

The Effect of Leverage, Liquidity, Profitability, and Size on Bond Rating in Financial Sector Companies in 2014-2018 Period

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Abstract:- This study attempts to analyze the determinants of bond rating in Indonesia. The purpose of this study is to determine factors influencing bond rating using separate test. The study uses financial ratios such as Leverage Ratio, Liquidity Ratio, Profitability and Firm Size. This study examines corporate bond that listed at Indonesian Stock Exchange for the period of 2014-2018. This research employs ordinal logistic regression. the conclusions that can be drawn from this study are as follows:

- **Leverage (Debt on Equity Ratio / DER) negatively affects bond ratings, this is because some companies in this study have guarantees or are guaranteed by their parent companies so that bond ratings are not based on financial ratios but rather from companies that guarantee them. If the company's debts are weak, it will be strengthened by the company that guarantees, so the bonds will be ranked the same as the guaranteed company.**
- **Liquidity (Current Ratio / CR) has a negative effect on bond ratings, a company that has a high liquidity means its current assets are greater than current debt, so that if there is a change in economic or financial conditions, then the current assets can be used to meet obligations companies related to bonds when they are due.**
- **Profitability (Return on Assets / ROA) has a positive effect on bond ratings, companies that have a good level of profitability, will make investors interested in investing their capital in the company because this ratio is one indicator used as a reference for investors in choosing companies to invest the capital.**
- **Firm Size (LnSize) has a positive effect on bond ratings, for investors, companies that have high total assets are considered good companies.**

Keywords:- Bond Rating, Leverage, Liquidity, Profitability, Firm Size, Ordinal Logistic Regression.

I. INTRODUCTION

Every company is inseparable from the need for funds (capital) to finance its business. The need for these funds is needed both for investment capital and working capital. The funds needed can be obtained either through financing from internal companies (internal financing) or financing from external companies (external financing). The source of internal capital financing is the utilization of retained earnings, i.e. earnings that are not distributed as dividends. An external source of financing is obtained by the company by making loans to other parties or obtaining funds through the capital market (Semmler & Mateane, 2012).

One way for companies to finance investment funding is by issuing bonds. Bonds are also a means to strengthen capital for the company. Bonds are securities in the form of certificates containing contracts between lenders (investors) and lenders (issuers) (Sari, 2008). Growth in the value of turnover and transaction types of bonds in Indonesia continued to increase, as did transactions for corporate bonds showing growth in 2016 followed by growth in bond issuance values.

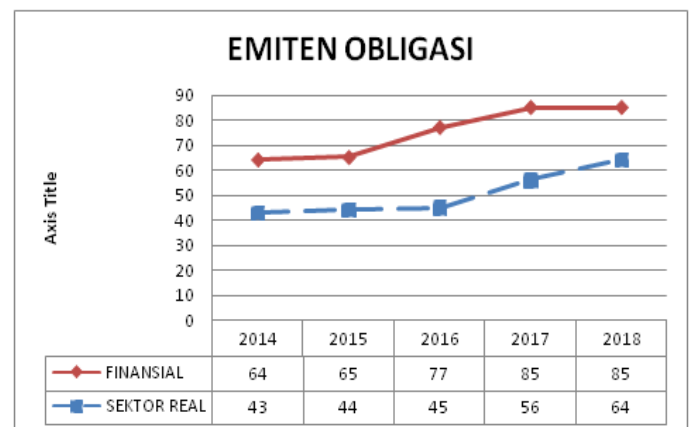


Fig 1:- Number of Issuers of Financial and Real Sector Bonds in Indonesia.

Source: PT Pefindo (2019, reprocessed)

If seen in Figure 1, the number of issuers of the Financial Sector bonds is more than the Real Sector sector, for the Financial Sector there was an increase of 18.5% in 2016 when compared to 2015.

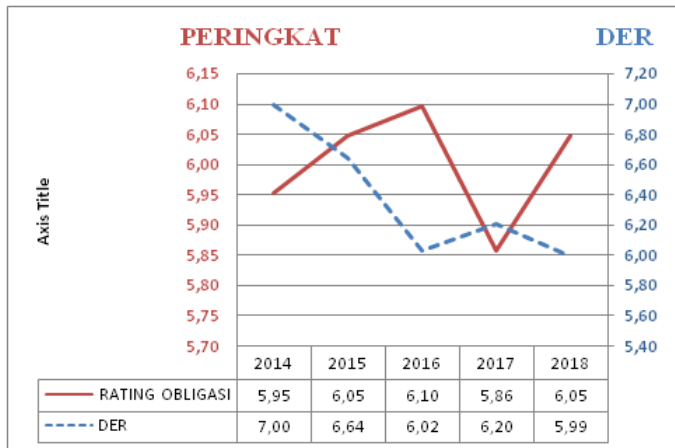


Fig 2:- Comparison of Financial Sector Bonds and Debt to Equity Ratio (DER) for the period 2014 - 2018.
Source: PT Indonesia Stock Exchange and PT Pefindo (2019, reprocessed)

From the data above, the Ratings Score of 5.95 in 2014 and the years after that are derived from the average bond rating per year, it appears that when DER has decreased the bond rating will increase, seen in 2015, 2016 and 2018 and when DER has increased, the bond rating has decreased, seen in 2014 and 2017.

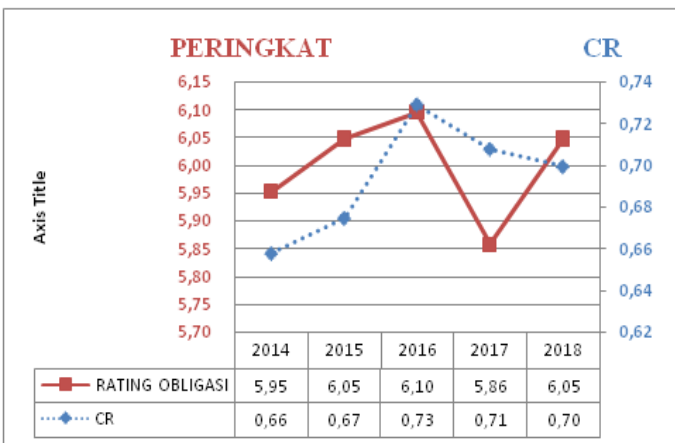


Fig 3:- Comparison of Financial Sector Bonds and Current Ratio (CR) for the period 2014 - 2018.
Source: PT Indonesia Stock Exchange and PT Pefindo (2019, reprocessed)

From the data above, the Rating Score of 5.95 in 2014 and subsequent years comes from the average bond rating per year, it appears that when the CR increases, the bond rating will also increase, then if the CR decreases, the rating will decrease, but there was a phenomenal draw in 2018, it appears that CR has decreased, but the bond rating has increased.

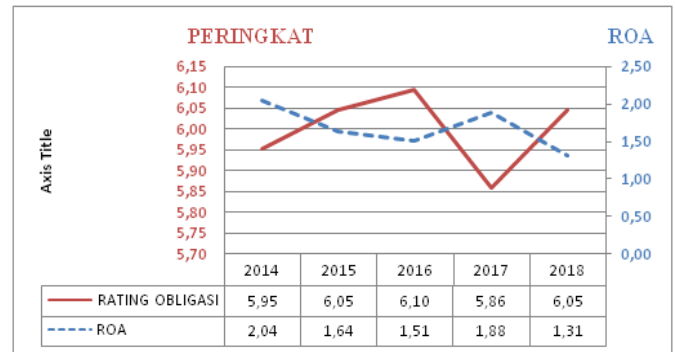


Fig 4:- Comparison of Financial Sector Bonds and Return on Assets (ROA) for the period 2014 - 2018.
Source: PT Indonesia Stock Exchange and PT Pefindo (2019, reprocessed)

From the data above, the Rating Score of 5.95 in 2014 and subsequent years comes from the average bond rating per year, it appears that when ROA increases, the Bond Rating will decrease, this is seen in 2014 and 2017, but when ROA has decreased, the Bond Rating has increased, this was seen in 2015, 2016 and 2018.

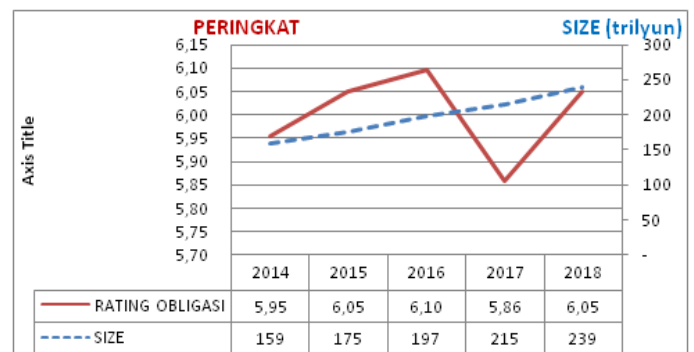


Fig 5:- Comparison of Bond ratings and Financial Sector Size for the period 2014 - 2018.
Source: PT Indonesia Stock Exchange and PT Pefindo (2019, reprocessed)

From the data above, the Rating Score of 5.95 in 2014 and subsequent years comes from the average bond rating per year, it can be seen that the size of the company, represented by the Total Assets of Financial Sector companies, has increased every year but for the Bond Rating has experienced fluctuation.

➤ *Research Problem Formulation*

Based on the background of the problem, this research is focused on the following problems:

- Does DER negatively affect bond ratings?
- Does CR have a positive effect on bond ratings?
- Does ROA have a positive effect on bond ratings?
- Does Firm Size have a positive effect on bond ratings?

➤ *Research Purposes*

The objectives of this research are:

- To test the effect of Debt to Equity Ratio (DER) on Bond Rating

- To test the effect of the Current Ratio (CR) on the bond rating
- To examine the effect of Return on Assets (ROA) on Bond ratings
- To test the effect of Firm Size (SIZE) on Bond ratings.

II. LITERATURE REVIEW

A. Signaling Theory

Signaling theory (signaling theory) originated from Akerlof's writing in his 1970 work "The Market for Lemons", which introduced the term asymmetric information (asymmetry information). Asymmetric information is a condition in which the seller has more information about the product than the buyer, or the opposite condition that might occur. Akerlof studies the phenomenon of imbalance information about product quality between buyers and sellers by testing the used car market.

From his research, he found that when buyers do not have information related to product specifications and only have a general perception of the product, then the buyer will assess all products at the same price both high quality and low quality products, thus detrimental to sellers of high quality products. This condition occurs due to lack of more information by one party (the buyer) of the product offered by the other party (the seller).

B. Agency Theory

Agency theory can be seen as a version of game theory (Mursalim, 2005), which makes a contractual model between two or more people (parties), where one party is called an agent and the other party is called the principal. Principal delegates responsibility for decision making to the agent, it can also be said that the principal gives a mandate to the agent to carry out certain tasks in accordance with the agreed work contract. The authority and responsibility of the agent and principal are regulated in a work contract based on mutual agreement. Teori Modigliani Miller (MM)

C. Asymmetric Information Theory

The manager as the manager of the company knows more about the internal information and prospects of the company in the future than the owner (shareholder). Therefore as a manager, the Manager is obliged to give a signal regarding the condition of the company to the owner. The signal given can be done through the disclosure of accounting information such as financial statements.

The financial statements are intended for use by various parties, including the management of the company itself. But most concerned with financial statements are actually external users (outside management). The financial statements are important for external users especially because this group is in the most uncertain conditions (Ali, 2002). Internal users (management) have direct contact with the entity or company and are aware of significant events that occur, so that the level of dependence on accounting information is not as great as external users.

D. Bond Rating

According to George Foster (in Andry, 2005) ratings or ratings, is a statement about the state of the debtor and the possibility of what can and will be done in relation to the debt they have, so it can be said that ratings try to measure the default risk, ie the opportunity the issuer or borrower will experience condition of not being able to fulfill its financial obligations.

E. Leverage

Leverage (Debt to Equity Ratio / DER) Leverage ratios are ratios used to measure how much assets the company has come from debt or capital, so that this ratio can determine the company's position and obligations that are fixed to other parties and balance the value of fixed assets with existing capital. If this ratio shows a high number, the higher the risk of default (debt) that will be faced by the company.

F. Liquidity (Current Ratio/CR)

According to Wijaya (2017) liquidity ratio, which is a ratio that measures a company's ability to pay off short-term liabilities. Liquidity ratios illustrate the company's ability to meet short-term obligations (debt) in a timely manner in paying expenses, bills and all other obligations that will be due soon. The company's liquidity is shown by the size of the current assets that is assets that are easy to convert into cash which includes cash, securities, and inventory. A company that is able to fulfill its financial obligations on time means that the company is in a liquid state and has a current asset greater than its current debt (Almilia & Devi, 2007).

G. Profitability (Return on Assets/ROA)

According to Wijaya (2017) profitability ratio, which is a ratio that shows a company's ability to generate profits (profits). Investment in the form of bonds is actually not directly affected by the profitability of the company, because no matter how much profit is able to be generated by the company, the bondholders still receive the amount of interest that has been determined. However, analysts remain interested in the company's profitability because this is the single best indicator of the financial health of the company (Almilia & Devi, 2007).

H. Firm Size

The size of the company can be seen through the company's total assets. Ogden (1987) argues that total debt and company size have a strong and positive correlation. In general, large companies will give a good rating (investment grade). Company size also has a correlation to the level of bankruptcy risk so that it can affect bond ratings. Yuliana, et al (2011) states that the larger the company and the more known the public, the more information that can be obtained by investors and the less uncertainty that investors have. Another reason is the size of the company, investors can find out the company's ability to pay bond interest periodically and pay off the principal that can improve the company's bond rating.

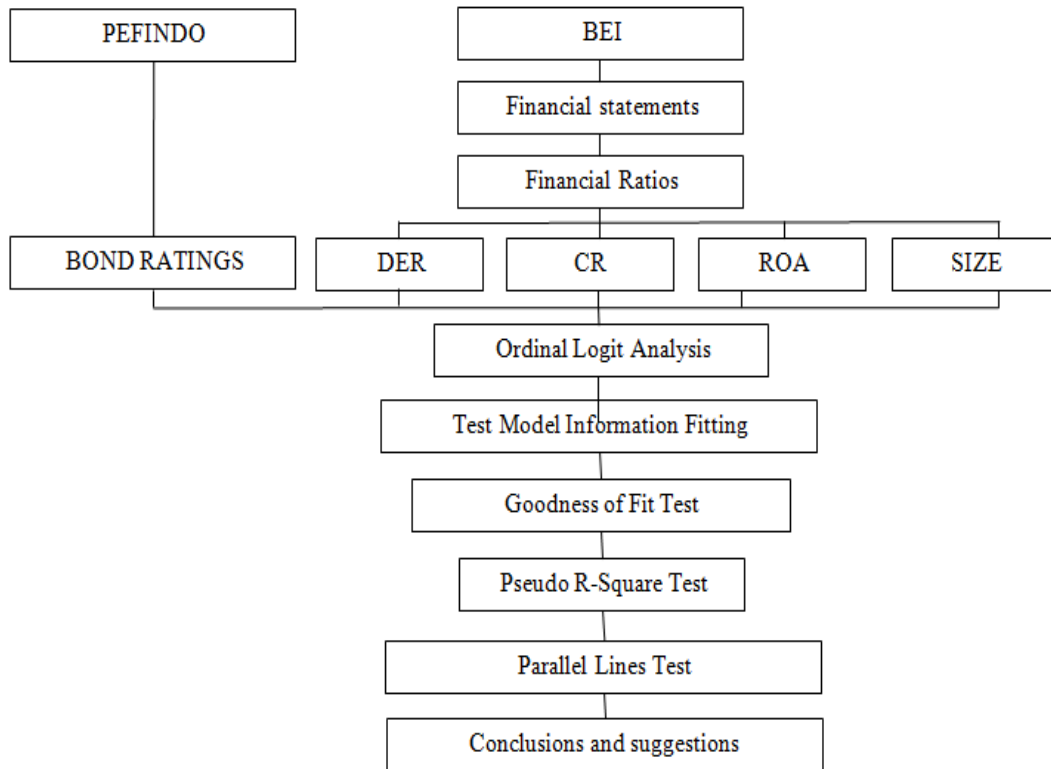


Fig 6:- Framework

❖ *Hypothesis*

Based on the formulation of the problem and empirical studies that have been carried out, then it can be hypothetically drawn as follows:

➤ *Effect of DER on Bond Ratings.*

The higher the leverage / DER, most of the capital owned by the company is funded by debt, so it will make it more difficult for companies to obtain loans because the company is in default risk, because it is likely that the company cannot repay the loan principal and interest periodically due to the amount of debt owed by the company. So the higher the leverage the possibility of rating the bond rating of the company will be lower.

• **H1: DER has a negative effect on bond ratings**

➤ *Effect of CR on Bond Ratings.*

The higher the liquidity / CR of a company, the better the company's ability to meet its short-term obligations. Borrowers (lenders) use the most liquid assets as the main source of payment and security interest in financed assets. The more companies have a lot of liquid assets, it will indirectly affect the repayment of long-term obligations (redemption of bonds) which is expected to reduce default risk, so that the possibility of a better bond rating of these companies

• **H2: CR has a positive effect on bond ratings.**

➤ *Effect of ROA on Bond Ratings.*

The higher the level of profitability of the company, the lower the risk of inability to pay obligations or defaults. Profitability provides an illustration of the effectiveness of the company in generating profits for the company. The

higher the profitability ratio, the more effective the company is in generating profits, so that the company's ability to repay the loan principal and pay interest is getting better and the bond rating will be high

• **H3: ROA has a Positive effect on bond ratings;**

➤ *Effect of Size on Bond Ratings.*

The greater the size of a company, the greater the potential or ability of the company to pay off its obligations. This can indirectly affect the company's bond rating because the greater the company's ability to meet its debt obligations and provide a positive signal for investors who want to invest in the company

• **H4: Total Assets have a positive effect on bond ratings.**

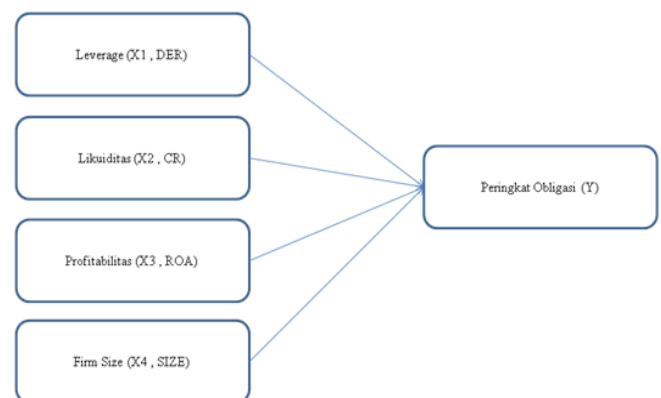


Fig 7:- Research Model

III. METHODOLOGY

The research design used in this study is Causal, Causal research method is research that tests the hypothesis

about the effect of one or several variables (Independent Variable) on other variables (Dependent Variable).

No	Jenis Variabel	Keterangan	Ukurang (Proksi)	Skala
1	Dependen	Peringkat Obligasi	Variabel Kategorikal; 1 untuk Obligasi dengan peringkat AAA, 2 untuk AA, 3 untuk A dan 4 untuk BBB	Ordinal
2	Independen	Leverage	$\frac{\text{Total Hutang}}{\text{Total Ekuitas}}$	Rasio
3		Likuiditas	$\frac{\text{Total Aktiva Lancar}}{\text{Total Kewajiban Lancar}}$	Rasio
4		Profitabilitas	$\frac{\text{Total Laba}}{\text{Total Aktiva}}$	Rasio
5		Ukurang Perusahaan (Firm Size)	Total Aktiva	Rasio

Table 1:- Operational Variabel

➤ *Data Analysis Method*

Hypothesis Test, to test the hypothesis used Ordinal Logit Analysis. This analysis was conducted to determine the effect of each independent variable on the dependent variable, namely the prediction of financial company bond ratings for 2014 to 2018, because the dependent variable is a dummy variable, which is a variable that has two alternatives. The model is as follows:

$$\text{Logit } P(BBB) = \text{Log} \frac{p(BBB)}{1-p(BBB)}$$

Or

$$\text{Log} \frac{p(BBB)}{1-p(BBB)} = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Information :
 Y = Bond rating prediction
 P (BBB) = Probability of BBB rating compared to AAA rating
 P (A) = Probability of rank A compared to AAA rating
 P (AA) = Probability of AA rank compared to AAA rating
 α_0 = Constant term
 β = The coefficient of each in the prediction X.
 X 1 = Leverage ratio (Debt to Equity Ratio)
 X 2 = Liquidity (Current ratio)
 X 3 = Profitability (ROA)
 X 4 = Firm Size (Size)
 Dp = dummy / binary variable
 e = error

IV. RESULTS AND DISCUSSION

The object of research and population used in this study are financial companies listed on the Indonesia Stock Exchange in 2014-2018. This study uses secondary data from the company's annual financial statements. The sampling technique used in this study used a purposive sampling technique and obtained 21 of 85 financial companies that met the criteria for research samples.

A. *Ordinal Logit Test*

In this bond research, a group comparison is performed on the dependent variable with a dummy code that has one reference group as the basis for comparison, namely the bond rating where:

Bond Rating	Value
idAAA	9
idAA+	8
idAA	7
idAA-	6
idA+	5
idA	4
idA-	3
idBBB+	2
idBBB	1

Table 2

This ordinal logit regression compares several groups. In this bond research, a group comparison is performed on the dependent variable with a dummy code that has one reference group as the basis for comparison, namely the

bond rating where AAA = 1, AA = 2, A = 3 and BBB = 4, with AAA as the basic or reference comparison categories so that they can be written in the equation below:

$$\begin{aligned} \text{Logit (P(idBBB))} &= 58.275 - 0.470\text{DER} + 0.556\text{CR} - 0.146\text{ROA} + 2.125\text{LnSize} \\ \text{Logit (P(idBBB) + P(idBBB+))} &= 59.725 - 0.470\text{DER} + 0.556\text{CR} - 0.146\text{ROA} \\ &+ 2.125\text{LnSize} \\ \text{Logit (P(idBBB) + P(idBBB+) + P(idA-))} &= 61.580 - 0.470\text{DER} + 0.556\text{CR} - \\ &0.146\text{ROA} + 2.125\text{LnSize} \\ \text{Logit (P(idBBB) + P(idBBB+) + P(idA-) + P(idA))} &= 62.293 - 0.470\text{DER} + \\ &0.556\text{CR} - 0.146\text{ROA} + 2.125\text{LnSize} \\ \text{Logit (P(idBBB) + P(idBBB+) + P(idA-) + P(idA) + P(idA+))} &= 63.142 - \\ &0.470\text{DER} + 0.556\text{CR} - 0.146\text{ROA} + 2.125\text{LnSize} \\ \text{Logit (P(idBBB) + P(idBBB+) + P(idA-) + P(idA) + P(idA+) + P(idAA-))} &= \\ &64.038 - 0.470\text{DER} + 0.556\text{CR} - 0.146\text{ROA} + 2.125\text{LnSize} \\ \text{Logit (P(idBBB) + P(idBBB+) + P(idA-) + P(idA) + P(idA+) + P(idAA-) +} & \\ \text{P(idAA))} &= 65.287 - 0.470\text{DER} + 0.556\text{CR} - 0.146\text{ROA} + 2.125\text{LnSize} \\ \text{Logit (P(idBBB) + P(idBBB+) + P(idA-) + P(idA) + P(idA+) + P(idAA-) +} & \\ \text{P(idAA) + P(idAA+))} &= 65.705 - 0.470\text{DER} + 0.556\text{CR} - 0.146\text{ROA} + \\ &2.125\text{LnSize} \end{aligned}$$

Fig 8

➤ Bond Estimates Parameter

Parameter	B	Std. Error	95% Wald Confidence		Hypothesis Test			Exp(B)	
			Lower	Upper	Wald Chi-Square	df	Sig.		
Thresh old	[P0=1]	58,275	8,5719	41,474	75,076	46,218	1	0,000	209465690901877000000000,000
	[P0=2]	59,725	8,6298	42,811	76,639	47,898	1	0,000	867549621698292000000000,000
	[P0=3]	61,580	8,7455	44,499	78,721	49,581	1	0,000	554582933298069000000000,000
	[P0=4]	62,293	8,8041	45,097	79,548	50,061	1	0,000	119062388890796000000000,000
	[P0=5]	63,142	8,8692	45,758	80,525	50,689	1	0,000	264274897899801000000000,000
	[P0=6]	64,038	8,9386	46,518	81,557	51,325	1	0,000	647501264802266000000000,000
	[P0=7]	65,287	9,0564	47,597	83,038	51,969	1	0,000	225921168346389000000000,000
	[P0=8]	65,705	9,0840	47,900	83,509	52,917	1	0,000	942869990511217000000000,000
DER	-0,470	0,0957	-0,658	-0,283	24,155	1	0,000	0,625	
CR	0,556	0,5452	-0,513	1,624	1,099	1	0,908	1,749	
ROA	-0,146	0,0995	-0,341	0,049	2,158	1	0,142	0,864	
ln Size	2,125	0,2884	1,560	2,690	54,278	1	0,000	8,972	
(Scale)	1*								

Table 3:- Bond Estimates Parameter
Link function: Logit.

➤ Interpretation:

- The DER variable has a negative effect in determining the bond rating with a coefficient value of -0.470 with a P-value of 0.000 (below the cutoff value = 0.05), so that

the DER variable has a significant effect on bond ratings with an odd ratio value of 0.625

If the other variables are constant, for every one unit increase in the DER variable, the probability of financial bonds being ranked higher will decrease by 0.470. And

conversely the probability of financial bonds being ranked lower, will go up by 0.470. The DER odd ratio (0.625), which is smaller than 1, indicates that the probability of the bond being ranked higher will decrease if the DER variable rises.

- The CR variable negatively affects the ranking of bonds with a coefficient value of 0.856, but with a P-value of 0.308 (above the cutoff value of 0.05), the effect of the CR variable is not significant on the bond rating, with an odd ratio value of 1.743.

If the other variables are constant, for every one unit increase in the CR variable, the probability of financial bonds being ranked higher, will increase by 0.856. And conversely the probability of financial bonds being ranked lower, will drop by 0.856. The CR Odd ratio (1,743), which is greater than 1, indicates that the probability of bonds being ranked higher will increase if the CR variable rises.

- ROA profitability variable has a positive effect in determining the rating of bonds with a coefficient value - 0.146 but with a P-value of 0.142 (above the cutoff value of 0.05), the effect of the ROA variable is not significant on bond ratings, with an odd ratio value of 0.864.

If the other variables are constant, for every one unit increase in the ROA variable, the probability of financial bonds being ranked higher, will decrease by 0.146. And conversely the probability of financial bonds being ranked lower, will rise by 0.146. The DER odd ratio (0.864), which is smaller than 1, indicates that the probability of bonds being ranked higher will decrease if the ROA variable rises.

- The LnSize variable has a positive effect in determining the bond rating with a coefficient value of 2.125, with a P-value of 0.000 (below the cutoff value = 0.05), so that the Size variable has a significant effect on bond ratings with an odd ratio value of 8,372

If the other variables are constant, for every one unit addition to the LnSize variable, the probability of financial bonds being ranked higher, will increase by 2,125. And conversely the probability of financial bonds being ranked lower, will go down by 2,125. The DER odd ratio (8,372) which is greater than 1, indicates that the probability of the bond being ranked higher, will increase if the LnSize variable rises.

Estimated parameter table 3. is the estimation parameter for the ordinal logistic regression model. In this bond research, the independent variables that have significant effect (significant) are DER and firm size with a P-value below 0.05, namely DER with P value: 0.004, Firm size with p = 0.000.

The effect of DER independent variables and firm size on bond ratings can be interpreted as follows. Firm size = 1 and other independent variables = 0, it can be concluded that when the company has an increase in the ratio of firm

size which is proxied by the value of total assets, to increase one unit of firm size will reduce the company's opportunity to get a BBB rating of 2,04882E-09 or 0.0000002049%, reducing the company's chances of getting an A rating of 8.41218E-08 or 0.000008207%, and will reduce the company's chance of getting an AA rating of 9.58097E-06 or 0.0009581%. Another interpretation is that when an increase in one firm firm size unit, it will decrease the odd ratio (exp -0.709) = 0.492 AAA rating categories.

B. Assessing Ordinal Logit Results (Test of Significance)

Fitting Model Test Information to find out how effective the variables used, second with the Goodness of Fit Test, known as the G Test to determine the suitability of the analysis model, the third Pseudo R-Square Test to determine the strength of the relationship between the independent variable with the dependent variable and finally the Test Parallel Linesc to assess all categories have the same parameters or not.

➤ *Bond Information Fitting Model*

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	406.800			
Final	274.837	131.963	4	.000

Link function: Logit.

Table 4:- Fitting Information Model

The results of the fitting information model in this study showed that the model with only an intercept produced a value of -2Log Likelihood of 406,800, whereas if the independent variables DER, CR, ROA, and LnSize were included in the model, then the value of -2Log Likelihood dropped to 274,837 so that Chi -Square became 131,963, and this decrease was significant with a p-value of 0.000, which means a model with an independent variable was able to provide better accuracy results for predicting bond ratings compared to only models with intercepts only. So it can be concluded that this model is very fit. Where :

H0: Model Fit is only intercepted
H1: Fit model by entering independent variables or independent variables

A value of -p (0,000) <alpha 5%, then reject H0 means the model fit by including independent variables or independent variables that affect bond ratings.

➤ *Goodness-of-Fit Obligasi*

Goodness-of-Fit			
	Chi-Square	df	Sig.
Pearson	592.205	828	1.000
Deviance	274.837	828	1.000

Link function: Logit.

Table 5:- Goodness-of-Fit Obligasi

Goodness-of-fit is not very relevant because many cells have a frequency of 0, therefore it can be ignored in this study.

➤ *Pseudo R-Square Obligasi*

On R-Square bonds, Nagelkerke’s value is 0.731, which means 73.1% of the dependent variable variation (bond rating) which can be explained by variations of independent variables such as DER, CR, ROA and size, and the remaining 26.9% is explained by other variables outside this model.

Pseudo R-Square	
Cox and Snell	.715
Nagelkerke	.731
McFadden	.324

Link function: Logit.

Table 6:- Pseudo R-Square Obligasi

Model	Test of Parallel Lines^a			
	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	274.837			
General	250.900 ^b	23.936 ^c	28	.685

The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.

a. Link function: Logit.
 b. The log-likelihood value cannot be further increased after maximum number of step-halving.
 c. The Chi-Square statistic is computed based on the log-likelihood value of the last iteration of the general model. Validity of the test is uncertain.

Table 7

➤ *Test of Parallel Linesc Obligasi*

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Table 8

In bond research, this table provides the results of a parallel line test by showing a p-value greater than 0.05,

which means the model is suitable and no need to be re-modeling.

V. CONCLUSIONS

Based on the results of the analysis of research data and the discussion that has been stated in chapter IV, the conclusions that can be drawn from this study are as follows:

- Leverage (Debt on Equity Ratio / DER) negatively affects bond ratings, this is because some companies in this study have guarantees or are guaranteed by their parent companies so that bond ratings are not based on financial ratios but rather from companies that guarantee them. If the company's debts are weak, it will be strengthened by the company that guarantees, so the bonds will be ranked the same as the guaranteed company.
- Liquidity (Current Ratio / CR) has a negative effect on bond ratings, a company that has a high liquidity means its current assets are greater than current debt, so that if there is a change in economic or financial conditions, then the current assets can be used to meet obligations companies related to bonds when they are due.
- Profitability (Return on Assets / ROA) has a positive effect on bond ratings, companies that have a good level of profitability, will make investors interested in investing their capital in the company because this ratio is one indicator used as a reference for investors in choosing companies to invest the capital.
- Firm Size (LnSize) has a positive effect on bond ratings, for investors, companies that have high total assets are considered good companies.

This research is inseparable from various limitations and shortcomings. The suggestions that can be delivered on the basis of research and discussion that have been presented previously are as follows:

➤ For Bond Issuing Companies (Issuers).

Issuers should improve their financial performance, in order to increase investor interest and confidence in investing. Profitability and Total Assets affect the bond rating, so if the company wants its bond rating to survive or increase, it is also expected to increase its Profit and Total Assets.

➤ For Investors and Prospective Investors.

For investors who want to invest their funds in bonds in addition to paying attention to profitability and total assets, but also pay attention to the company's bond rating, choose bonds with lower leverage ratios and high liquidity ratios, because companies with bond ratings as well as good leverage and liquidity ratios indicate the less likely the company will experience difficulties in fulfilling its obligations when due

➤ Share Further Research

- The object of this study is only limited to bonds issued by financial sector companies listed on the IDX and rated by PT PEFINDO. Researchers can then include other sectors so that the sample of the company is more diverse.

- The researcher can then add other variables that might better explain variations in bond ratings, for example financial variables such as growth ratios, solvency and so on with different proxies. Non-financial variables that can be added, for example bond coupon rates, bond age, bond guarantees, management quality, auditor reputation and so on.

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