeguard depositors assets and make loans to individuals and businesses. The banking sector plays a significant role in the economic growth and development of any country, this is because the banking sector has a function as an intermediary between excess funds and those who need funds. Capital or funds are needed for a company to carry out all its operating activities. The capital or funds can be obtained in the money market or capital market. The *capital market* trades long-term capital in the form of securities such as bonds and stocks. Bonds are securities or certificates that contain contracts between funders and those who are given funds or issuers (Halim, 2015).

No	Types of Effects	2017	2018	2019	2020
1	Stock	3.834,84	3.560,87	3730,74	3.766,95
2	Government Bonds	381,90	401,68	88,36	41,77
3	Corporate Bonds	64,34	76,94	428,58	408,52
4	Medium Term Bonds	54,38	75,22	71,97	54,81
5	State Sharia Securities	27,98	42,02	39,73	31,68
6	Sukuk	17,16	30,33	36,6	37,61
7	Other	42,46	23,30	69,42	49,11
Sum		4.423,07	4.210,35	4.465,4	4.390,45

Table 1. Total Securities recorded in C-BEST Period 2017-2020 (in trillion rupiah)

Source: www.ksei.com

The table above shows that stocks and bonds are the types of securities that investors are most interested in the capital market. According to Keown (2011), it is explained that bonds look attractive to some investors because of claims to company assets and income. Investors who will buy bonds not only consider the level of security of the bond but also consider the *risk (risk)* that exists in the bond itself. Bonds are relatively safe, but although they have minimal risk, they also have the risk of default, which can affect to bond ratings. Default is a company's not ability to pay bonds. In the financial sector, especially the banking sector, many companies have downgraded their bond ratings. Some of the causes of the decline in bonds is include rising interest rates that make debt risk increase. Examples of companies that experienced an increase in 2016-2019.

No	Company Name	Information			
		2016	2017	2018	2019
1	Bank Mayapada (MAYA)	IdA-	IdA	ldA-	IdBBB+
2	PT. Bima Multi Finance (BIMF)	IdBB	IdBB	ldD	-
3	SNP Finance	-	IdA-	IdCCC	-

Table 2. Bond Rating

Source: www.pefindo.com

Pefindo downgraded Bank Maya's bonds from idA in 2017 to idA- in 2018, and downgraded back to idBBB+ In 2019. The decline in bonds was due to declining asset quality and high ratio of non-performing loans. PT. Bima Multi Finance (BIMF) has sent a letter to stop rating its company and bonds to PT. Pefindo. Prior to termination, BIMF's debt rating on both the company and its sustainable bonds was "idD". This is because the company defaults on maturing bonds. PT. Bima Multi Finance until June 30, 2017, achieved revenue of Rp157.28 billion, a decrease compared to revenue of Rp210.33 billion in the same period the previous year. The decline in profit resulted in BIMF company defaulting on its debt and its rating was downgraded to idD level by PT. PEFINDO. In addition to Bank Mayapada and BIMF, SNP Finance also experienced a downgrade, this was due to debt default. SNP Finance applied for a postponement of debt repayment obligations. The SNP was unable to repay the debt. Therefore, PT Pefindo downgraded SNP Finance's bond rating from idA- in 2017 to idCCC.

Bond ratings agencies are independent institutions that issue bond ratings to companies. The rating is based on the creditworthiness or ability of the company. In this study, the rating agency was PT. PEFINDO which has been recognized by Bank Indonesia. According to (Brigham & Houston, 2013) that bond ratings are assessed from qualitative and quantitative factors. One of them is the financial ratio.

Financial ratios help investors to analyzing financial statements. Through financial statements, investors can forecast the condition and performance of the company for the future. In this study, the author uses *Leverage (Debt To Equty Ratio), Profitability (Return On* Assets), Liquidity (*Current Ratio),* and company size (Ln Total Assets) as variables in testing the effect on bond ratings.

The first variable in the study was leverage. (Kasmir, 2010) explains that *leverage* is a financial ratio used to measure the extent to which a company's activities are financed with debt. High debt in the capital structure, the riskier the debt is at the lent interest rate. Based on research (Sihombing &; Rachmawati, 2015), that leverage has no effect on bond ratings. In the research (Darmawan et al., 2020), leverage has a significant positive effect on bond ratings in financial sector companies listed on the IDX in 2015-2018.

The second variable is profitability as measured by *Return of Assets* (ROA). High profitability illustrates that the company has operated well in managing its assets so that it can generate high profits. Meanwhile, in research (Sihombing & Rachmawati, 2015), profitability does not affect bond ratings.

The third variable is liquidity. The liquidity ratio is a ratio that measures a company's ability to pay its short-term obligations. High liquidity signals that the company is able to fulfill its obligations in a relatively short period of time. In research (Anom, 2021), liquidity has a positive but not significant effect on bond ratings.

The next variable is the size of the company measured by the growth of the company. Growth is to measure the extent to which the company is able to manage the resources contained in the company, if the resources are managed properly it will affect the company's *income*, thus attracting the attention of investors. In research (Sihombing & Rachmawati, 2015), Company Size has a positive effect on bond ratings in financial sector companies for the period 2009-2013. Meanwhile, in research (Putra, 2018), that Company Size has an insignificant effect on bond ratings in financial and banking companies for the 2013-2017 period.

### II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMNET

*Signaling* theory is a theory that discusses how companies should be able to provide signals to users of financial statements as a source of information. Signals (information) are obtained from the company's financial statements. According to Brigham & Houston (2019) that a signal is an action taken by company management that provides clues for investors about how management views the company's prospects. Ratio analysis is very useful for planning and evaluating company *performance* and for investors can be used as a benchmark level of security if they are going to invest their funds. The ratio provides very important information for creditors and investors, as well as for company management which is used to develop strategies in maximizing profits and

improving the efficiency of company asset management, and for investors can be used to determine liquidity capabilities and financial risks.

Liquidity is a ratio that looks at the amount of current assets to current debt. (Kasmir, 2014). *Current* ratio is a ratio that describes the ability of a company to pay its short-term obligations using current assets. Low liquidity reflects that it is unable to pay its short-term debts. This can affect the sustainability of the company's operations, thus forcing the company to use other funds to pay debts, which can lead to bankruptcy.

The *leverage* ratio, measured by DER, describes the ability of a company to meet and maintain its ability to always be able to meet its obligations in paying debts. High ratio shows that higher debt used in financing capital investments, which means that financial risk increases. The *leverage* ratio is a financial ratio that shows the extent to which the company's activities are financed with debt. Profitability describes the company's ability to earn profits from the use of assets in operational activities, but it can also be used to determine the effectiveness of the company in managing its resources. Good profitability describes the high profit generated by the company. (Fahmi, 2011) Measures of profitability ratios allow analysis to evaluate company profits and how efficient companies are in generating profits.

Company size is a scale that can divide the size of a business based on several calculations including Total Assets, Log Size, Stock Value and so on. According to Hery, (2017). Company size describes the size of a company as measured by total assets or total net sales. Large assets describe a company that has a large size. The greater the asset, the greater the capital/investment invested.

### HYPOTHESIS DEVELOPMENT

The hypothesis in this study include:

- H<sub>1</sub> Liquidity have a positive significant effect on Bond Ratings
- H<sub>2</sub> Leverage have a negative significant effect on Bond Ratings.
- H<sub>3</sub> Profitability have a positive significant effect on Bond Ratings
- H<sub>4</sub> Company have a positive significant effect on Bond Ratings.

### **RESEARCH METHODOLOGY**

This research is a quantitative research with causality design. The study population consists of all financial companies in the banking sub-sector listed on the Indonesia Stock Exchange (IDX) in 2022 and total is 58 companies. The data processed is in the form of annual financial statements along with other supporting records. Based on predetermined criteria, there are 13 samples, including the following:

	Company	Code	
1	PT. Bank Tabungan Negara Persero Tbk	BBTN	
2	PT. Bank Rakyat Indonesia Persero Tbk	BBRI	
3	PT. Bank CIMB Niaga Tbk	BNGA	
4	PT. Bank Maybak Indonesia Tbk	BNII	
5	Bank Pembangunan Daerah Jawa Barat dan Banten Tbk	BJBR	
6	PT. Bank QNB Indonesia Tbk	BKSW	
7	PT. Bank Mandiri Persero Tbk	BMRI	
8	PT. Bank Mandiri Taspen	ВМТР	
9	Permata Bank Tbk	BNLI	
10	BPD Sumatera Utara	BSMT	
11	Bank Victoria Internasional Tbk	BVIC	
12	PT. Bank OCBC NISP Tbk	NISP	
13	PT. Bank Pan Indonesia Tbk	PNBN	

### Table 3. Research Sample

Source: processed by the author

Data analysis uses quantitative data analysis methods. While the data analysis technique used is regression analysis.

### **RESULTS AND DISCUSSION**

Based on the results of the panel data linear regression analysis test through the Chow, Hausman and Lagrange Multiplier Tests, the best model use is the *Common Effect Model*. This is the results of the *Common Effect Model*.

Variable	Coefficient	Std. Error	t-Statistic	Prob		
С	-2.619695	4.022166	-0.651314	0.5180		
CR	-7.076322	2.562231	-2.761781	0.0082		
DER	-0.002087	0.056189	-0.037135	0.9705		
ROA	25.36983	13.85928	1.830530	0.0735		
UP	0.546023	0.115634	4.721996	0.0000		
R-Squared	R-Squared		0.476006			
Adjusted R-sc	Adjusted R-squared		0.431411			
F-statistic		10.67391				
Prob (F-statistic)		0.000003	0.00003			

### Table 4. Common Effect Model

Source: Results of data processing using eviews 12 (2023)

Equation of the panel data regression results:

### Y = -2.619695 + -7.076322CR + -0.002087DER + 25,36983ROA + 0.546023UP

- 1. Value of the constant coefficient -2.619695 < the probability value is 0.05, the constant has no meaning.
- 2. Value of the regression coefficient of the variable CR (X1) -7.076322 and significant 0.0082, CR has a negative and significant effect on the rating of bonds. If the CR increases by 1 unit, the bond's rating decreases by -7.076322.
- 3. Value of the regression coefficient of the variable DER (X2) -0.002087 with a significance of 0.9705, This shows that DER has a negative effect not significantly on bond ratings. If the DER increases by 1 unit, the bond's rating decreases by -0.002087.
- 4. Value of the regression coefficient of the variable ROA (X3) 25.36983 and significance 0.0735. ROA has a significant positive effect on bond ratings. If the ROA increases by 1 unit, the bond's rating increases by 25.36983.
- 5. Value of the regression coefficient of the Company Size variable (X4) is 0.546023 and the significance is 0.0000. ROA has a significant positive effect on bond ratings. if Company Size (X4) increase by 1 unit, the Bond Rating variable will increase by 0.546023 units.

#### DISCUSSION

Liquidity has a negative significant effect on the rating of bonds, the hypothesis (H<sub>1</sub>) is rejected. This result is in line with Hasan & Dana's (2018) research that *the Current Ratio* affects to bond ratings. Companies that have a high *Current Ratio* will decrease their bond ratings. Companies that have high liquidity reflect the condition of the company in a bad condition. This is due to too many receivables, which can trigger *bad debts*, company is not optimal in managing receivables so that it can have an impact on bond *ratings*. The results of this study are not in line with Azani et al (2017).

*Leverage* has a negative insignificant effect, the hypothesis H<sub>2</sub> is rejected. This research is in line with Blesia & Pramudika (2016), that not significant effect on bond ratings. The use of debt by the company does not always assume badly, the use of debt can also help management in optimizing the use of funds to generate profits for other activities related to company operations.

Profitability has a positive significant effect on the rating of bonds, H<sub>3</sub> is received. High profitability, reflects that the company is using assets well to generate profits and excellent company performance.

The size of the company has a positive and significant influence on the rating of bonds,  $H_4$  is accepted. This result is in line with Hafidania & Hakiman (2020), that a large company size reflect that the company operates optimally so can produce adequate assets and profits. Companies that have large assets are more competitive than companies that have small assets.

### CONCLUSION

- 1. Liquidity measured by CR has a negative and significant effect on bond ratings.
- 2. *Leverage* measured by *DER* has a negative and insignificant effect on bond ratings.
- 3. Profitability measured by *ROA has a* positive and significant effect on bond ratings.

4. The size of the company measured by Ln (Total Assets) has a positive and significant effect on bond ratings.

### SUGGESTION

- 1. For Further research, with this research, it is hoped that futher researcers will be able to conduct research relating to adding variabels that affect bond ratings such guarantees, age of bonds and auditor reputation.
- 2. Investors have to analyze financial ratios to determine bank performance and evaluate problems and developments of bond ratings.

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