Determinants of Bonds Rating: Case Study of Indonesian Banking Listed on The Indonesia Stock Exchange

Muhammad Bayu Aji Sumantri[1], Nugraha Nugraha[2], Maya Sari[3], Ikaputera Waspada[4]

[1,2,3,4] Universitas Pendidikan Indonesia, Bandung, Indonesia

muhammad.bayu@upi.edu

Abstract. This research aims to study the influence of profitability, solvency, and Good Corporate Governance mechanisms on bond ratings in Indonesia. The popu- lation used in this research consists of companies listed on the Indonesia Stock Ex- change during the period of 2018-2022, and the sampling method employed is pur- posive sampling. A sample of 21 companies in the banking sector, which have been listed on the Indonesia Stock Exchange for more than 10 years, was obtained. The data analysis technique used is multiple regression analysis. The research findings reveal that good corporate governance, represented by in- stitutional ownership, prof- itability represented by Return on Equity, and sol- vency represented by Debt to Eq- uity Ratio, have a positive influence on bond ratings. However, liquidity represented by the Current Ratio does not have a sig- nificant effect on bond ratings.

Keywords: bonds rating, dividend policy, good corporate governance

1   Introduction

The bond market is one of the important components in the financial system of a country. Bonds are debt instruments issued by companies or governments to raise funds from investors. Generally, bonds are assessed by credit rating agencies to provide an evaluation of the credit risk associated with these instruments [1]. This as- sessment serves as an indicator for investors regarding the credit risk embedded in those bonds. In the context of banking, bank bonds are an important debt instrument. The banking sector in Indonesia is a highly significant sector in the country's economy. The rapid growth of the banking industry has driven Indonesian banks to seek broader sources of funding, including through bond issuance. Therefore, it is important to un- derstand the factors that influence the credit rating of bank bonds in Indonesia. Bonds are a form of tradable debt recognition, but investors must be prepared to face the risk of default [2]. Bond ratings provide information about a company's ability to repay the issued bonds [3]. Bank Indonesia has recognized six com- panies, including Fitch Ratings, Moody's Investor Service, and Standard and Poor's, as potential security rating agencies based on a decree issued in 2011. Bond ratings serve as an indication of the default risk held

by a company. The lower the rating, the higher the risk, leading investors who wish to buy bonds to demand higher interest rates as compensation for the greater risk. The higher interest rates reflect higher borrowing costs [4]. To increase shareholder value, it is important for a company to reduce its cost of capital. Lowering interest rates helps reduce the weighted average cost of capital [5]. Therefore, in order to reduce borrowing costs and enhance company value, a company must improve its bond rating or reduce the percep- tion of bond risk in the capital market [6].

Theoretically and empirically, bond ratings are influenced by several factors. Bond credit ratings reflect the credit quality of the securities, which is determined by various factors such as debt burden, profitability, asset risk level, and company size [7]. According to Foroughi et al [8], key ratios used to assess bond security include coverage ratio, leverage ratio, liquidity ratio, profitability ratio, and cash flow to debt ratio. Profitability ratio indicates a company's ability to generate profits from sales or assets and serves as the best indicator of the company's financial health, with higher profitability leading to better bond ratings and lower default risk. Information about the characteristics of companies issuing bonds and sukuk is crucial for investors in considering the risks they face when holding these financial instruments [9]. Bonds and sukuk are known as safe financial instruments that offer fixed income in the capital market. However, investors often face difficulties in obtaining accurate information regarding the characteristics of the bond and sukuk issuers, which can ultimately impact the level of risk faced by investors. Misinterpreting this company information can result in investment decision failures, which, in turn, may discourage some investors from reinvesting their funds. However, investors can refer to the bond and sukuk ratings provided by rating agencies. These ratings are used to communicate the company's performance and can determine whether the company is suitable for in- vestment (investment grade or non-investment grade). A good rating for a company serves as a positive signal to investors about the company's ability to timely repay the principal value of bonds and sukuk, reflecting the risk level of all traded bonds and sukuk[9].

Signaling theory is a concept developed by economists Michael Spence and Joseph Stiglitz. In signaling theory, the fundamental concept is that individuals or companies can use certain actions or signals to communicate qualities or characteristics that are difficult to directly observe or measure to others. These signals can help reduce uncertainty and information asymmetry between parties involved in economic transactions. According to Firth et al., [10] signals refer to actions taken by a company to influence decisions or provide guidance to investors regarding management's perception of the company's prospects. These signals consist of information provided by the company regarding promotions or performance that reflect the company's situation. Signaling theory is highly relevant to bonds in the context of the financial market. Signaling theory is relevant to bond issuance by banks because banks can use signals to convey information about their financial strength and stability to investors. These signals help reduce uncertainty and information asymmetry between the company and investors.

Investors can use these signals as indicators to assess the risk and potential returns of investing in bonds. Additionally, companies can also use signals to attract greater investor interest and obtain lower borrowing costs. In the context of bonds, signaling theory provides an understanding of how companies can use certain actions or signals, such as bond structure, interest rates, or financial information, to communicate information about the quality and risk of the bonds to investors [11].

PEFINDO, or PT Pemeringkat Efek Indonesia, is a securities rating agency operating in Indonesia. PEFINDO utilizes specific methodologies and analysis processes to determine bond ratings in Indonesia. The process of determining bond ratings by PEFINDO involves detailed analysis of various factors that affect the quality and risk of the bonds. The methodologies and analysis processes used by PEFINDO are based on standards and guidelines established in the securities rating industry. In addition to PEFINDO, Indonesia recognizes bond ratings by several foreign companies such as Moody's, Fitch, and S&P.

Profitability ratios are financial indicators used to measure the profitability or earnings performance of a company. Profitability ratios provide an insight into how effectively a company generates profits from its operational activities. There are several types of profitability ratios, including Return on Assets (ROA), Return on Equity (ROE), Return on Investment (ROI), Gross Profit Margin, and Net Profit Margin. Profitability is the best indicator of a company's financial health. The better the profitability of a company, the stronger its credit rating, indicating a lower inherent risk [7]. Profitability ratios can signal whether a company's bonds will deliver the promised returns. Profitability ratios benefit both company management and investors in evaluating the company's ability to generate profits from invested assets [12]. Higher return on assets ratios are considered positive for a company. A high return on assets indicates that the company can quickly repay its debts, which in turn can impact the bond rating of the company.

Solvency ratios are financial measures used to evaluate a company's ability to meet its long-term financial obligations [13]. These ratios provide an in- dication of the level of resources available to the company to fulfill its debts and main- tain long-term financial stability. There are several types of ratios that fall under sol- vency ratios, including Current Ratio, Quick Ratio, and Debt to Equity Ratio. Extensive research has been conducted and published on the subject of corporate governance and its impact on company performance. One notable study conducted by Erkens et al., [14] serves as a valuable reference for our own research. Their study focused on examining the influence of corporate governance on company performance specifically during the financial crisis of 2007-2008. To assess corporate governance Erkens et al., [14] (2012) utilized three indicators: board independence, large shareholders, and institutional ownership. The findings of their research indicated that companies with a higher proportion of shareholders and greater institutional ownership tended to take on greater risks during the crisis, resulting in larger losses for shareholders. Additionally, compa- nies with

higher board independence tended to raise more equity, leading to a wealth transfer from shareholders to lenders.

In Indonesia, the Bond market continues to experience positive developments. In May 2023, based on data from the Indonesian Central Securities Depository (KSEI), the recorded value of bonds amounted to Rp 459.387 trillion. The issuance of these bonds is conducted by many companies across various sectors, including the banking sector. Companies, especially in the banking sector, issue bonds for various purposes, including obtaining the necessary funds to finance operations or specific projects, diversifying sources of funding, improving liquidity, enhancing the company's image, and obtaining better ratings in the future [6]. The high value of bonds circulating in the capital market is accompanied by a high level of investor interest in low-risk debt investments. Against this background, researchers are interested in stud- ying the influence of profitability, solvency, and good corporate governance on bond ratings.

2   Methods

This is a descriptive qualitative research study that utilizes secondary data as its source. The main approach employed in this research is the descriptive method. Descriptive method is a type of research that aims to depict a past or ongoing event or phenomenon by using scientific procedures to address existing issues. The data used in this study is secondary in nature. The independent variables utilized are Return on Asset, Non-Performing Loan, and Independent Board of Commissioners as a proxy for the Good Corporate Governance variable. Meanwhile, the dependent variable in this research is the bond rating issued by PEFINDO, which is then converted into a numerical scale ranging from 0 for the lowest rating to 18 for the highest rating. The observation period for this study spans from 2018 to 2022. The research subjects are companies in the banking sector listed on the Indonesia Stock Exchange. Sampling is conducted by purposive sampling method. The Panel Least Square (Data Panel) method is employed to analyze the data. Data is primarily collected through the financial reports of the sampled financial companies. From these annual reports, data and information related to the main variables, such as board independence, institutional ownership, and large shareholders, are gathered. Consistent with the approach used by Erkens et al., [14] to determine independent supervisory boards, a director is considered independent if they do not hold an executive position in the company or, more specifically, if they are not a full-time employee of the company. Additionally, we added that a director is deemed independent if they have no familial ties to the shareholders. Large shareholders refer to individuals or entities that hold a significant number of shares in the company [15]. Furthermore, in defining institutional ownership, we clarify that it encompasses financial institutions such as pension funds, mutual funds, and the like.

3   Results and Discussion

The multiple regression analysis using panel data with the Random Effect Model yielded the following probability values. For variable X1 or Return on Assets, the probability value is 0.3145, indicating that it has a significance level greater than the alpha value of 0.05. Therefore, it can be concluded that Return on Assets does not have a significant influence on bond ratings. Moving on to variable X2 or Non-Performing Loans, the probability value is 0.0378, indicating that it has a significance level lower than the alpha value of 0.05. Therefore, it can be concluded that Non-Performing Loans have a significant influence on bond ratings. Lastly, for variable X3 or Independent Commissioners, the probability value is 0.1994, indicating that it has a significance level greater than the alpha value of 0.05. Therefore, it can be concluded that the Independent Commissioners variable does not have a significant influence on bond ratings.

Table 1. Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14.77213	1.273999	11.59509	0.0000
ROA	-0.07504	0.074245	-1.010770	0.3145
NPL	-0.35965	0.170874	-2.104767	0.0378
IDC	2.563114	1.984152	1.291793	0.1994

From the results of the panel data regression analysis that has been carried out, the regression equation can also be determined as follows:

$$Y = 17.77213 - 0.075045 - 0.359650 + 2.563114 \tag{1}$$

The results of the regression coefficient show that the ROA variable is -0.075045, which means that a 1% increase in ROA will lower the bond rating by 0.075045. then in the NPL variable a 1% increase will lower the bond rating by 0.359650. finally on the independent commis- sioner variable, a 1% increase in the independent commissioner will increase the bond rating by 2.563114.

Table 2. R-Square Value

R-squared	0.074429	Mean dependent var	3.533876
Adjusted R-squared	0.046937	S.D. dependent var	1.364860
S.E. of regression	1.332444	Sum squared resid	179.3161
F-statistic	2.707266	Durbin-Watson stat	0.882997
Prob(F-statistic)	0.049215		

Based on the F-test results, the generated F-statistic value is 2.707266 with a probability value of 0.049215, which is lower than the alpha value of 0.05. Additionally, this

analysis also yields an R-squared value of 0.074429, indicating that the research variables used in this study, namely ROA, NPL, and Independent Commissioners, can only explain 7.4 percent of the influence on the dependent variable, Bond Ratings. Therefore, the remaining 92.6 percent is explained by other variables not included in this study. The results of this analysis demonstrate how various factors can influence bond ratings. Hence, different research studies on bond ratings may yield varying results. Consequently, the regression equation derived from this study cannot be consid- ered a guarantee for predicting bond ratings.

4   Conclusions

Based on multiple regression analysis using Eviews 9, it was found that Non-Perform-ing Loan has a significant influence on bond ratings, partially. However, Return on Asset and Independent Commissioners do not have a significant influence on the bondratings of banking companies in the Indonesian sector listed on the Indonesia Stock Exchange. These findings indicate both similarities and differences compared to previ-ous research. For future studies, it is recommended to use annual periods, increase thesample size, and include additional research variables.

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