

The effect of profitability, company size, liquidity, bond age and collateral on bond ratings in banking companies listed on the Indonesia Stock Exchange

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AKURASI

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Abstract

The only form of funding a company used to obtain was by issuing bonds. This research aims to determine the significance of the effect of profitability, company size, liquidity, bond age, and collateral on bond ratings in banking sector companies listed on the IDX. The data in this research is secondary data obtained from www.idx.co.id and the PT Pefindo website. Using a purposive sampling method, the total sample was 14 banking sector company bonds for the 2018–2022 period. The data analysis technique used is a logistic regression analysis test with the IBM SPSS Statistics 26 program. The analysis results show that profitability has a significant positive effect on bond ratings. Company size has an insignificant negative effect on bond ratings. Liquidity has a significant positive effect on bond ratings. Bond age has an insignificant positive effect on bond ratings. Collateral has a significant negative effect on bond ratings.

Public interest statements

The results of this study and information about financial ratios can be used as a guideline for investors who want to invest, especially in debt securities or bonds.

Keywords: investor, bond rating, profitability, company size, liquidity, bond age, collateral

Paper type: Research paper

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Abstrak

Satu-satunya bentuk pendanaan yang digunakan perusahaan untuk memperoleh dana adalah dengan menerbitkan obligasi. Penelitian ini bertujuan untuk mengetahui signifikansi pengaruh profitabilitas, ukuran perusahaan, likuiditas, umur obligasi, dan agunan terhadap peringkat obligasi pada perusahaan sektor perbankan yang terdaftar di BEI. Data dalam penelitian ini merupakan data sekunder yang diperoleh dari www.idx.co.id dan website PT Pefindo. Jumlah sampel adalah 14 obligasi perusahaan perbankan periode 2018–2022, dengan menggunakan metode *purposive sampling*. Teknik analisis data yang digunakan analisis regresi logistik dengan program IBM SPSS Statistics 26. Hasil analisis menunjukkan bahwa profitabilitas berpengaruh positif signifikan terhadap peringkat obligasi. Ukuran perusahaan berpengaruh negatif tidak signifikan terhadap peringkat obligasi. Likuiditas berpengaruh positif signifikan terhadap peringkat obligasi. Usia obligasi berpengaruh positif tidak signifikan terhadap peringkat obligasi. Jaminan berpengaruh negatif signifikan terhadap peringkat obligasi.

Pernyataan Kepentingan Publik

Hasil penelitian ini dan informasi terkait dengan rasio keuangan dapat dijadikan pedoman bagi para investor yang akan melakukan investasi khususnya pada surat utang atau obligasi.

Kata Kunci: investor, peringkat obligasi, keuntungan, ukuran perusahaan, likuiditas, umur obligasi, jaminan

INTRODUCTION

To expand and develop its business, the company needs a lot of capital or funds. The source of funds can come from investments from investors or capital owners as well as loans from banks or creditors. Investment is a source of funding. The purpose of investment is to obtain profits in the future. Before they invest some of their money, of course, they must choose which company can be trusted based on the company's financial condition. If the company's finances are better, investors will be more interested in investing their money there (Putri et al., 2019). According to Tandelilin (2017) Investment is divided into two categories: real assets (for example, land, gold, houses, and others) and financial assets (for example, deposits, stocks, bonds, and other securities).

Bond issuance is one way a company can finance its investments. According to Houston (2021) a bond, also known as a bond, is a long-term contract in which the borrower of the fund agrees to pay the principal and interest on a certain date to the bondholder. Bond investment in Indonesia is still very small compared to stocks, but investing in bonds is much more profitable than stocks (Listiawati & Paramita, 2018). The stocks an investor buys may not always make a profit. This is in stark contrast to bonds, which offer fixed income with predetermined maturities. Therefore, investing in stocks is considered riskier than investing in bonds. However, that doesn't mean bonds don't have risk; Although investing in bonds is safer, bonds still have risks, such as interest rate risk and the risk of companies not being able to pay bond coupons or bond principal. However, bond ratings can reduce bond risk (Sari & Badjra, 2016).

According to Kamstra in Saputri & Purbawangsa (2016) several factors, both financial and non-financial, affect bond ratings. Financial factors include liquidity ratios, solvency ratios, profitability ratios, leverage ratios, and company growth. Non-financial factors also include company size, bond age, security (collateral), and auditor reputation. Fahmi in Darmawan et al. (2020), said that profitability is a measure of overall management effectiveness based on the level of profit earned from investments and sales. The higher the profitability ratio of the company, the

higher the rating of bonds assigned to it. The results of research by Anom (2021) and Hasan & Dana (2017) show that profitability affects bond ratings positively, but (Darmawan et al., 2020) found that profitability affects bond ratings negatively.

In addition to profitability, the size of the company affects the rating of bonds. Total assets and net sales are two ways that can be used to show how big or small a company is. A company has a larger size if it has more assets (Darmawan et al., 2020), and a larger company size means lower risk, which means the company has a better bond rating. The study of Dewi & Mahardika (2019) found that company size had a positive effect on bond ratings, but Darmawan et al. (2020) found that company size did not have a negative effect on bond ratings.

Liquidity affects bond ratings in addition to profitability and company size. According to (Darmawan et al., 2020), liquidity is the ability of a company to meet its short-term obligations quickly and on time. Research by Darmawan et al. (2020) and Anom (2021) shows that liquidity has a positive impact on bond ratings. On the other hand, research by Aji et al. (2019) and Hasan & Dana (2017) found that liquidity has a positive impact on bond ratings.

A bond's rating is also affected by the bond's age. According to Darmawan et al. (2020), the age of a bond is defined as the date on which the bondholder will receive a total repayment or face value of the bond. According to Darmawan et al. (2020), investors are more likely to choose bonds with short life than bonds with long life. Short-lived bonds can have investment grade ratings because they have lower risk compared to long-lived bonds. The results of Fikriyah (2018) research show that the age of bonds has a positive impact on bond ratings, but Hasan & Dana (2017) found that it has a negative impact on bond ratings.

In addition, bond ratings are affected by collateral. Bonds are divided into two types: secured and unsecured. According to Brister et al. in Aji et al. (2019), investors prefer secured bonds over unsecured ones. Secured bonds use high-value assets, which upgrade the bond's rating so that it is considered safe. In addition, by guaranteeing the assets owned by the company for bonds, the company can reduce the risks it will face. Research by Dewi & Mahardika (2019) found that collateral affects bond ratings, but Aji et al. (2019) found that collateral affects bond ratings.

Several previous studies have been conducted to evaluate how the variables studied affect bond rankings; therefore, researchers want to re-examine the topics of bond ranking by adding profitability, corporate size, liquidity, bond life, and collateral as independent variables.

The study aims to investigate how profitability, business size, liquidity, bond life, and collateral influence the bond rankings of bank companies listed on the Indonesian Stock Exchange from 2018 to 2022. This research is expected to help companies manage their finances and resources well. Investors and the public are also expected to benefit from these findings by choosing the right investment, especially bonds. In addition, this research can be used as a reference for other researchers who want to do research in the same field.

THEORETICAL FRAMEWORK AND HYPOTHESES

Signaling Theory

Signal theory explains how signalers act to influence signal receivers. The cues given by companies to outside parties are known as signals. Whether signals that can be observed directly or that require further study to find out, they can come in many forms. All types of signals issued aim to indicate changes in the market or external sources (Ghozali, 2021). According to signal theory, company management signals rating agencies with financial statements and non-financial information. As part of the rating process, bond rating agencies issue bond ratings to bond-issuing

companies. A bond rating indicates a company's ability to repay debt. There is a connection between signal theory and bond ratings because companies provide signals through information to potential investors. Potential investors may be interested in buying corporate bonds if there are positive signals.

Profitability

Kasmir (2021) states that profitability is a ratio that measures how well a company can make a profit. This can be seen from the profit on sales and investment. According to Novtaviani & Oetomo (2019), the profitability ratio shows the level of effectiveness of management or company, which is indicated by sales and investment profits. If profitability is high, profitability will show investors that the company is making a lot of money. This study measures profitability using ROA (Return On Asset) to find out how efficient a company's management is in managing its assets in a profit-making way. According to Darma & Sulistiyani (2019), bond rating predictions can be influenced by profitability variables because high company profits will result in higher ratings as well.

Company Size

According to Kasmir (2021), company size is a measure used to divide how big or small a business is based on the company's total assets. Large company size can attract investors. According to Meutia (2021), total assets are the best way to describe how big a business is. Companies that have a lot of assets show that they already have the ability to make a good profit compared to companies that have a lot of assets. In this study, the size of the company is calculated using Ln (Total Assets). This is done to reduce excessive data fluctuations and simplify the number of assets worth hundreds of billions to trillions without changing the proportion of total actual assets.

Liquidity

Kasmir (2021) states that a bank's liquidity ratio indicates a bank's ability to meet its short-term obligations when billed. In other words, the bank has the ability to fulfill credit requests that have been submitted as well as repay depositors' funds when they are collected. A company is more liquid if it has a higher liquidity value. In this study, the Loan to Deposit Ratio (LDR) was used to measure bank liquidity. According to Kasmir (2021), LDR is a ratio that calculates the amount of credit provided compared to the amount of public funds and own capital used.

Bond Age (*Maturity*)

The bondholder will receive a repayment of the principal value or face value of the bond on a date known as the bond's life. The maturity value, also known as the maturity value, is the value that is expected to be paid at the time the bond matures, according to Hartono (2017), bonds with a one-year maturity are more predictable and have a lower risk than bonds with a five-year maturity, according to Kustiyaningrum et al. (2017) coupon or bond interest is usually higher if the maturity is longer.

Collateral

Secured and unsecured bonds fall into two categories based on collateral. Investors will like secured bonds, according to Brister et al. in Aji et al. (2019). By guaranteeing high-value assets for bonds, bond ratings get better. In addition, the company can reduce the risk it will receive by guaranteeing the assets it has for bonds.

Hypothesis Development

The effect of profitability on bond ratings

Hery (2016) states that the profitability ratio is a ratio used to measure the ability of a company to generate profits from its usual business activities. According to Novtaviani & Oetomo (2019), the profitability ratio shows the level of effectiveness of management or company, which is indicated by profits generated from investment and sales, and indicates that companies that have a high profitability ratio will have good performance. Investors can use profitability information as a signal, according to signal theory. If profitability is high, this can be a good signal for investors to invest. High profitability indicates good financial performance (Fikriyah, 2018), and the results of research by Anom (2021) and Hasan & Dana (2017) show that profitability improves bond ratings. So, the hypothesis of the research conducted is:

H1: It is suspected that profitability has a significant positive effect on bond ratings in banking companies listed on the Indonesia Stock Exchange.

The effect of company size on bond ratings

Houston (2021) states that company size is a company characteristic in terms of structure, and is defined as the average of total net sales for the year in question up to several years prior. According to Darmawan et al. (2020), large-sized companies have lower risks than small-sized companies. This is in accordance with the signal theory that large companies have low risk, which encourages investors to invest and also acts as a factor that can affect a company's bond rating. According to research by Fikriyah (2018) and Dewi & Mahardika (2019), company size increases bond ratings. So the research hypothesis is:

H2: It is suspected that the size of the company has a significant positive effect on the rating of bonds in banking companies listed on the Indonesia Stock Exchange.

The effect of liquidity on bond ratings

Liquidity is defined as the ability of an organization to meet its obligations financially in a short period of time using its current assets (Aji et al., 2019). Investors can use liquidity information as signals, according to signal theory. High liquidity indicates a company's ability to pay short-term obligations smoothly, which means it is a good signal for investors. Conditions like this can attract investors to invest in the company. Research Anom (2021) and Darmawan et al. (2020) shows that liquidity significantly affects bond ratings. So the hypothesis proposed in this study is:

H3: It is suspected that liquidity has a significant positive effect on bond ratings in banking companies listed on the Indonesia Stock Exchange.

The effect of bond life on bond ratings

According to Darmawan et al. (2020), the age of a bond is defined as the date when the bondholder will receive a total repayment or face value of the bond. Bonds that mature within one year are easier to predict than bonds that mature within five years. According to signal theory, this can inspire investors to invest. In addition, a bond's shorter lifespan can impact a bond's investment-grade rating. According to Hasan & Dana (2017) research, the age of bonds has a positive impact on bond ratings. So the hypothesis proposed in this study is:

H4: It is suspected that the age of bonds has a significant positive effect on bond ratings in banking companies listed on the Indonesia Stock Exchange.

The effect of Collateral on bond ratings

Secured and unsecured bonds fall into two categories based on collateral. Investors will love secured bonds (Dewi & Khrisna, 2019). By guaranteeing high-value assets for bonds, bond ratings get better. In addition, the company can reduce the risk it will receive by guaranteeing the assets it has for bonds. This means that the life of the collateral can give investors a good signal that they can invest in bonds. In addition, research conducted by Aji et al. (2019) shows that collateral has a significant positive impact on bond ratings. So the research hypothesis is:

H5: It is suspected that collateral has a significant positive effect on bond ratings in banking companies listed on the Indonesia Stock Exchange.

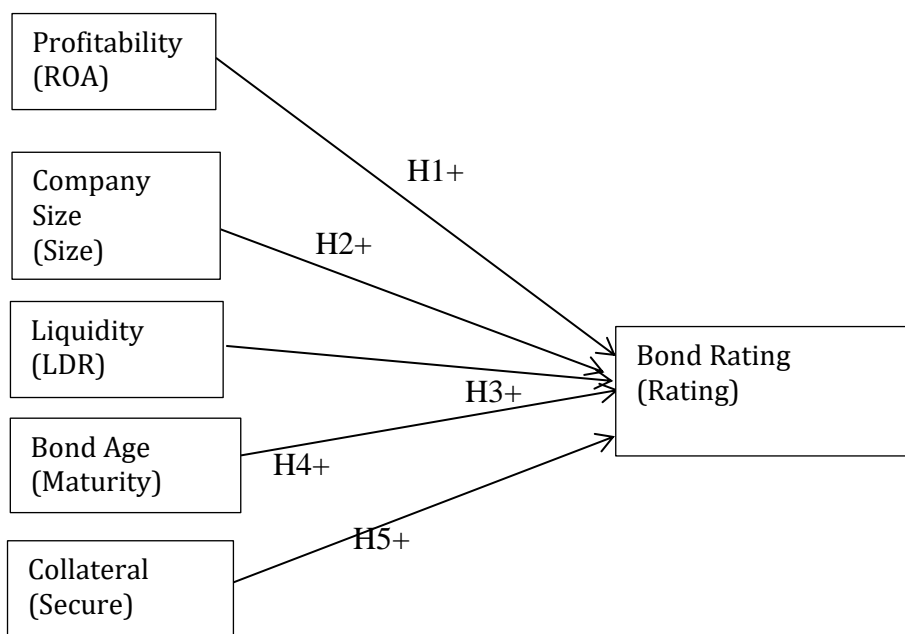


Figure 1.
Conceptual Framework

METHOD

To determine the relationship between variable X and variable Y, the design of this study used associative causality. To collect data, we use documentary methods accessed through the official website of PT. Pefindo, Indonesia Stock Exchange, and individual companies. This research involves all company companies that issue bonds rated by PT. Pefindo and listed on IDX from 2018 to 2022, a total of 65 entities. A *purposive* sampling method is used, provided that consistent companies display bond ratings rated by PT. Pefindo and listed on the IDX and its financial statements from 2018 to 2022, so there are seventy sample data with 14 companies and the research time is five years.

Variable Measurement

This study uses bond ratings as the dependent variable, and the independent variables are profitability, company size, liquidity, bond age, and collateral. Bond ratings are measured using categories. The bond rating is assigned by PT. Pefindo. This rating is given to companies with idAAA, idAA, idA, idBBB bond ratings or included in the investment category. The ratings of idBB, idB, idCCC, idD, and no ratings included in the non-investment category are given a score of 1. After that, the variable profitability. Return on Assets (ROA), a metric used to calculate profitability ratios, shows how much net profit a company earns when calculated from the value of its assets. As stated by (Hery, 2016), ROA can be calculated using the following formula:

$$ROA = x 100\% \frac{Net Profit}{Total Asset}$$

Ln (Total Assets) is used to project the size of the company. Large assets indicate that the company has reached the stage of being able to generate good profits compared to companies that have smaller assets. According to (Fikriyah, 2018), the natural logarithm of total assets can be used to measure the size of an organization:

$$Size = Ln (Total Assets)$$

One way to measure liquidity is to use the Loan to Deposit Ratio (LDR). LDR is a ratio that calculates the total credit provided compared to the total public funds and own capital used. A following formula can be used to calculate the loan-to-deposit ratio (Kasmir, 2021):

$$Loan\ to\ Deposit\ Ratio = x 100\% \frac{Total\ Loan}{Total\ Deposit + Equity}$$

According to (Darmawan et al., 2020), the age of a bond can be calculated by subtracting the maturity of the bond by its issue date:

$$Maturity = Bond\ Maturity - Bond\ Issue\ Date$$

Furthermore, the collateral variable is measured by giving a value of 1 if the bond is secured by special assets and 0 if the bond is only a bond that is not secured by special assets (Dewi & Mahardika, 2019).

Analysis techniques

Statistical descriptive tests are used to describe and identify the characteristics of research sample data. Furthermore, a frequency statistical descriptive test is used to see the frequency of ratings of bonds and collateral given categories 1 and 0 in the data. Logistic regression analysis was used in this study. After that, a logistic regression test is performed, which consists of testing the entire model, also known as the model suitability test, to ensure that the model is suitable and feasible for use. Furthermore, the Hosmer and Lemeshow tests are used to test the null hypothesis that the empirical data fit or match the model and there is no difference between the data and the model. After that, the hypothesis is tested. The hypothesis test (logistic regression) was used to measure the effect of variable X on variable Y, and the determination test (nagelkerke r square) was used to measure the effect of variable X on variable Y compared to other variables not

included in this study. Therefore, the logistic regression analysis model used in this study is described as follows:

$$Ln = \frac{p}{1-p} = -5,229 + 2,177ROA - 0,078Size + 0,069LDR + 0,015 Maturity - 2,091Secure + e$$

Information:

$Ln = \frac{p}{1-p}$: Bond Rating
α	: Constant
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$: Regression Coefficient
<i>ROA</i>	: <i>Return On Asset</i>
<i>Size</i>	: <i>Company Size</i>
<i>LDR</i>	: <i>Loan to Deposit Ratio</i>
<i>Maturity</i>	: <i>Bond Age</i>
<i>Secure</i>	: <i>Collateral</i>
<i>e</i>	: <i>Standart Error</i>

RESULTS AND DISCUSSION

Descriptive statistical test

The maximum, minimum, mean, and standard deviation values can be found from descriptive statistical tests performed on 70 observational observations, as shown in Table 1. During the study period, the profitability value (ROA) of the company had significant variations, with a minimum value of 0.010 and a maximum value of 14.750. The mean is 1.66814% and the standard deviation, or deviation of the data spread, is 1.905269%. Since the standard deviation value of the company is greater than the average value, this indicates that the observed company has a profitability value with a large variation.

During the study period, the company size (size) had a minimum value of 16.447, a maximum value of 27.413, and an average value (mean) of 19.66250%. There is also a deviation rate or deviation of data dissemination of 2.487034%. Because the company's standard deviation value is smaller than the average value, this shows that the observed company has a profitability value with a small variation.

During the study period, the liquidity value (LDR) showed a minimum value of 12,350, a maximum value of 135,460, and an average value (mean) of 81.82757% and a deviation rate (standard deviation) of 17.103302%. This shows that the observed company has a profitability value with a small variation because the standard deviation value is smaller than its average value. During the study period, the maturity value of the bonds had a minimum value of 1.0, a maximum value of 30.0, and an average value (mean) of 5.71%. Since the standard deviation value is greater than its average value, the observed value of the company's profitability shows significant variations.

Table 1.*Descriptive Statistics*

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	70	.010	14.750	1.66814	1.905269
Size	70	16.447	27.413	19.66250	2.487034
LDR	70	12.350	135.460	81.82757	17.103302
Maturity	70	1	30	5.71	6.642
Collateral	70	0	1	.70	.462
PO	70	0	1	.60	.493
Valid (listwise)	N 70				

Source: Data processed, 2023

Based on Table 2, unsecured corporate bonds are coded 0, while secured corporate bonds are coded 1. The frequency table shows that there were 21 observations (30.0%) of unsecured bonds and 49 observations (70.0%) of secured bonds.

Table 2.*Descriptive Statistics Variable Frequency Assurance*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Guaranteed	21	30.0	30.0	30.0
	Guaranteed	49	70.0	70.0	100.0
	Total	70	100.0	100.0	

Source: Data processed 2023

Table 3.*Descriptive Statistics Variable Frequency Bond Ratings*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non Investment Grade	28	40.0	40.0	40.0
	Investment Grade	42	60.0	60.0	100.0
	Total	70	100.0	100.0	

Table 3 shows that companies with bond ratings in the investment category (AAA, AA, A, BBB) are coded 1 and companies with bond ratings in the non-investment category (BB, B, CCC, D) are coded 0. The frequency table shows that 28 observations, or 40.0% of the total, have bond ratings in the non-investment category, and 42 observations, or 60% of the total, have bond ratings in the investment category.

Table 5.
Logistic Regression Test (Hypothesis Test)

	Hypothesis	Beta	Sig	Decision
H1	Profitability positively affects bond ratings	2.177	0.000	Accepted
H2	Company size positively affects bond ratings	-0.078	0.593	Rejected
H3	Liquidity positively affects bond ratings	0.069	0.025	Accepted
H4	The age of a bond positively affects the rating of a bond	0.015	0.737	Rejected
H5	Collateral has a positive effect on bond ratings	-2.091	0.035	Rejected
	Chi-square	10.656	0.222	
	Nagelkerke R Square			0.427

Source: Data processed, 2023

Test the hypothesis

Results of the Fit Model Overall analysis, which shows that the analysis model is better. It is known that in block 0 there is a decrease in the value of -2Log Likelihood by 94.222 to 55.254, or chi square decreased by 38.968. Thus, it can be concluded that the logistic regression model as a whole is appropriate and feasible to use. As shown in Table 5, the chi-squared value is 10.656 with a significant value of 0.222, indicating that there is no difference between the logistic regression model prediction and the observational data. This shows that the model is capable of being accepted because it corresponds to the observed results.

Logistic regression analysis based on the calculation results by using SPSS 26 software obtained the following equation:

$$n = \frac{p}{1 - p} = -5,229 + 2,177ROA - 0,078Size + 0,069LDR + 0,015 Maturity - 2,091Secure$$

According to the regression equation above, a constant value of -5.229 is obtained, which indicates that the probability that the bond's rating will decrease by 5.229 if independent variables such as ROA, size, LDR, age, and collateral are fixed. The variable ROA regression coefficient of 2.177 indicates that every one unit increase in ROA will result in a bond rating upgrade of 2.177. The SIZE variable regression coefficient of -0.078 indicates that every one unit increase in SIZE will result in a downgrade of the bond's rating by 0.078. The regression coefficient of the LDR variable is 0.069. The value of the age variable regression coefficient of 0.015 indicates that every increase of one LDR unit will result in an increase in the bond's rating of 0.069. The collateral variable regression coefficient value of -2.091 indicates that every increase of one collateral unit will result in a bond rating downgrade of 0.015. The value of Nagelkerke R Square is 0.427, as shown by the result of the value of Nagelkerke R Square shown in Table V.5. This shows that an independent variable of 42.7% (ROA, size, LDR, bail period, and collateral) can explain the dependent variable (bond rating), and other variables not included in the regression equation model can explain the remaining 57.3%.

Discussion

The effect of profitability on bond ratings

The results of the study using logistic regression showed that profitability variables proxied by return on assets (ROA) had a positive impact on the bond ratings of banking companies listed on the Indonesia Stock Exchange. In other words, if the return on assets of a company increases, then the rating of the company's bonds will increase, and vice versa, if the return on assets of a company falls, then the rating of the company's bonds will decrease. Investors can use ROA information as a signal, based on signal theory. Novtaviani & Oetomo (2019) stated that the profitability ratio shows the level of effectiveness of management or company, which is indicated by profits from sales and investment. A high profitability ratio indicates good company performance if profitability is high. Management that successfully makes a profit will show good performance. The higher the profitability ratio, the higher the rate of return, which reduces the likelihood of default. In addition, if the profitability value is high, the rating of the bonds given will also rise. Research conducted by Aji et al. (2019) found that profitability has a positive and significant impact on bond ratings.

The effect of company size on bond ratings

The results of logistic regression measurement show that the company's size variable has a negative and insignificant effect on the bond ratings of banking companies listed on the Indonesia Stock Exchange. Since the size of a company can indicate how easily a company obtains funds from the capital market, the size of the company is considered a determinant of a company's success; In other words, if the size of the company goes up, it will have an impact on the downgrade of the bond rating and vice versa, if the size of the company goes down, it will have an impact on the upgrade of the bond rating. However, this negative research result will not give a good signal to investors because a high or low size will not affect a company's bond rating. A previous study, conducted by Darmawan et al. (2020), found that company size did not affect bond ratings; Therefore, a high or low company size can also have a negative impact on bond ratings due to default "default", which leaves all of the company's assets low in value or may have been lost.

The effect of liquidity on bond ratings

The results of logistic regression measurement show that the liquidity variable (LDR) has a major positive impact on the bond ratings of banking companies on the Indonesia Stock Exchange. That is, the liquidity value of a company will affect the increase in its bond rating, and vice versa, the liquidity value of a company will affect the downgrade of its bond rating. A high level of liquidity indicates the financial strength of the company, which will financially affect the prediction of the rating of bonds. Investors can use liquidity information as a signal to invest. A high liquidity value indicates the ability of a company to smoothly pay short-term obligations, which attracts investors to invest in the company. The results of this study are in line with research conducted by Darmawan et al. (2020), which found that liquidity affects bond ratings significantly and positively.

The effect of bond age on bond ratings

According to the results of logistic regression measurements, the variable age of bonds does not have a significant influence on the bond ratings of banking companies listed on the Indonesia Stock Exchange. In other words, if the lifetime value of a company's bonds increases, it will have a positive impact on the bond's rating but with relatively little impact; Conversely, if a company's

profitability declines, it will have a negative impact on bond ratings but with relatively little impact. Bonds with a long maturity are considered less risky than bonds with a short maturity, and this is seen in the bond rating. In other words, bonds with shorter maturities will have higher bond ratings. According to the fourth hypothesis that was not accepted in this study, the age of the bond does not affect the possible rating of the bond. According to Hasan & Dana (2017) research, the results show that the age of bonds does not have a significant positive impact on bond ratings. The results show that the age of a bond does not actually determine a bond's rating, as various other factors predominantly affect a bond's rating, such as liquidity and profitability.

The Effect of collateral on bond ratings

The results of logistic regression measurements show that collateral variables partially affect the bond ratings of banking companies listed on the Indonesia Stock Exchange. In other words, the collateral value of a company will affect the downgrade of its bond rating and vice versa, the collateral value of a company will affect the improvement of its bond rating. Bonds are divided into two categories, guaranteed and non-collateralized. Investors will like secured bonds, according to Brister et al. in Aji et al. (2019) by guaranteeing high-value assets for bonds, bond ratings get better. In addition, the company can reduce the risk it will receive by guaranteeing the assets it has for bonds. In signal theory, this means that collateral can give investors a good signal to invest in bonds. In addition, this can financially affect bond rating predictions. The research found that the fifth rejected hypothesis had no impact on improving the rating of corporate bonds; This finding is in line with the findings of Dewi & Khrisna (2019) research, which found that collateral has a significant negative impact on bond ratings.

CONCLUSION

The conclusion of this study is that profitability and liquidity have a significant positive effect on the bond ratings of banking companies listed on the Indonesia Stock Exchange; the size of the company has a negative, but insignificant effect; and the age of the bond has a significant positive effect. After that, the bond ratings of banking companies listed on the Indonesia Stock Exchange were significantly negatively affected by the collateral factor. The limitations of this study may affect the results. This study only used five years, namely 2018–2022. If the study was conducted over a longer time, the results may be different. Then there are many other variables that can be used to measure bond ratings, but this study only used five variables. If there are other variables used, future research may need to add variables such as leverage, bond yield, capital structure, company growth, etc. that can affect bond ratings. To obtain different results, the study should proceed with different populations and samples or by expanding the object and period of the study. Companies issuing bonds must pay attention to their financial performance so that they can upgrade the bond rating to investment grade. Investors who want to invest their funds into bonds should buy bonds with investment grade ratings.

Reference

- Aji, P. L., Tohir, T., & Suwaryo, S. (2019). Analisis Pengaruh Profitabilitas Leverage Aktivitas Jaminan Dan Umur Obligasi Terhadap Peringkat Obligasi Perusahaan Keuangan Yang Terdaftar Di Bursa Efek Indonesia Periode 2015-2017. *Jurnal Ekonomi, Bisnis, Dan Akuntansi*, 21(2). <https://doi.org/10.32424/jeba.v21i2.1327>
- Anom, M. F. (2021). Pengaruh Likuiditas, Profitabilitas, Dan Leverage Terhadap Peringkat Obligasi

- Pada Sektor Perbankan Yang Terdaftar Di Pt Pefindo Periode 2014-2018. *Jurnal Ekobis Dewantara*, 4(2), 108–121.
- Darma, M., & Sulistiyani, T. (2019). Pengaruh Profitabilitas, Likuiditas, Ukuran Perusahaan Dan Leverage Terhadap Peringkat Obligasi Perusahaan Non Financial Yang Terdaftar Di Bei. *Jurnal FOKUS*, 09(01), 92–105.
- Darmawan, A., Al Fayed, Y. F., Bagus, F., & Pratama, B. C. (2020). PENGARUH PROFITABILITAS, LIKUIDITAS, LEVERAGE, UMUR OBLIGASI DAN UKURAN PERUSAHAAN TERHADAP PERINGKAT OBLIGASI PADA SEKTOR KEUANGAN YANG TERDAPAT DI BEI TAHUN 2015-2018. *DERIVATIF: Jurnal Manajemen*, 14(1). <https://doi.org/10.24127/jm.v14i1.443>
- Dewi, W. P., & Khrisna, D. P. M. (2019). The Effect of Company Sizes, Growth and Secure to Bond Rating (Empirical Study on Manufacturing Companies on The Consumer Goods Sector Rated in PT PEFINDO Period 2013-2017). *E-Proceeding of Management*, 6(2), 3668–3674. www.kontan.co.id,
- Dewi, W. P., & Mahardika, D. P. K. (2019). Pengaruh Ukuran Perusahaan, Pertumbuhan Perusahaan dan Jaminan Terhadap Peringkat Obligasi (Studi Empiris pada Perusahaan Manufaktur Sektor Industri Barang Konsumsi yang diperingkat PT. Pefindo Periode 2013-2017). *E-Proceeding of Management*, 6(2), 3668–3674. www.kontan.co.id,
- Fikriyah, S. H. (2018). PENGARUH LIKUIDITAS, PROFITABILITAS DAN UKURAN PERUSAHAAN TERHADAP PERINGKAT OBLIGASI PADA INDUSTRI PERBANKAN YANG TERDAFTAR DI BURSA EFEK INDONESIA. In *Jurnal Akuntansi Berkelanjutan Indonesia* (Vol. 1, Issue 3).
- Ghozali, I. (2021). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 26*. Badan Penerbit Universitas Diponegoro.
- Hartono, J. (2017). *Teori Portofolio Dan Analisis Investasi* (5th ed.). Rajawali Press.
- Hasan, D. A., & Dana, I. M. (2017). The Effect of Profitability, Liquidity, Maturity And Assurance Against Highest Bond Ranking In Financial Sector In Indonesia Stock Exchange. *E-Jurnal Manajemen Universitas Udayana*, 7(2), 643. <https://doi.org/10.24843/ejmunud.2018.v7.i02.p04>
- Hery. (2016). *Analisis Laporan Keuangan*. Pt. Grasindo.
- Houston, B. D. (2021). *Dasar-Dasar Manajemen Keuangan*. Penerbit Salemba Empat.
- Kasmir. (2021). *Analisis Laporan Keuangan*. Pt. Rajagrafika Persada.
- Kustiyaningrum, D., Nuraina, E., & Wijaya, A. L. (2017). PENGARUH LEVERAGE, LIKUIDITAS, PROFITABILITAS, DAN UMUR OBLIGASI TERHADAP PERINGKAT OBLIGASI (STUDI PADA PERUSAHAAN TERBUKA YANG TERDAFTAR DI BURSA EFEK INDONESIA). *Assets: Jurnal Akuntansi Dan Pendidikan*, 5(1), 25. <https://doi.org/10.25273/jap.v5i1.1184>
- Listiawati, L. N., & Paramita, V. S. (2018). Pengaruh Tingkat Suku Bunga, Inflasi, Debt To Equity Ratio, Dan Ukuran Perusahaan Terhadap Yield Obligasi Pada Perusahaan Yang Terdaftar Di Bursa Efek Indonesia Tahun 2010 - 2016. *Jurnal Manajemen*, 15(1), 18–32. <https://doi.org/10.25170/jm.v15i1.97>
- Meutia, R. (2021). Leverage Terhadap Peringkat Obligasi Pada Perusahaan Jasa Keuangan Di Bursa Efek Indonesia. *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi (JIMEKA)*, 6(2), 1. www.idx.co.id
- Novtaviani, R., & Oetomo, H. W. (2019). Pengaruh Likuiditas, Profitabilitas dan Intellectual Capital Terhadap Peringkat Obligasi Perbankan di BEI. *Jurnal Ilmu Dan Riset Akuntansi, Volume 8*(2), 2–15.
- Putri, R. Y., Diana, N., & Junaidi. (2019). Pengaruh Profitabilitas, Likuiditas, Solvabilitas Dan Good Corporate Governance Terhadap Peringkat Obligasi. *Akuntansi Keuangan*, 08(01), 127–141.
- Saputri, D., & Purbawangsa, I. (2016). *SEKTOR JASA DI BURSA EFEK INDONESIA*. 5(6), 3706–3705. www.idx.co.id.
- Sari, N. M. S. K., & Badjra, I. B. (2016). Pengaruh Likuiditas, Ukuran Perusahaan, Leverage dan Jaminan terhadap Peringkat Obligasi pada Sektor Keuangan. *E-Jurnal Manajemen Universitas Udayana*, 5(8), 5041–5069.
- Tandelilin, E. (2017). *Pasar Modal Manajemen Portofolio dan Investasi*. Pt. Kanisius.

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