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Factors Affecting Bond Ratings in BUMN Companies

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Abstract---*The purpose of this study is to obtain empirical evidence of profitability, liquidity, solvency and activity on state-owned enterprise's bond rating listed on the Indonesia Stock Exchange and PT. Pefindo. The sampling technique used purposive sampling, the research samples obtained totalled 11 companies with a research period from 2018-2023 so there were 66 units of analysis. The research design was quantitative descriptive. The analysis technique in this research is the multiple regression analysis method. The results showed that profitability and solvency have a significant positive effect, liquidity and activity have no significant effect on bond rating. This research implies that companies must pay attention to profitability and solvency and those that can affect bond rating so that bond rating will increase.*
Keywords---*Bond Rating, Current Ratio, Debt to Equity, Return on Asset, TATO.*

Introduction

The economic performance of a country is influenced by the capital market, this is because the capital market is a way of sharing economic resources. Where the capital market can be used as a means of obtaining capital for companies that need additional capital in their business activities, the capital market is a market for various long-term financial instruments (securities) that can be traded, either in the form of debt (bonds) or shares issued by governments and private companies (May, 2010; Jiang et al., 2012; Beaver et al., 2006).

Investing in bonds is an alternative that tends to be safer than other financial instruments. One of the advantages of bonds is that when a company goes into liquidation, bondholders have the first right to the company's assets, due to a contractual repayment agreement (De Jong et al., 2011; Mac an Bhaird, 2013; Gaud et al., 2007). Investing through bonds in addition to being profitable also has a weakness, namely the risk of default. Before buying bonds, investors must pay attention to default risk. Default risk is an opportunity where the issuer will experience conditions that are unable to pay its financial obligations. To avoid this risk, investors need to pay attention to several things, one of which is information about bond ratings (Herlinasari, 2021).

Bonds are transferable medium-term debt securities that contain a promise from the issuing party to pay rewards in the form of interest at a certain period and pay off the principal at a predetermined time to the buyer of the bond (idx.co.id). bond ratings are also said to be a means of monitoring management activities (MacLean et al., 2007;

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Chou et al., 2012). Where companies can list bonds on the Indonesia Stock Exchange (IDX) according to predetermined regulations is a minimum of BBB (Investment grade). The existence of these regulations shows that there is protection given to investors against the risk of default (Pradnyawati, 2022).

One of the rating agencies that provide bond ratings in Indonesia is PT PEFINDO. In providing ratings, this agency conducts assessments based on 3 (three) aspects, including: industrial aspects, financial aspects and non-financial aspects (Situmorang & Silalahi, 2022). According to PEFINDO PT PEFINDO or 'PT Pemeringkat Efek Indonesia' was established in Jakarta on 21 December 1993, through the initiative of OJK (Financial Services Authority) which was formerly named BAPEPAM (Capital Market Supervisory Agency), and Bank Indonesia. On 13 August 1994. PT PEFINDO obtained a business licence (No.39/PM- PI/1994) from OJK and is one of the supporting institutions of the Indonesian capital market bond ratings are generally divided into two categories of investment grade (AAA, AA, A, BBB) and non-investment grade (BB, B, CCC, and D) (Nurdiansyah et al., 2023).

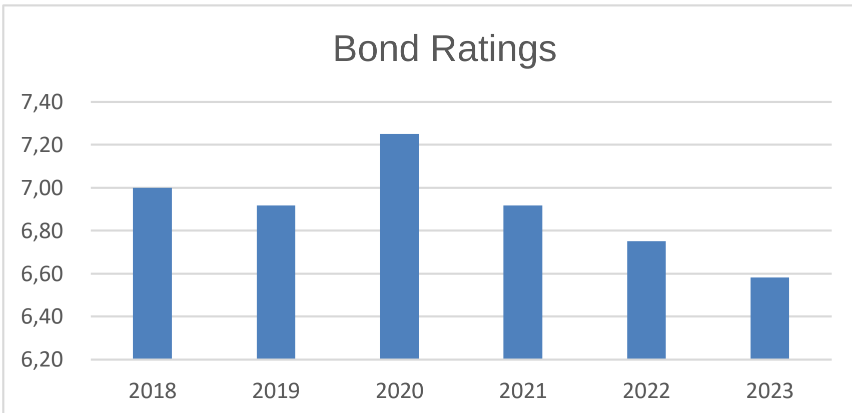

Figure 1. Average Bond Ratings in State-Owned Companies
Source: idx.co.id (data processed by the author)

There are also several previous research gaps regarding corporate financial ratios on bond ratings. Fadah et al. (2020); Aluman et al. (2022); Pramesti (2022); Harisman et al. (2022), found that profitability has a positive and significant effect on bond ratings. found that profitability has a negative and significant effect on bond ratings.

Safitri et al. (2020); found that profitability has no significant effect on bond ratings. Fadah et al. (2020); Nurkhakim et al. (2023); found that liquidity has a positive and significant effect on bond ratings. Nabila & Hartina (2021); Aluman et al. (2022); Harisman et al. (2022), found that liquidity has a negative and significant effect on bond ratings. Irdyansah & Stiadi (2023); Situmorang & Silalahi (2022); Manalu & Silalahi (2023), found that liquidity has no significant effect on bond ratings. Nurmalia et al. (2023), found that solvency has a positive and significant effect on bond ratings. Nabila & Hartina (2021); Wijaya & Suhendah (2021); Aluman et al. (2022); Harisman et al. (2022); found that solvency has a negative and significant effect on bond ratings. Nurdiansyah et al. (2023), found that solvency has no significant effect on bond ratings. Simatupang (2024), found that activity has a positive and significant effect on bond ratings. Manalu & Silalahi (2023), found that activity has a negative and significant effect on bond ratings. Herlinasari (2021), found that activity has no significant effect on bond ratings. The object of this research is state-owned companies listed on the Indonesia Stock Exchange and PT PEFINDO for the period 2018-2023. In this study, the Bond Rating which is assessed using a scale converted from the PEFINDO bond rating is the dependent variable. Profitability is implied as *Return on Assets*; Solvency is implied as *Debt to Equity Ratio*; Liquidity is implied as *Current Ratio*: and Activity is implied as *Total Asset Turnover,* which are independent variables. The theory used in this study is the *signalling theory*. Based on the phenomenon and research gap above, the authors are interested in conducting research with the title 'Factors Affecting Bond Ratings in BUMN Companies listed on the Indonesia Stock Exchange'.

Research Methods

The object of research was conducted at Manufacturing Companies listed on the Indonesia Stock Exchange in the 2019-2023 period. Data collection using *purposive sampling* technique which obtained a research sample of 11 BUMN companies. The research method used is a descriptive method with a quantitative approach using multiple regression analysis. The classical assumption test is carried out before the hypothesis test so that the test results meet the BLUE (Best Linear Unbiased Estimated) criteria. After that, hypothesis testing is carried out with the t-statistical test, F test, and coefficient of determination analysis. The model used in this study can be formulated as follows:

$$PO = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Table 1
Operational definition and measurement of variables

Variables	Definition	Formula	Measure
Bond Rating	According to Drs. Bambang Riyanto (1977), the definition of bonds is an acknowledgement of debt issued by a government company or other institutions as an indebted party that has a certain nominal value and the ability to pay interest periodically on a certain fixed percentage basis.	The bond rating (PO) describes the quality of the issuer in fulfilling its obligations. Bond ratings are measured using numerical values. (Cantor & Packer, 1996). On a scale of 1-10.	Scale
Return On Asset	*Return on Asset is the ratio between profit after tax shared with total assets.* (Brigham & Houston, 2019).	$ROA = \frac{Profit\ after\ tax}{Total\ Assets}$ (Brigham & Houston, 2019)	Ratio
Debt to Equity Ratio	Debt to equity ratio is used to assess debt to equity.	$DER = \frac{total\ debt}{Total\ Equity}$ (Kasmir, 2019).	Ratio
Current Ratio	Liquidity is a ratio that shows the company's ability to pay its long-term debt. (Kasmir, 2019).	$CR = \frac{current\ assets}{current\ payables}$ (Kasmir, 2019).	Ratio
Total Asset Turnover	Based on the description of the explanation by Hery (2018), measuring the effectiveness of the total assets of a company in causing sales activities, or the ratio used to measure how much sales per rupiah embedded in total assets will be generated.	$TATO = \frac{Sales}{Total\ Assets}$ (Fahmi, 2012)	Ratio

Source: data processed by the author from selected books

Result and Discussion

Descriptive Statistical Analysis Results

Table 2
Descriptive Statistics Results

Descriptive Statistics					
	N	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
ROA	66	.00	.31	.0531	.06489
DER	66	.37	10.14	3.1055	3.00094

Descriptive Statistics					
	N	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
CR	66	.67	2.49	1.2720	.42969
TATO	66	.53	55.00	5.9642	10.98343
PO	66	1.00	10.00	7.6667	2.28260
Valid N (listwise)	66				

Source: SPSS 25.0 Output

Hypothesis Test
Coefficient of Determination (Adjusted R^2)

Adjusted R Square obtained has a regression model result of 0.411 or 41.1%. The Bond Rating variable can be explained by 41.1%. by the Return on Asset, Debt to Equity Ratio, Current Ratio, and Total Asset Turnover variables while the remaining 58.9% can be influenced by other factors not examined.

Partial Test (T-test)

The t-value test is used to measure how far the influence of one independent variable individually in explaining the variation in the dependent variable (Ghozali, 2018). The results of the t-value test underlie the preparation of the research model which can be formulated as follows:

$$\mathbf{PO = 2.505 + 0.152ROA + 0.116DER + 0.069CR - 0.038TATO}$$

Table 3
T-value Test Results

	Hypothesis	B	Sig	α	Results
H_1	ROA has a significant positive effect on Bond Rating	0.152	.000	0.05	Accepted
H_2	DER has a significant positive effect on Bond Rating	0.116	.001	0.05	Accepted
H_3	CR does not affect Bond Rating	0.069	.554	0.05	Rejected
H_4	TATO does not affect Bond Rating	-0.038	.205	0.05	Rejected

Source: SPSS 25.0 output (Data processed by the author)

Return on Asset on Bond Rating

Based on the T-Test Results in Table 3. it is found that *Return on Asset* has a positive and significant effect on Bond Ratings in state-owned companies listed on the Indonesia Stock Exchange and registered with PT Pefindo for the period 2018-2023. This can be seen from the test results where the Return on Asset regression coefficient value is 0.115 with a positive or unidirectional value and a significance of 0.000 < α 0.05. so that the first hypothesis ($_{H1}$) which states that Return on Asset has a positive and significant effect on Bond Rating is accepted ($H1_{accepted}$). The results of this study are in line with signal theory, stating that the higher the company's profitability, the higher its chances of getting a good bond rating. This is due to the ability to pay off good debt. High profitability indicates that the company has a better ability to generate profits and cover operational costs, including interest and principal payments. Investors will be more confident to invest in bonds of companies that have high profitability because they believe that the company will be able to pay off its obligations (Kurniawan & Suwarti, 2017). The results of this study are in line with the results of research from Fadah et al. (2020); Aluman et al. (2022); Pramesti (2022); Harisman et al. (2022), who found that profitability has a positive and significant effect on bond ratings. However, it is not in line with Safitri et al. (2020); Irdyansah & Stiadi (2023); Manalu & Silalahi (2023); who found that profitability has no significant effect on bond ratings.

Debt to Equity Ratio on Profitability

Based on the T-Test Results in Table 3. it is found that the *Debt to Equity Ratio* has a positive and significant effect on Bond Ratings in state-owned companies listed on the Indonesia Stock Exchange and registered with PT Pefindo for the period 2018-2023. This can be seen from the test results where the *Return on Asset* regression coefficient value is 0.116 with a positive or unidirectional value and a significance of 0.001 < α 0.05. so that the second hypothesis ($_{H2}$) which states that the *Debt to Equity Ratio* has a positive and significant effect on Bond Rating is accepted ($_{H2\ accepted}$).

Based on signal theory, the DER ratio number can signal bad news because investors assume that the company has a lot of risk so investors will react by avoiding buying company shares when the DER ratio is high. This result is in line with the results of research by Irdyansah & Stiadi (2023); Manalu & Silalahi (2023); Nurmalia et al. (2023), found that the *Debt to Equity Ratio* has a positive and significant effect on bond ratings. Nabila & Hartina (2021); Wijaya & Suhendah (2021); Aluman et al. (2022); Harisman et al. (2022); found that *Debt to Equity Ratio* olvability has a negative and significant effect on bond ratings. Fadah et al. (2020); Pramesti (2022); Nurdiansyah et al. (2023) found that *Debt to Equity Ratio* has no significant effect on bond ratings.

Current Ratio to Bond Rating

Based on the T-Test Results in Table 3. it is found that the *Current Ratio* has a positive and insignificant effect on Bond Ratings in state-owned companies listed on the Indonesia Stock Exchange and registered with PT Pefindo for the period 2018-2023. This can be seen from the test results where the *Return on Asset* regression coefficient value is 0.069 with a positive or unidirectional value and a significance of 0.554 < α 0.05. so the third hypothesis ($_{H3}$) which states that *Current Ratio* has a positive and significant effect on Bond Rating is rejected ($H3_{rejected}$). Therefore, the current ratio value should not be too high because it will have a bad impact on the company with ineffective asset management problems such as the existence of unproductive funds invested in current assets and the buildup of inventory and receivables that are difficult to collect so that receivables and inventory cannot be converted into cash immediately (Situmorang & Silalahi, 2022). These results are in line with the results of research by Irdyansah & Stiadi (2023); Situmorang & Silalahi (2022); Manalu & Silalahi (2023), found that liquidity has no significant effect on bond ratings. Fadah et al. (2020); Nurkhakim et al. (2023); found that liquidity has a positive and significant effect on bond ratings. Nabila & Hartina (2021); Aluman et al. (2022); Royhaan et al., 2022; Harisman et al. (2022), found that liquidity has a negative and significant effect on bond ratings.

Total Asset Turnover on Bond Rating

Based on the T-test results in Table 4.11, it is found that *Total Asset Turnover* has a positive and insignificant effect on Bond Ratings in state-owned companies listed on the Indonesia Stock Exchange and registered with PT Pefindo for the period 2018-2023. This can be seen from the test results where the *Total Asset Turnover* regression coefficient value is -0.038 with a negative or unidirectional value and a significance of 0.205 < α 0.05. so the third hypothesis ($_{H3}$) which states that the *Current Ratio* has a positive and significant effect on Bond Rating is rejected ($H4_{\ is\ rejected}$).

The results of this study are not in line with signal theory, a high *Total Asset Turnover* value indicates the effectiveness of a company is getting better, and this is captured by investors as a good signal to attract investors to invest in the company. Companies with a high level of activity tend to be able to generate higher operating income. So that companies with a high level of activity will be able to fulfil their obligations well (Herlinasari, 2021). These results are in line with the results research of Herlinasari (2021), which found that activity has no significant effect on bond ratings. Simatupang (2024), found that activity has a positive and significant effect on bond ratings. Manalu & Silalahi (2023), found that activity has a negative and significant effect on bond ratings.

Conclusion

This study aims to examine the independent variables consisting of *Return on Asset*, *Debt to Equity Ratio*, *Current Ratio*, and *Total Asset Turnover*. *Adjusted R Square* obtained has a regression model result of 0.411 or 41.1%. The Bond Rating variable can be explained by 41.1%. by variables while the remaining 58.9% can be influenced by other factors not examined.

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