

EFFECT OF PROFIT MANAGEMENT FINANCIAL RATIO AND CORPORATE GOVERNANCE MECHANISM ON BOND RATING

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ABSTRACT

Bond ratings issued by rating agencies assist investors in selecting bonds. Bond ratings are very useful for investors and issuers, namely providing information about the company's ability to pay off the bonds issued. The rating issued gives a signal to investors on the quality and risk of a bond. The rating process is carried out by the rating agency by taking into account various factors, such as financial factors through financial ratios, earnings management measures and corporate governance mechanisms. This study aims to provide empirical evidence that earnings management, financial ratios and corporate governance mechanisms affect bond ratings. The subjects of this research are companies listed on the Indonesia Stock Exchange and listed on PT. PEFINDO 2008-2011. The sample selection was done by purposive sampling method, in order to obtain 11 companies that meet the criteria with 4 years of observation. The data used in the form of secondary data derived from the financial statements and bond rating database of PT. PEFINDO, while the data analysis used logistic regression analysis. The results show that earnings management, liquidity ratios, managerial ownership and audit quality have an effect on bond ratings. Meanwhile, the activity ratio, market value ratio, institutional ownership and independent commissioners have no effect on bond ratings. The conclusion of this study is that of the 8 variables used in this study only earnings management variables, liquidity ratios, managerial ownership and audit quality can be used to predict a company's bond rating. Suggestions that can be given are that the next researcher can replace the research sample using financial companies, add a complete corporate governance variable and be careful in interpreting a company's financial ratios.

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1. INTRODUCTION

Investments are classified into two types, namely investments in ownership certificates (shares) and investments in debt securities (bonds).[1]. The Indonesia Stock Exchange defines bonds as transferable medium-long term debt securities containing a promise from the issuing party to pay interest in the form of interest for a certain period and repay the principal at a predetermined time to the buyer of the bond.[2], [3]. Bonds are issued by companies that need funds, either for business expansion or to meet the company's financial needs in the short or long term. The advantage of investing in bonds compared to stocks is in terms of payment of returns. The income received from shares comes from dividends and capital gains. Dividend payments are given when the bond coupon payments have been made. If from the payment of the bond coupon there is no remainder for dividends, then the shareholders do not benefit from the shares owned[4]. Another advantage of investing in bonds is that bondholders have the first right to the company's assets if

the company goes into liquidation. This happens because the company has a contract agreement to pay off the bonds that have been purchased by bondholders[5].

Companies that issue bonds have an obligation to pay interest regularly in accordance with a predetermined period of time and the principal of the loan at maturity. So bonds are basically debt securities offered to the public. Although bonds are considered a safe investment, bonds still carry risks. One of these risks is the company's inability to repay its bonds to investors. The phenomenon of bond ratings can be seen in the case of one issuer, namely Mobile 8 Telekom, Tbk where in 2010 this company failed to fulfill the obligation to pay the 12th interest and the 9th interest and penalty for Mobile 8 bonds which continued to decline from year to year, thus causing the company to not have sufficient funds to pay its bonds. This bond default problem is not the first time that has happened, in March 2009 the IDX also suspended FREN's shares and bonds as the company did not pay interest on its bonds amounting to Rp. 675 billion. Due to the default, rating agency PEFINDO lowered the company's bond rating to 'D' from 'CC'[6].

Bond ratings are assigned by institutions that are independent, objective, and trustworthy. In Indonesia, there are two securities rating agencies, namely PT. PEFINDO and PT. KASNIC Credit Rating. The difference between the two agents is the object of assessment. PEFINDO's object is only to rank debt securities and companies. Meanwhile, PT Kasnic provides rating services for bonds, commercial paper, collateralized bonds, and general obligations[7]. Companies listed on the Indonesia Stock Exchange are more likely to use the services of Pefindo to rate bonds issued, although PT. Kasnic. Therefore, this study refers to the results provided by PT. Pefindo. The selection of pefindo is expected to provide relevant information because some companies use these services, which means they have confidence in the rating agency's assessment.

The reason why the bond rating issued by the rating agency is biased is because the rating agency does not monitor the company's performance every day, and the rating agency only judges from the occurrence of an event. In addition, there is no further explanation from the rating agency on how financial and non-financial factors can be used in determining bond ratings. In order to invest in bonds, apart from having sufficient funds, investors must also be able to analyze or estimate the factors that could affect investing in bonds. There are many factors that affect bond ratings[8]. These factors consist of financial and non-financial factors. Financial factors such as leverage, profitability, growth and size. Meanwhile, non-financial factors such as sinking funds, maturity, and risk. Investors from several factors have their own reasons for buying bonds, namely where bonds have security and fixed profit payments for a certain period and bond price fluctuations follow the flow of interest rates. The security of a bond for investors is shown through the ability to pay off the loan principal and pay interest at maturity[9], [10].

Earnings management is a form of deviation in the process of preparing financial statements, which affects the level of profit shown in the financial statements [11]. The purpose of carrying out earnings management practices is so that the bond ratings that will be issued by the rating agency fall into the category of companies that are worthy of being a place of investment for investors. The rating of a company that is worthy of being a place of investment is usually called investment grade. With a good rating, it will increase investor confidence and maximize the funds that enter the company[12], [13].

Financial ratios are a company's financial analysis tool to assess the performance of a company based on the comparison of financial data contained in the financial statements (balance sheet, profit/loss report, cash flow statement)[14]. The ratio describes a relationship or balance (mathematical relationship) between a certain amount with another amount. Ratio analysis can be used to guide investors and creditors to make decisions or considerations about the company's achievements and prospects in the future. One way of processing and interpreting accounting information, which is expressed in relative and absolute terms to

explain certain relationships between one number and another number of a financial statement. The better the financial ratios, the higher the bond rating of a company[15].

2. METHOD

Research Types and Design

The type of data used in this study is secondary data in the form of annual financial statements listed on the Indonesia Stock Exchange (IDX) whose reporting period ends December 31. The data was obtained from the Indonesian Capital Market Directory (ICMD), as well as the corporate bond rating database issued by PEFINDO (www.pefindo.com). The selected annual financial statements are the financial statements of companies that issue bonds and are rated by PT. Pefindo.

Population and Research Sample

The entire research subject is called the population. This study uses a population of all publicly traded companies that issue bonds and these companies are listed on the Indonesia Stock Exchange (IDX) and listed on bond ratings issued by PT. PEFINDO. Selection of PT. PEFINDO because in Indonesia, the company that got the permit and became the market leader in giving the rating was PT. PEFINDO (Indonesian Securities Rating Agency). Sampling in this study was taken based on certain criteria that are thought to represent the population in the study. The sampling technique used in this research is using purposive sampling technique.

Data Collection Methods In this study, the data used were secondary data. The data collection method used is the documentation method. The data collected consists of annual report data obtained at the Capital Market Information Center (Indonesia Stock Exchange) or internet access (www.idx.co.id). Bond rating data is obtained from the corporate bond rating database issued by PEFINDO by accessing the internet (www.pefindo.com).

Methods of Data Analysis Testing the hypothesis in this study was carried out by multivariate analysis using logistic regression. This model is used when you want to test whether the probability of occurrence of a nonmetric or categorical dependent variable can be predicted with the independent variable where the independent variable is a combination of metric and non-metric or categorical variables. In addition, this model was chosen because the dependent variable in the study is a qualitative variable that has an order, so that linear probability models such as multinomial logit cannot be used (Ghozali, 2012). This analytical technique no longer requires normality tests and classical assumption tests on the independent variables.

3. RESULTS AND DISCUSSION

Logistics Regression Analysis

Table 1. Logistics Regression Variables in the Equation

	B	SE	Wald	df	Sig.	Exp(b)
Step 1a ML	-9,706	4,901	3.922	1	.048	.000
LIQ	3,642	1,452	6.292	1	.012	38160
TAT	-.435	2,195	0.39	1	.843	.647
PER	.068	.137	.248	1	.619	1.070
INST	-.020	.042	.235	1	.628	.980
MANJ	5,974	2,996	3.975	1	.046	392,900
BOARD_ENG	7,215	8.898	.657	1	.417	1.359E3
AUDQUA	7,215	2,087	4.730	1	.030	93.696
Constant	-10,828	5.068	4,565	1	.033	.000

Effect Of Profit Management, Financial Ratio And Corporate Governance Mechanism On Bond Rating

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From the logistic regression equation, it can be explained as follows: If liquidity (LIQ), company activity (TAT), market value ratio (PER), institutional ownership (INST), managerial ownership (MANJ), independent commissioner (BOARD_IND) and audit quality (AUDQUA) is considered constant, then the log of odds of the bond rating will decrease to 9.706 for every increase of one earnings management unit (ML). If earnings management (ML), company activity (TAT), market value ratio (PER), institutional ownership (INST), managerial ownership (MANJ), independent commissioners (BOARD_IND) and audit quality (AUDQUA) are considered constant, then the log of odds the bond rating will increase to 3,642 for every increase in one unit of liquidity (LIQ). If earnings management (ML), liquidity (LIQ), market value ratio (PER), institutional ownership (INST), managerial ownership (MANJ), independent commissioners (BOARD_IND) and audit quality (AUDQUA) are considered constant, so the log of odds bond rating will decrease to 0.435 for each increase of one unit of company activity (TAT). If earnings management (ML), liquidity (LIQ), company activity (TAT), institutional ownership (INST), managerial ownership (MANJ), independent commissioners (BOARD_IND) and audit quality (AUDQUA) are held constant, then the log of odds bond rating will increase to 0.068 for every one unit increase in market value ratio (PER). If earnings management (ML), liquidity (LIQ), company activity (TAT), market value ratio (PER), managerial ownership (MANJ), independent commissioners (BOARD_IND) and audit quality (AUDQUA) are considered constant, then the log of odds rating bonds will drop to 0, 020 for every increase in one unit of institutional ownership (INST). If earnings management (ML), liquidity (LIQ), company activity (TAT), market value ratio (PER), institutional ownership (INST), independent commissioners (BOARD_IND) and audit quality (AUDQUA) are considered constant, then the log of odds rating bonds will increase to 5,974 for every increase in one unit of managerial ownership (MANJ). If earnings management (ML), liquidity (LIQ), firm activity (TAT), market value ratio (PER), institutional ownership (INST), managerial ownership (MANJ) and audit quality (AUDQUA) are considered constant, then the log of odds rating bonds will increase to 7,215 for every increase of one unit of independent commissioner (BOARD_IND). If earnings management (ML), liquidity (LIQ), company activity (TAT), market value ratio (PER),

Analysis of Overall Model Fit (Overall Model Fit)

This test will examine the effect of each independent variable, namely earnings management, liquidity ratios, activity ratios, market value ratios, institutional ownership, managerial ownership, independent commissioners, and company audit quality on bond ratings. The first analysis is to test the whole model (overall model fit). The statistics used are based on the Likelihood function. Likelihood (L) of the model is the probability that the hypothesized model describes the input data. To test the null hypothesis and the alternative hypothesis, L was transformed to -2LogL . With an alpha of 5%, the method of assessing the fit of this model is as follows:

1. If the value of $-2\text{LogL} < 0.05$ means that the model fits the data.
2. If the value of $-2\text{LogL} > 0.05$ means that the model does not fit the data.

The existence of a decrease in the value between the initial -2LogL (initial -2LL function) and -2LogL value in the next step indicates that the hypothesized model fits the data. The results of the study using the SPSS version 16 program obtained the following outputs:

Table 2 Likelihoods

Iteration	-2 Logs likelihood	-2 Logs likelihood
Step 0 1	59,534	.364
2	59,534	.368
3	59,534	.368

In table 2, it can be seen from the statistical value of -2LogL , that is, without variables, it is only constant of 59,534 after entering the three new variables shown in table 4.7, the value of -2LogL decreases to 20,316 or a decrease of 39,218. This decrease is significant or cannot be compared with df (difference in df with constant only and df with 8 independent variables). $\text{Df1} = (\text{nk}) 44$ and $\text{df2} = 44 - 8 = 36$, so the difference in $\text{df} = 44 - 36 = 8$. Based on the percentage points of the t distribution table with $\text{df} = 8$, the number is 2,306. Because 39.218 is greater than the table value (2.306), it can be said that the difference in the decrease of -2LogL is significant. These results mean the addition of independent variables earnings management, liquidity ratios, activity ratios, market value ratios, institutional ownership, managerial ownership,

Assessing the Feasibility of the Regression Model

The feasibility of the regression model was assessed using Hosmer and Lemeshow's Goodnes of Fit Test. Hypotheses to assess the feasibility of the regression model:

H_0 : There is no difference between the model and the data

H_a : There is a difference between the model and the data

If the value of Hosmer and Lemeshow's Goodnes of Fit Test statistic is equal to or less than 0.05, then the null hypothesis is rejected, which means that there is a significant difference between the model and the observed value, so that the Goodness fit of the model is not good because the model cannot predict the value of the observations. Conversely, if it is not significant then the null hypothesis cannot be rejected, which means that the empirical data is the same as the model or the model is said to be fit. The results of the study using the SPSS version 16 program obtained the output in table 4.8 as follows:

Table 3 Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	3.394	8	.907

Table 3 shows the Hosmer and Lemeshow value of 3.394 and significant at 0.907 because this value is above 0.05, the model is said to be fit and the model is acceptable.

Nagelkerke Test Analysis (R^2)

Nagelkerke R Square is a modification of the Cox and Snell's coefficients to ensure that the value varies from 0 to 1. The test is carried out to assess how much variation in the dependent (bond rating) can be explained by variations in the independent variables (earnings management, liquidity ratio, activity ratio, value ratio). market, institutional ownership, managerial ownership, independent commissioners and audit quality). The Nagelkerke R^2 value can be interpreted as the R^2 value in multiple regression.

Table 4.9 Nagelkerke (R^2)

Step	-2 Logs likelihood	Cox & Snell R Square	Nagelkerke R Square
1	20,316	590	.795

Table 4 shows the Cox and Snell's R values of 0.590 and Nagelkerke's R^2 values of 0.795. This result means the variability of the dependent variable (bond rating) which can be explained by the variability of the independent variable. The SPSS output in table 4.9 gives Cox and Snell's R values of 0.590 and Nagelkerke's R^2 values of 0.795. This result means that the variability of the dependent variable (bond rating) which can be explained by the variability of the independent variables (earnings management, liquidity ratio, activity ratio, market value ratio, institutional ownership, managerial ownership, independent commissioners and audit quality) is 79.5%.

Hypothesis Testing Analysis

The test with the logistic regression model used in this study is to determine the effect of each independent variable, namely earnings management, liquidity ratios, activity ratios, market value ratios, institutional

ownership, managerial ownership, independent commissioners and audit quality on the dependent variable, namely bond ratings. . The test criteria with the confidence level used is 95% or the significance level is 5% ($\alpha = 0.05$). This study uses 8 independent variables, namely earnings management, liquidity ratios, company activity ratios, market value ratios, institutional ownership, managerial ownership, independent commissioners, and audit quality. The output results of SPSS version 16 in table 1 show that there are 4 variables that affect bond ratings, namely earnings management, liquidity ratios, managerial ownership and audit quality. While the other 4 variables have no effect on bond ratings, namely the company's activity ratio, market value ratio, institutional ownership and independent commissioners.

Effect of Earnings Management on Bond Rating

Earnings management are the actions of managers to increase (decrease) the current period's profit of a company that is managed for the purpose of avoiding losses and so on (Arif, 2012). Earnings management can make the company's performance look good to investors by increasing the profits earned by the company. A company's bond rating can be influenced by earnings management by increasing a company's profit so that the company's performance looks good in the eyes of investors and investors ultimately entrust them to provide debt to the company. If the company's performance looks good and many investors entrust their funds to the company, the rating agency will also give a good bond rating to the company.

The existence of earnings management can show good company performance by increasing company profits, investors will entrust giving debt to the company so that the bond rating is good. Companies with this condition are attracted by many investors because they generally have a bond rating in the high investment grade category. The results of this study are consistent with previous research conducted by Arif (2012) which states that earnings management has a significant effect on bond ratings.

Effect of Liquidity Ratio on Bond Rating

The liquidity ratio is a ratio that shows the ability of a company to meet its financial obligations that must be fulfilled immediately or the company's ability to meet financial obligations when billed. A company that is able to meet its financial obligations on time means that the company is liquid and has current assets greater than its current liabilities. This is because the current assets owned are able to pay off the company's short-term obligations. Burton et al., (2000) stated that a high level of liquidity will indicate the strong financial condition of the company so that financially it will affect the prediction of bond ratings.

Liquidity ratio is a ratio that shows how much a company's ability to fulfill its obligations. With a high level of liquidity ratio indicates a strong company condition and tends to be able to fulfill its obligations and the company's performance will look good. So that investors can entrust to provide debt to the company, the more investors who entrust providing debt will be able to increase the company's bond rating. The results of this study are consistent with previous research conducted by Almilialia and Devi (2007) which states that the liquidity ratio as measured by the current ratio has an effect on bond ratings.

The Influence of Company Activities on Bond Rating

The activity ratio is a tool to measure the effectiveness of the company in using or utilizing its resources. Companies with a high level of activity tend to be able to generate higher income than companies with a low level of activity. If the level of company activity is high, it will generate high income. Companies that have high income tend to be able to meet their obligations including bond interest payments so that it can affect bond ratings. This study shows hypothesis 3 which states that the activity ratio variable as measured by the price earning ratio has no effect on bond ratings. The activity ratio is a tool to measure the effectiveness of the company in using or utilizing its resources. The results of the study which showed that the activity ratio had no effect on the bond rating showed that the level of activity did not directly affect the acquisition of the bond rating at that time. The results of this ratio are highly dependent on the type and

nature of the industry, so that in interpreting the activities of a company, caution must be exercised. Not all companies have the same resources and level of activity so that the income earned is also different. The results of the study which showed that the activity ratio had no effect on the bond rating showed that the level of activity did not directly affect the acquisition of the bond rating at that time. The results of this ratio are highly dependent on the type and nature of the industry, so that in interpreting the activities of a company, caution must be exercised. Not all companies have the same resources and level of activity so that the income earned is also different. The results of the study which showed that the activity ratio had no effect on the bond rating showed that the level of activity did not directly affect the acquisition of the bond rating at that time. The results of this ratio are highly dependent on the type and nature of the industry, so that in interpreting the activities of a company, caution must be exercised. Not all companies have the same resources and level of activity so that the income earned is also different.

This means that the activity ratio between non-financial companies is different because the operations carried out are different. Another factor that also has the opportunity to cause the activity ratio variable as measured by Total Asset Turnover to have no effect on bond ratings is the awareness of investors who not only pay attention to the company's financial factors, but also includes an assessment of industry risk and business risk. This reason is considered logical considering that the rating process is not only based on the company's financial condition. The results of this study are consistent with previous research conducted by Yuliana et al., (2011) which states that the activity ratio as measured by Total Asset Turnover (TAT) has no effect on bond ratings.

Effect of Market Value Ratio on Bond Rating

Market value ratio or market value ratio is a ratio that measures market price relative to book value. The market value ratio is proxied by the Price Earning Ratio (PER). PER reflects investors' expectations about the company's future performance. PER is a function of the expected future earnings of the company. If future income improves, the company will be able to pay off its obligations so that it can increase the company's bond rating. This study shows hypothesis 4 which states that the market value ratio variable as measured by the Price Earning Ratio (PER) has no effect on bond ratings.

The Effect of Institutional Ownership on Bond Rating

A certain percentage of shares owned by an institution can affect the process of preparing financial statements, which does not rule out the possibility of accrualization according to the interests of the management (Boediono, 2005). Institutional ownership has the ability to control management through an effective monitoring process, thereby reducing management's actions to manage earnings. With institutional ownership, good corporate governance can be implemented, so as to prevent hazard from management or immediately take corrective action management which in turn can improve the company's performance and high debt rating (Rinaningsih, 2008). Schleifer and Vishny (1997) in Prasetyo (2010) state that institutional investors with large ownership have incentives to monitor management performance because they earn large profits and have large voting power which makes it easier for them to take corrective action. This study shows hypothesis 5 which states that the institutional ownership variable as measured by the percentage of shares owned by the institution has no effect on bond ratings.

The results of the study were not significant, indicating that the monitoring carried out by the institution was not optimal or not yet effective as a tool for monitoring management. This can be due to the relatively large institutional ownership and most of the shares are concentrated in institutional investors. It is possible that the accounting information produced by management is based on the interests of the majority shareholders. The explanation that can be put forward from the results of this study is not in line with agency

theory which states that majority shareholders (concentration of institutional ownership) will try to increase the value of the company which will ultimately raise the rating of the company's bonds.

Effect of Audit Quality on Bond Rating

The results of the study on the audit quality variable which was proxied by the size of the Public Accounting Firm showed that audit quality had a significant positive effect on corporate bond ratings. This means that bonds issued by companies audited by Big 4 KAPs have a higher probability of getting a bond rating in the investment grade category than companies that are not audited by Big 4 KAPs.

4. CONCLUSION

The conclusions of this study are: Earnings management that has an effect on bond ratings. Liquidity ratio has an effect on bond rating. The activity ratio has no effect on bond ratings. The market value ratio has no effect on bond ratings. Institutional ownership has no effect on bond ratings. Managerial ownership has an effect on bond ratings. Independent commissioners have no effect on bond ratings. Audit quality has an effect on bond ratings.

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