Bond Ratings in Non-Financial Companies Listed on the Indonesian Stock Exchange

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ABSTRACT

In order for a company to exist and survive, one of them can be achieved through the company's financing sources. The company in this case requires capital or funds. The need for capital or funds can be financed with own capital in the form of short-term or long-term debt obtained from one of them, namely bonds. This study aims to analyze the effect of leverage, liquidity, profitability and company size on bond ratings of non-financial companies. In this study, using multiple linear regression analysis methods with the SPSS 25 program to process the data. The data used is secondary data which is the annual financial statements of non-financial companies on the Indonesia Stock Exchange in 2019-2021. The observation data used is 132 data. The results of this study indicate that leverage, liquidity do not contribute to bond ratings, profitability is able to contribute to bond ratings, and company size is able to contribute to bond ratings.

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INTRODUCTION

One of the supports for the company to achieve these goals is through the company's financing sources. The company in this case requires capital or funds. The need for capital or funds can be financed with own capital in the form of reserves, additional paid-in capital, profits or capital from investors or capital. Foreign debt in the shape of bonds and non-bonds, as well as short- and long-term debt. Bonds are transferable medium-term debt securities that have a promise from the issuing party to reward the bond buyer with interest at specific intervals and repay the principle at a predetermined time, according to the Indonesia Stock Exchange (2022).

Knowing and tracking the fluctuations of a bond issuer's rating is crucial for investors to make informed decisions about what steps to take and how much to invest in order to minimize the risk of a default at maturity and maximize potential returns.

Because bonds are also carried out by companies as a means of expansion and strengthening capital. The existence of a bond rating will be an important encouragement for the company, where the bond rating can guarantee the timeliness and security of principal and interest payments on its bond debt (Bagaskoro and Wahidahwati, 2014 in Adeka and Titiek 2017).

Of the 44 Non-Financial Companies, 19 companies experienced a decrease in their bond ratings. The data shows the condition of companies that experience failure to pay short-term, inability to pay overdue bond coupons, high financial leverage, liquidity conditions, and weak cash flow results make the company have to experience a bond rating downgrade.

This behavior runs counter to how investors have responded to the COVID-19 outbreak. This is evident from publicly available statistical data released in January 2021 by PT Kustodian Sentral Efek Indonesia (KSEI), which was able to demonstrate a rise in the number of investors from 1,619,372 to 2,484,354, which indicates an increase in the number of investors. The data was collected at the end of 2018 and into 2019.

The increase of 53.41% is still lower than the data for the end of 2019 to 2020. At the end of 2020, the number of investors reached 3,880,753 even though the pandemic was still ongoing. This proves that businesses in the capital market are more popular with the public than real businesses when they are down during this pandemic due to the Large-Scale Social Restrictions (PSBB).

The existence of an increase in the number of investors is able to produce a good impact on the world of capital markets, over time investors can make the capital market their livelihood, and focus on entrusting their money to the capital market, which can be in the form of stocks, bonds, mutual funds or other investments. Because of this changing thing requires people to be careful and carefully analyze in advance what kind of investment they will buy, including investors who want a little risk through bonds.

In this study, the theory of securities valuation used is to use fundamental analysis where this analysis is used to see and provide an assessment of the company in terms of performance which can be seen from the company's good or bad financial aspects, here investors or researchers see a
company by reading the company's financial statements whether it is healthy or not (Annisa, 2019). Therefore, a fundamental analysis is a method of evaluating or projecting the value of a bond or bond rating by using a variety of genuine data sources. The ability of the business to be financed with debt (debt to equity ratio), return on short-term debt (current ratio), the size of the business, and other financial data are some frequently used indicators or data that are used to evaluate the performance of the business. These indications are available from a company's profit and loss statement and balance sheet.

Leverage includes a ratio that shows how much debt there is in the company (Lukas, 2008: 415) in Putri, Ardi and M. Amin (2017). Packing Order Theory explains the company's favorite source of funds, namely internal financing (funding from operations). If it is considered that the internal funds owned are insufficient, funding from bonds and issuance of shares is needed. In this case debt is allowed if it can provide benefits, because large amounts of debt cause bankruptcy (Liquidation) for the company (Husnan, 2007) in Aries Veronica (2015).

Liquidity signifies the company's expertise in meeting current debt on time. Where the increasing liquidity of the company proves the increasing bond rating obtained by the company (Sutrisno, 2005: 70) in Dinda and I Made (2018: 646). The increasing liquidity of the company makes bonds more profitable and attracts more investors who have bonds to quickly sell their debt securities (Favero et al: 2007) in Dinda and I Made (2018: 646). An increased liquidity ratio indicates that bonds in an organization or company belong to the investment-grad category, due to low short-term debt rather than higher short-term assets, indicating the company's habit of paying its current debt to stakeholders according to maturity (Fauzia: 2009) in Dinda and I Made (2018: 646).

A ratio known as profitability is used to assess the macro-level efficacy of firm management by calculating the amount of profit realized relative to sales or investments. According to (Fahmi 2014: 135) in Heny's (2016: 55) research, the better this ratio, the better it indicates how capable the company's earnings are.

Company size is a scale that can classify the size of the company from various ways, namely by total assets (Hery: 2017). The size of the company explains the size of the company which can be expressed by total assets or by total net sales. The greater the company's assets, the greater the capital invested, then there is also a lot of turnover.

THEORETICAL REVIEW

**Signal Theory**

Signal theory is a theory that informs announcements for potential investors so that they can easily determine to invest their capital or shares in the selected company. (Gunawan, 2021). In general, in signal theory the company is the party that must present information about financial statements. Where the information from this financial report aims to make stakeholders such as managers, creditors, and investors aware of the company's financial
condition so that they can assess the company appropriately (Yuniningsih, Pertiwi and Purwanto, 2018).

The implication of signal theory in this study is that it is used to explain how financial reports are able to provide signals to rating agencies regarding the condition of the company where it is taken into consideration in providing bond ratings. Because the rating assessment considers financial factors, company management tends to carry out earnings management so that it has an impact on obtaining a high bond rating.

**Bonds**

According to Adnya (2020: 111) Bonds are long-term debt securities (more than one year) issued by companies or issuers. Bonds can also be interpreted as long-term debt instruments where the borrower or buyer of this bond agrees to make payments in the form of interest and principal that have been determined at a certain time to the bond owner. From that definition, it can be seen that bonds have a nominal value, interest rate, and maturity period within a predetermined period of time.

Bonds are one of the sources of funding for a company, bonds themselves can be long-term debt instruments issued or sold to the public by the company. Before a bond is issued by the company, the company will be tested by the OJK (Financial Services Authority) which is responsible for supervising the capital market (Dewi and Yasa, 2016).

These bonds are securities issued by issuers to investors. At maturity of the bond, the investor will receive the principal value in addition to periodic coupons from the issuer. (Anandia, Nur Aini, and Suprapto, 2019)

**Bond Rating**

In general, bond ratings are divided into two types, namely Investment Grade (AAA, AA, A and BBB) and non-investment grade (BB, B, CCC, and D) (Partiningsih and Asyik, 2016 quoted from research by Rully Anandia Suprapto and Nur Aini, 2019).

Corporate bond ratings provide clues for investors about the quality of bond investments they are interested in. Investors can use the services of a credit rating agency that provides assessment services for outstanding bonds to obtain information about bond ratings.

PT PEFINDO Rating Process: (a) Financial, industrial, and non-financial (business) performance analysis is used in the rating process (PEFINDO, 2009). Bond analysis can take into account a number of factors, including the following (Raharjo, 2003 in Putri Sakinah's research, 2017) (b) Industrial performance, encompassing market share, industry competition, raw material availability, industrial structure, and the impact of governmental and other economic policies. (c) Financial Performance, encompassing levels of debt management, asset and liability management, profitability ratio, capital adequacy ratio, and interest payment adequacy ratio. (d) Non-Financial Performance, which includes contractual obligations, management qualities, and the company’s
reputation (including sinking funds, debt tests, dividend tests, mergers, and asset sales).

**Leverage**

In terms of a company's liquidation, the leverage ratio shows how well positioned the company is to meet its short-term and long-term financial obligations. According to Munawir (2004), who cites research from Adeka Titis Kurniawan and Titiek Suwarti (2017), a company is considered solvable if it has enough wealth or assets to cover all its debts. Otherwise, the company is said to be in an irreversible state because the amount of assets is not enough to cover the debt. According to Kartika et al. (2020), leverage is a metric that shows the amount of variable debt used to fund an organization's activities, including its long-term debt settlement.

The greater the leverage ratio in the company, the greater the risk of company failure and vice versa, the smaller the leverage ratio in the company, the better the rating given to the company (Nurakhiroh et al, 2014 cited in research by Rully Anandia Suprapto and Nur Aini, 2019).

**Liquidity**

Likuditas explains that the company's ability to meet its urgent or immediate financial obligations is fulfilled, or the company is able to meet financial obligations when due. Companies that are able to meet their financial obligations when due, the company is said to be in a liquid condition and companies that are said to be able to pay their financial obligations when due if they have a means of payment or current assets that are greater than their current debt or short-term liabilities, and vice versa if the company is unable to pay its financial obligations when due, the company is said to be in an illiquid state (Munawir, 2004: 31 cited in research by Adeka Titis Kurniawan, Titiek Suwarti, 2017).

**Profitability / Rentability**

The profitability ratio shows the capacity of a business to make a profit over a long period of time. The success of a company and its capacity to use its resources profitably is what determines its profitability; Therefore, the profitability and capacity of a company to use its assets efficiently is determined by comparing its profit for a certain period of time with its total assets or capital. Basically, creditors or business owners can provide funds for corporations (Munawir, 2004: 33). Adeka Titis, Kurniawan and Titiek Suwarti (2017) were cited in the study. According to Yunningsih et al. (2018), profitability is a metric used to evaluate an entity's capacity to generate profits every financial period by utilizing its capital and assets.

According to Linnandarini, 2010 in Dinda Aziiza Hasan's research, 2018 Profitability can also be said to be a ratio that provides an overview of how effectively a company operates which can result in providing profits for the company.

**Company Size**
For many different reasons, the size of a corporation can be described as a factor of its financial structure in practically any study. First, the ease of raising capital from capital corporations can be influenced by the size of the company. For bonds and stocks, small businesses typically lack access to structured capital markets. The cost of launching a modest amount of securities can be unaffordable if they have access.

Secondly, the size of the company is able to estimate the bargaining power in financial contracts. Large companies can often choose funding from various forms of debt including special offers. more profitable than those provided by small businesses. The likelihood that the contract will be drafted according to the preferences of both parties in exchange for the use of the contract debt increases with the observed amount of money.

Third, it is possible for scale effects on returns and costs to generate higher profit margins for larger companies. This is because other factors that may have an impact on the financial structure will come before size. (According to Agnes, 2004: 101 in Sakinah's research, 2017)

The Effect of Leverage on Bond Rating

This ratio is to calculate how much the company’s ability to be financed with debt. This ratio also gives the level of funds provided by the owner compared to the finance provided by creditors.

The likelihood of a company failing increases with its leverage level. The organization’s rating increases with decreasing leverage (Hamida 2017: 71-78). A company that has a high level of corporate leverage may be more vulnerable to collapse, as it may not be able to pay off its debt and its bond rating may decline.

This research finding is in line with studies by Rezah et al. (2020), Adeka et al. (2018), and Rully (2019), which show that leverage significantly lowers bond ratings. This suggests that the company’s high interest expense could be explained by excessive leverage, which would also have an effect on the bond’s rating. However, the findings of this study contradict research conducted by Rezah et al. (2020), Setiawan, Angga et al. (2022), Darma, Marwia, and Tina Sulistyani (2019), and Angel, Gyzhella Chresty and Lorina (2021).

Adam (2013) which states that Leverage has no significant effect on bond ratings. From this description, the following hypothesis is obtained:

**H1**: Leverage has a negative effect on bond ratings

The Effect of Likuiditas on Bond Ratings

One measure of a company’s capacity to pay its direct financial obligations is its liquidity ratio. Utari et al. (2014) state that corporate bonds have a higher rating when their liquidity is higher. A company will be able to meet its short-term obligations to investors on schedule if it has a greater percentage of current asset ownership than current debt. The ability of a business to repay its short-term debt is also considered, which will have an impact on its long-term debt repayment. When a company’s current assets exceed its current liabilities, it believes it will be able to repay its long-term debt to investors on schedule.
The results of this study are in line with previous research conducted by Hidayat (2018), Akhmad et all (2020), and Rezah et al (2020) showing that liquidity has a significant positive effect on bond ratings. This means that the level of liquidity of a bond has a very important role in influencing bond prices. High liquidity can provide a positive signal to investors to want to buy securities from the company. However, this research is also not in line with research conducted by Nugraha, Adam (2013), Tannia, et al (2020), and Darma, et al (2019), and Ika (2020) which state that liquidity has no significant effect on bond ratings. From this description, the following hypothesis is obtained:

**H2**: Liquidity has a positive effect on bond ratings. Effect of Profitability on Bond Rating

This ratio is a measure of whether the owner or share investor can get a reasonable rate of return on what has been invested in the company. Where this ratio provides an overview of the level of effectiveness of the company’s management in generating profits (Wastam 2018: 50)

This ratio is very attractive to bondholders and potential investors because this ratio is an important measure or indicator in measuring the company’s ability to generate profits. Therefore, the bond rating of a company that has high profitability will be in demand by investors so that the company's bonds go up and the bond rating increases.

The present study's findings align with earlier investigations by Nugraha, Adam (2013), Adeka et al (2017), Kurniawan and Suwarti (2017), and Hafiz et al (2021) that demonstrated a noteworthy positive correlation between profitability and bond ratings. This indicates that profitable businesses send out a positive signal for bond ratings. Profitability is determined by a company's performance and its capacity to use its resources profitably; the more profitable a company is, the more profitable it can turn a profit. This analysis, however, runs counter to studies by Safitri et al. (2020), Marwia and Tina (2019), and Tannia et al. (2020), which conclude that profitability has no appreciable impact on bond ratings. From this description, the following hypothesis is obtained:

**H3**: Profitability has a positive effect on bond ratings. The Effect of Company Size on Bond Rating

The size of the company is able to describe the size of a company that can determine the size of a company which is stated through total assets, the greater the assets, the greater the capital invested, while the more debt turnover in the company (Hery 2017). Company size that high is able to describe the company is able to operate well so that it can generate high assets and profits, so the market will want to pay more because the market or investors believe they will get a profitable return from the company. (Hartono 2017)

The results of this study are in line with previous research conducted by Rully (2019), Deliana and Zulfikar (2021), and Annisa et al (2019) which state that company size has a significant positive effect on bond ratings. This means that from the size of the company, investors are able to know the company's ability to pay bond interest periodically and be able to pay off the principal loan which can
improve the company's bond rating. However, this research is not in line with research conducted by Faizah, Yuniar Laeli Nur (2019), and Darmawan, Akhmad et all (2020), and Subekti, Risma et all (2022) which state that company size has no significant effect on bond ratings. From this description, the following hypothesis is obtained:

**H4: Company size has a positive effect on bond ratings.**

**METHODOLOGY**

This study covered up to 100 non-financial companies that were listed on the Indonesia Stock Exchange between 2019 and 2021. Indirect observation approaches were used in this study's data collection. Secondary data from annual financial accounts is what was used. Multiple linear regression analysis is a quantitative research technique used in this study. Purposive sampling is used to determine the sample. The following criteria are used to choose the sample: bonds from non-financial institutions that were listed on the Indonesia Stock Exchange (IDX) and issued and outstanding during the observation period (2019–2021).

1. Bonds whose companies are registered with PT PEFINDO during the observation period.
2. Bonds that have complete rating at PEFINDO 2019-2021. (3) Having financial reports for the period January 1, 2019 to December 31, 2021 and all the necessary data, so that there are 46 non-financial companies that are the research sample. This study uses multiple linear regression analysis methods and is assisted by the SPSS statistical data management program.

**RESULTS AND DISCUSSION**

This analysis aims to determine whether the data is considered to look good or not. The results of this data outlier detection analysis Distance Maximum must be smaller than 20.515.

Which in this test there are outliers if Mahal. Distance Maximum > Prob. & Number of variables [=CHIINV(0.001;5): searched through Excel] = 20,515

The results of the analysis of the detection of outlier data in this analysis do not have a value of Mahal. Distance Maximum which is smaller than 20.515. This means that there are no outliers in the data, namely 16,356 < 20,515, therefore this data has good quality. and can be continued for further processing.

**Normality Test**

This analysis is used to test regression models in which the dependent and independent variables or both have a normal distribution or not. For more detail, it can be seen in the following table:

**Table 2 NPar Tests Table**

**One-Sample Kolmogorov-Smirnov Test**
There are 3 data or variables that are not normally distributed, but from the data quality test the results show that there are no outliers in the data, therefore this data has good quality and can be continued for further processing. Based on the "central limit of theorem" the amount of data processed includes large data, which is more than 30. Thus it can be assumed that the data is considered NORMALLY distributed (Sekaran, 2006; 296).

**Multicollinearity Test**

This analysis is used to detect the existence of correlation of independent variables in multiple regression. For more details, it can be seen in the following table:

The classical assumption of multicollinearity was tested using multiple linear regression analysis, and the results showed that there were no signs of multicollinearity for variables CR (X1) = 1.309, DER (X2) = 1.079, ROA (X3) = 1.278, and Company Size (X4) = 1.035 when the variable VIF value was less than 10. Therefore, it can be said that there are no signs of variable multicollinearity. In addition to additional independent factors. If the variance inflation factor, or VIF, value is greater than 10, substantial multicollinearity is present (Cryer, 1994: 681).

**Heteroscedasticity Test**

The purpose of this study was to find out whether residual variation differs from one observation to the next. In this case it is referred to as homoscedasticity. A well-designed regression model lacks heteroscedasticity.
Heteroscedasticity testing here uses Spearman rank correlation between residuals and all independent variables.

The analysis findings showed that, among variables with significance values greater than 0.05 for each, variables CR (X1) = 0.089, DER (X2) = 0.798, ROA (X3) = 0.620, and Company Size (X4) = 0.632 were not significantly correlated with the independent variable. It is therefore possible to conclude from the results of the analysis that there is no heteroscedasticity for those variables that do not show a significant relationship. To determine that each research variable satisfies the assumption of heteroscedasticity.

**Autocorrelation Test**

This test is used to detect the existence of a correlation between confounding errors in period t and confounding errors in period t-1 (previous). If the data is above 15

Notes: Autocorrelation in most time series data.

For classical assumptions that detect autocorrelation here, it is NOT DONE because the data is not time series data. However, if the autocorrelation test is still carried out, then the classical assumptions that detect autocorrelation here show the result that the Durbin Watson value of 2.097 is in the negative doubt area. So this shows that there are no symptoms of autocorrelation.

### Table 5 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin - Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.411a</td>
<td>.169</td>
<td>.141</td>
<td>.948</td>
<td>.169</td>
<td>6.040</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X4 = Size, X2 = DER, X3 = ROA, X1 = CR

a. Dependent Variable: Y = Bond Rating

Source: Data processed

**Multiple Linear Regression**

Thus, the regression analysis results are explained as follows:

### Table 6 Multiple Linear Regression Results
### Table 1

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
<th>Correlation Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Partial</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td><strong>7.659</strong></td>
<td>.396</td>
<td>19.322</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>X1 = CR</td>
<td>-.081</td>
<td>.118</td>
<td>-.066</td>
<td>-6.88</td>
</tr>
<tr>
<td></td>
<td>X2 = DER</td>
<td>.127</td>
<td>.111</td>
<td>.099</td>
<td>1.144</td>
</tr>
<tr>
<td></td>
<td>X3 = ROA</td>
<td><strong>4.516</strong></td>
<td>1.984</td>
<td>.215</td>
<td>2.277</td>
</tr>
<tr>
<td></td>
<td>X4 = Size</td>
<td>-.057</td>
<td>.015</td>
<td>-.337</td>
<td>-3.961</td>
</tr>
</tbody>
</table>

**Bond Rating = β0 + β1 ROE + β2 EVA + β3 MVA + μi**

**Bond Rating = 7.659 - 0.081CR + 0.127 DER + 4.516 ROA - 0.057 SIZE + μi**

From the multiple linear regression equation above, it can be described as follows:

(1) Constant (β0) = 7.659 indicates if the variables CR (X1), DER (X2), ROA (X3) and SIZE (X4) are zero or constant. Then the Bond Rating value is decreased or increased by 7.659. (a) Regression Coefficient CR (X1) = -0.081, The regression coefficient value of CR (X1) is 0.081 and has a negative sign indicating a change in the opposite direction between CR (X1) and Bond Rating (Y), meaning that if CR (X1) increases by one unit, the Bond Rating will increase by one unit. (Y) will decrease by 0.081. Conversely, if CR (X1) decreases by one unit, the company’s Bond Rating (Y) will increase by 0.081 with the assumption that CR (X1) will decrease by 0.081.

DER (X2), ROA (X3) and SIZE (X4) variables are constant. (b) Regression Coefficient DER (X2) = 0.127 The regression coefficient value of DER (X2) of 0.127 and positive indicates a unidirectional change between DER (X2) and Bond Rating (Y), meaning that if DER (X2) increases by one unit, the Bond Rating (Y) will increase by 0.127. Conversely, if DER (X2) decreases by one
unit, the company's Bond Rating (Y) will decrease by 0.127 assuming the variables CR (X1), ROA (X3) and SIZE (X4) are constant.

Regression Coefficient ROA (X3) = 4.516, The regression coefficient value of ROA (X3) is 4.516 and has a positive sign indicating a unidirectional change between ROA (X3) and Bond Rating (Y), meaning that if MVA (X3) increases by one unit, the Bond Rating (Y) will increase by 4.516. Conversely, if ROA (X3) decreases by one unit, the company's Bond Rating (Y) will decrease by 4.516 with the assumption that CR (X1), DER (X2), and SIZE (X4) are constant.

Regression Coefficient of SIZE (X4) = -0.057, The regression coefficient value of SIZE (X4) is -0.057 and has a negative sign, indicating an opposite change between SIZE (X4) and Bond Rating (Y), meaning that if SIZE (X4) increases by one unit, the Bond Rating (Y) will decrease by 0.057. Conversely, if SIZE (X4) decreases by one unit, the Bond Rating (Y) will decrease by 0.057. The company will increase by 0.057 with the assumption that the variables CR (X1), DER (X2) and ROA (X3) are constant.

Simultaneous Test (F Test)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>21.713</td>
<td>4</td>
<td>5.428</td>
<td>6.040</td>
<td>.001</td>
</tr>
<tr>
<td>Residuals</td>
<td>106.956</td>
<td>119</td>
<td>.899</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>128.669</td>
<td>123</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y = Bond Rating
b. Predictors: (Constant), X4 = Size, X2 = DER, X3 = ROA, X1 = CR

Seen from the number $F_{hitung} = 6.040$ with Sig. 0,00 < 0,05: Significantly positive, meaning that changes in the three variables CR (X1), DER (X2), ROA (X3) and SIZE (X4) are able to explain changes in the Bond Rating variable (Y). Where if you look at the Determination coefficient, you can [see R Square 0.169] or 16.9% while the remaining 83.1% [100% - 16.9%] is explained by other variables besides the CR (X1), DER (X2), ROA (X3) and SIZE (X4) variables. The results of this analysis indicate that the regression model that can be used for this analysis technique is suitable or not suitable. Means can use this analysis technique.

**Coefficient of Determination ($R^2$)**

The purpose of the coefficient of determination test is to assess how well the model takes into account fluctuations in the dependent variable. The coefficient of determination test produces the following findings.
Effect of Leverage (X1) on bond rating (Y)

The results of hypothesis testing can be seen that the Leverage variable (X1) is not able to contribute to the bond rating. This result is not in accordance with the first hypothesis which states that leverage is able to contribute to bond ratings. This research is in line with research from Hafiz, Muhammad, et al. (2021), Larasati, Putri (2020) where the study has the result that leverage makes a very small or negligible contribution to bond ratings.

This explains that companies with low levels of debt are not necessarily better than companies with high levels of debt. This is because the nature of debt is very dependent on the company. If the company is running well and provides high income, any level of debt is believed to be able to be paid, but if the company is not running well and does not provide profit, it will be difficult to pay even a small debt. This research is inversely proportional to Sakinah, Kadafi (2017). Where in the study explains that a good company that has the ability to pay its short-term obligations is a good company.

Effect of Liquidity (X2) on Bond Rating (Y)

The results of hypothesis testing can be seen that the Liquidity variable is unable to contribute to the bond rating. This result is not in accordance with the second hypothesis in this study states that liquidity can contribute to bond ratings. The results of this study are in line with the research of Kurniawan, data processed.

From table 4.14 the results of the calculation of the coefficient of determination (R²) where R square is 0.169 or 16.9%, it can be interpreted that the dependent variable affects the independent variable by 0.169 or 16.9%. While the remaining 83.1% (100% - 16.9%) is explained by other variables besides the variables of Leverage, Liquidity, Profitability and company size.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.411</td>
<td>.169</td>
<td>.141</td>
<td>.948</td>
<td>.169</td>
<td>6.040</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X4 = Size, X2 = DER, X3 = ROA, X1 = CR  
b. Dependent Variable: Y = Bond Rating  

Source: data processed

Table 9 Test Coefficient of Determination
Adeka Titis and Titiek Suwarti (2017), and Larasati, Putri Anggita (2020). And Nugraha, Adam (2013) which shows that liquidity results are unable to contribute to bond ratings. The effect of the liquidity ratio that contributes to the bond rating is because PT PEFINDO may be more assessing asset management and passive on the basis of the cash flow statement, which provides more detailed information. Relevant data on cash receipts and expenditures are provided by the cash flow statement (Kieso, 2005). Users of financial statements can learn what happens to a company's liquid resources by looking at the cash flow statement. This test shows that a company's liquidity is supported by high current assets and the capacity to book or generate profits for the business through stable and consistent year-on-year high profits. This is because the business is focused on short-term and long-term payments (Widiastuti and Rahyuda, 2016). This research is inversely proportional to the research of Nugraha, Adam (2013). Larasati, Putri Anggita (2020), where the study explains that high current assets illustrate that the company is able to pay off its short-term debt or loans.

**Effect of Profitability on Bond Rating**

The results of hypothesis testing can be seen that the profitability variable is able to contribute to the bond rating. This result is in line with hypothesis 3 in this study which states that profitability is able to contribute to bond ratings. The results of this study are consistent with the research of Nugraha, Adam (2013), Kurniawan, Adeka Titis and Titiek Suwarti (2017) and Suprapto, Rully Anandia (2019) who found a relationship between profitability and bond ratings, the higher the profitability, the better the company's rating. The company's profitability. With the company's profitability showing that the company is in a state of increasing or decreasing profits, investors will entrust by giving their capital to the bond issuing company by giving their capital to the company so that the bond rating is good. Companies with increasing profitability conditions are in demand by many investors. The results of this study are inversely proportional to Larasati, Putri Anggita (2020). Suprapto, Rully Anandia (2019) which states that the greater the profit received by the company does not affect the level of investor confidence in providing capital.

**The Effect of Company Size on Bond Rating**

The results of hypothesis testing can be seen that the company size variable is able to contribute to the bond rating. This result is not in accordance with hypothesis 4 in this study which states that company size is able to contribute to bond ratings. These results are supported by Rukmana (2016), Darmawan, Akhmad, et all (2020) which state that even though the company size is of high value, it can have a downward value on the bond rating if the company is in default, thereby lowering the bond rating. As found in four major banks in Greece that were downgraded to CCC because they were hit by default. The four big banks are National Bank of Greece, Piraeus Bank, Eurobank Ergasias and Alpha Bank. This proves that a large / high company size does not guarantee a high / good bond rating, according to the above phenomenon there are several
factors that cause the bond rating to drop, one of which is that the company is exposed to the risk of default. According to Spence Theory (1973), that company size can signal the bond rating is true as evidenced by giving a negative signal. However, the results of this study found differences with Hafiz's research, Muhammad, Fitri Yetty, Munasiron Miftah (2021) which shows that the size of the company is not measured by total assets alone.

CONCLUSIONS AND RECOMMENDATIONS

Leverage contributes little or nothing to the bond rating. Where the high and low bond rating is owned, it is not determined by the size of the Leverage. This is because the nature of debt is very dependent on the company. If the company is running well and provides high income then any level of debt is believed to be able to be paid, but if the company is not running well and does not provide profit then paying even a small debt will be difficult. Liquidity contributes little or nothing to the bond rating. This can be due to PT PEFINDO which may be more assessing asset management and passive on the basis of relevant cash flow statements about cash receipts and disbursements, or in this case the Company's liquidity is not only supported by high current assets, but also supported by the ability to book or provide profits for the Company from year to year that are consistent and stable through high profits. Profitability is able to contribute to the bond rating. Where high profitability will be high, and vice versa. Value Size is able to contribute to the bond rating. Where the size of the company is high, the bond rating will be low, and vice versa. Researchers provide suggestions that can be input for further researchers by adding to the variables studied such as bond age, solvency activity ratio, growth and increasing the number of observed observation samples.

FURTHER STUDY

This study aims to continue the previous research entitled "Bond Ratings in Non-Financial Companies Listed on the Indonesia Stock Exchange." This follow-up study will explore more in-depth aspects related to bond ratings on non-financial companies, focusing on the factors that influence these ratings and their impact on the bond market. This research is expected to provide a more comprehensive insight into the dynamics of bond ratings in the context of the Indonesian financial market, as well as contribute to the general understanding of risk management and corporate finance.

REFERENCES


Coal listed on the IDX in 2016-2018. Student Scientific JUrnal, Volume 2 No. 1, Page 113-126


Putri, Ilsa. 2017. Analysis of Factors that affect bond ratings in Banking Companies. IBS
Rahayu, Ika Puji (2020). The Effect of Profitability, Liquidity, Leverage, Bond Age and Auditor Reputation on Bond Rating. STIE Malangkucecwara Thesis


Suleman, Dede; Marginingsih, Ratnawaty; Susilowati, Isnurrini Hidayat. Financial Management. Yogyakarta: Graha Ilmu.2020


