



Fundamental Factors for Bond Ratings: Modified Jones as Mediating Variable

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Abstract

The study aims to ascertain how the debt-to-equity ratio, earnings management, and current ratio affect bond ratings in corporate businesses assessed by PT. PEFINDO 2020–2022 and listed on the Indonesia Stock Exchange. The reason earnings management is used as mediation in this research is a novelty from previous research, where earnings management is rarely used. The earnings management model used by the Jones modification has a higher level of accuracy compared to previous models, where the measurement is through revenue recognition which has the highest accuracy. Apart from that, many companies use earnings management practices so that the company's finances look good to investors, so the company will get new investors. In this study, 135 sample bond types that fit the predefined criteria were obtained from 26 organizations using purposive sampling with several preset criteria. Data analysis methods were uses path analysis techniques with the Lisrel program version 8.8 to analyze the available bond types. This study suggests that earnings management does not mediate between bond ratings and the current ratio. In particular, bond ratings are significantly impacted by the current ratio, the debt-to-equity ratio does not strongly impact earnings management, and bond ratings are not significantly affected by earnings management.

Keywords: Current Ratio, Debt to Equity Ratio, Earnings Management, Bond Rating

1. Introduction

Income is a factor in the investment process; as income rises, so does the number of investors. The capital market is a place where issuers sell securities such as shares, warrants, and bonds. Bonds are a source of company funding which includes a written agreement between the bond issuer and investors with a denomination and term. Many investors are interested in corporate bonds, which can be seen through their rating level.

Data from Refinitiv Lipper shows that investment funds in the bond market fell by 175.5 billion US dollars. This is the biggest decline in 2022 after 1990, but currently, bond-issuing companies have to pay greater interest charges. The existence of high debt levels and rising interest rates reduces investor confidence in the repayment ability of bond issuers, as well as causes a decline in investment in the bond market. Investments in bonds from developing countries experienced withdrawals worth 80 billion US dollars during the first three quarters, which was a negative impact caused by a large increase in interest expenses. Meanwhile, there was a drawdown on US bonds amounting to 65.81 billion US dollars, and around 16.44 billion US dollars for inflation-linked bonds (Ekonomi Global, 2022).

Based on data from the Financial Services Authority in 2022, the increase in debt securities yields in the United States has caused higher pressure on capital outflows from emerging markets, including Indonesia, which has caused a weakening in the exchange rate and bond market. Based on data from the Indonesian Securities Price Appraiser (PHEI), ICBI movements rose 6.67% for the year and rose 9.29% on an annual basis. The strengthening of the Indonesian bond index in trading is in line with the strengthening of corporate and government bond return performance. It was found that the state bond index's movement (INDOBeX Government Total Return/INDOBeXG-TR) strengthened by 11.24% annually and climbed by 8.56% during the current year. Under the same conditions, the corporate bond index (INDOBeX Corporate Total Return/INDOBeXC-TR) was observed to rise 5.25% throughout the current year and strengthened 7.61% on an annual basis. However, this is not in line with the conditions that occurred in several companies which experienced a decline in their bond ratings due to issuers experiencing default, causing the bond ratings to drop(DataIndonesia.id, 2023). High bond liquidity can lead to more attractive bonds so that the bondholders can sell them at any time, but when the bond liquidities are low then it will affect the bond price will fall (Maskami et al., 2022)

Issuers must complete ratings by a securities rating agency before issuing bonds, according to Bapepam LK Regulation Number IX.C.11, which governs the Rating of Debt Securities. Bank Indonesia and OJK recognize six Indonesian securities rating firms. These companies include Standard & Poor's, Moody's Investor Service, PT Fitch Rating Indonesia, PT ICRA Indonesia, and PT Pemeringkat Efek Indonesia. This research made use of the bond credit rating that PT Pefindo gave. The large number of bond issuers on the IDX who choose PT Pefindo as a rating agency to evaluate bonds is the basis for this decision. Because the majority of business actors rely on PT Pefindo, which routinely provides the public with the latest information regarding the latest bond ratings, to assess their bond ratings, the data used is relevant.

Several companies whose bond ratings have fallen due to default in the corporate sector have increased every year, in 2020 it increased to 0.85% from the previous year's 0.79%, and in 2021 and 2022 it also increased, each year reaching 0.95% to 1.03%. PT Waskita Karya Tbk (WSKT) has stopped trading in the company's shares due to delays in payment of Continuous Bond IV Phase I coupons in 2020. The Bond and WSKT Continuous III and IV ratings have become idCCC from idBBB-. The outlook for the company's rating is under review with negative implications.(CNBCIndonesia, 2023). In 2020, PT Brata Indonesia (Persero)'s 2017 MTN A series rating became idD compared to the previous rating, namely idCCC. This reflects that Brata is currently under a moratorium on debt payments until October 5, 2021 (Pasardana.id, 2021). In 2022 PT's rating. Ricobana Abadi (RICO) and MTN I 2017 became "idCCC" from previously "idBB-". This reflects RICO's uncertain ability to pay off MTN I 2017 worth 400 billion whose maturity will be on December 20, 2022 (MediaAsuransiNews.Co.id, 2023). The change in income against the income earned by investors affects the decline in bond ratings due to the uncertainty of interest rates, where investors expect high returns from the issuer (Weniasti & Marsoem, 2019).

Even though bonds are considered relatively safe investments, there are still risks that need to be considered. One of the various risks is the risk of default or the risk of the company being unable to pay its obligations to investors. Investors will be more likely to choose issuers that have issued bonds regularly and have a good reputation in the market. To reduce the risk of the company being unable to pay its obligations, investors should pay attention to several aspects, including information related to the bonds that will be issued by the issuing company, considering the bond rating. explains that bond ratings are indicators that can be used to monitor bond quality (Purba & Mahendra, 2023).

Factors that influence bond ratings are the amount of leverage owned by the company, and the results of research on significant influences on financial ratios which are measured using Debt to Equity Ratio with earnings management practices and bond ratings (Felicia & Natalova, 2022). The results of other research state that there is an influence between financial ratios, especially liquidity ratios expressed in the current ratio, with earnings management practices and bond ratings (Susanto et al., 2022). Regarding the influence between earnings management practices and company bond ratings (Maghfiroh & Fidiana, 2019).

The Debt-to-Equity Ratio does not affect the rating of non-financial corporate bonds, but the current ratio may significantly influence corporate bond ratings (Rosita et al., 2022). Bond ratings are not influenced by the liquidity ratio variable which is represented through the current ratio (Zuhri et al., 2019). The findings of this study indicate that there are gaps in these differences in results that require further research.

This research examines bond ratings, profitability, earnings management strategies, and liquidity ratios for companies listed on the BEI between 2020 and 2022. Furthermore, this study examines the direct impact of profitability and earnings management tactics and liquidity measures on a company's bond rating. Lastly, by using a model modification Jones, this research will examine the indirect impact of profitability and liquidity ratios on corporate bond ratings due to the influence of earnings management strategies. To attract investors, managers can disclose financial data that is not in line with the reality of earnings management techniques.

Debt to Equity Ratio and Current Ratio serve as proxies for fundamental characteristics in bond rating research, and the mediating variable is used to examine their influence. According to research (Dechow et al., 2012). Earnings management in the modified Jones model has been modified, which can identify earnings management more accurately compared to other models (Suyono, 2017). The most popular model used by researchers to measure earnings management is the modified Jones model, which is based on the intrinsic aspects of earnings management and the discretionary accrual approach. This model differs significantly from previous models and makes it simpler to modify earnings and exercise discretion through the recognition of cash income. If these changes are implemented through earnings, management's sample estimates of earnings will be unbiased if they are successful. Compared with previous models, the accuracy of the modified Jones model for testing earnings management is the highest.

2. Literature Review

2.1. Signaling Theory

Of information provided by companies to parties outside the company to help companies make investment decisions. Signaling theory discusses signals that arise from decisions made by companies (Fahmi, 2014). Information has an important role for investors and business people because it provides a relevant picture of the condition of the company in the past, present, and future, and has an impact on the continuity of the company and the level of liquidity

of its securities markets. Signal theory provides an understanding of variables such as profitability, liquidity, leverage, and bond ratings related to earnings management practices.

2.2. Bonds

Bonds are an attractive choice of financial instruments, because bonds provide profits through interest rates. Besides, the risk associated with bonds is relatively lower than that of other investments. According to (Rusfian, 2021), a bond is one of the debt instruments offered by the issuer of a bond to the bondholder (buyer) with a promise of payment of interest each particular year agreed along with payment of the bond in full at maturity. according to (Fairuz omar & M.zubair, 2009), are interest rate risk, default risk, call risk, purchasing power risk, reinvestment risk, and liquidity risk. To maintain bond security and protect investors, corporate bonds are rated by agencies such as Standard & Poor, Moody's, Casnic, and pefindo others.

2.3. Bond Ratings

A bond rating is a character mark given by a rating agency to describe the level of bond risk (Hartono, 2009). According to (Prihadi, 2019), bond ratings are the process of determining the risk inherent in a company issuing bonds. The higher the rating, the lower the risk of failure to pay. The rating of bonds is based on the evaluation of the financial statements of the company; if the company's financial reports are not in line with expectations, it will encourage managers to apply profit management practices, by increasing corporate profit. A good rating will boost investor confidence and maximize the funds that enter the company.

2.4. The Influence between variables and hypotheses

The Influence of the Current Ratio on Earnings Management

The current ratio assesses a company's capacity to pay off its debt or short-term liabilities. (Januri, 2020) states that the current ratio describes the relationship between cash and other current assets and also the company's current liabilities, which are cash assets that are not difficult to convert, such as securities, cash, inventories, and receivables. Companies that have large capital can increase the value of their assets. Meanwhile, the company's ability to generate profits if its current ratio is higher than the value of its assets (Kurniasih & Surachim, 2019). When a company's liquidity ratio is low, managers often manipulate profits to make the company look strong, whereas a high current ratio indicates that the company has a lot of assets, making it attractive to potential investors.

H₁: It is predicted that the Current Ratio has a significant influence on Earnings Management.

The Influence of Debt to Equity Ratio on Earnings Management

The amount of debt a company uses will determine its debt-to-equity ratio; The more debt you have, the greater the risk faced by investors, which makes them demand higher levels of return. As a result, the company's value will decrease as the amount of debt in its capital structure increases. Excessive amounts of debt will be dangerous and the company cannot escape from the debt burden. Considering the potential for company default due to its inability to make debt payments on time, earnings management is highly recommended (Mulyana & Saputra, 2017). Companies that use earnings management practices aim to pay off their debts through the use of assets owned (Christiana, 2020).

H₂: It is predicted that DER has a significant influence on Earnings Management.

The influence of the current ratio on bond ratings

A high level of liquidity will demonstrate the financial soundness of the business, influencing the bond rating. (Purba & Mahendra, 2023) state that although the current ratio shows a company's ability to pay off debt rapidly, liquidity may provide investors with information about its potential to satisfy its financial obligations, depending on its maturity (Alfiani, 2013). The bond rating, which is determined by the firm's assets that may be used to meet its obligations shortly, is influenced by the capacity of the company to settle debts.

H₃: It is predicted that the Current Ratio has a significant influence on the Bond Rating

Effect of DER on-Bond Ratings

Companies with high leverage will deter investors because excessive leverage will result in high loan interest rates, which can make it difficult for the company to pay off all its debts. How much of the company's capital can be used to pay off debt, and how probable is it that it will default. A high DER suggests that the company's debt is more significant than its asset value (Rosita et al., 2022). As a result, the company's bond rating increases in response to improved performance, which attracts investors to provide credit.

H₄ : It is predicted that DER will have a significant influence on Bond Ratings

The Influence of Earnings Management on Bond Ratings

The accrual estimations used to assess earnings management methods may impact a company's bond rating. Company management usually improves company performance through earnings management practices or earnings engineering, which is expected to increase the company's bond rating. With earnings management, you can show strong business performance, which will convince investors and obtain a favorable bond rating (Petty Arisanti et al., 2022). Earnings management can influence the company's bond rating which can improve the company's performance in the eyes of investors (Aluman et al., 2022). Investors will be interested in companies that meet these requirements because they usually have bond ratings in the range of superior *investment grade*.

H₅: It is predicted that earnings management will have a significant influence on bond ratings

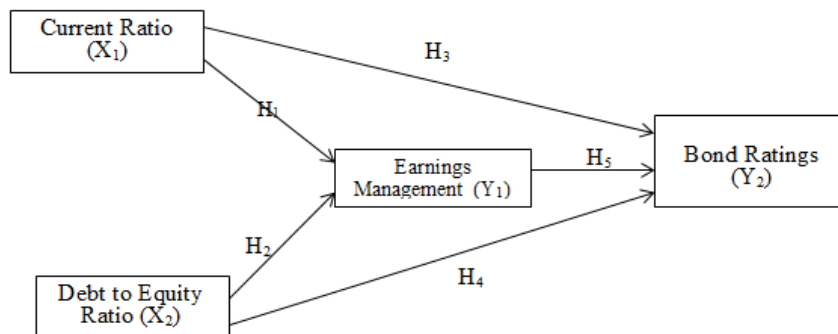


Figure 1. Conceptual Framework

Source: Data Processed by author (2023)

3. Materials and Methods

3.1. Materials

Associative causal research is the methodology used, and its goal is to articulate a causal link between the independent (influencing) and dependent (affected) variables. According to (Sugiyono, 2017). associative is: "A research problem formulation whose nature is to ask questions related to the relationship between two or more variables.

The research population consists of corporate entities listed on the Indonesia Stock Exchange (BEI) and the rating report that PT PEFINDO provides on their bonds. Four hundred thirteen bonds from 100 different firms comprised the study's population. Purposive *sampling* is the method used in this study to gather samples, and the criteria included bonds issued by companies that were listed on the IDX in 2020–2022, rated by PT Pefindo, issued bonds during the 2020–2022 observation period and presented financial reports in rupiah currency for all of those companies.

With 26 corporate businesses meeting the sample criteria and 45 different bond kinds with a 3-year research period, 135 samples from the 26 companies that met the study's observation data requirements were used.

3.2. Methods

Table 1. Operational Variables

No	Variable	Measurement	Scale
1	Current Ratio (Current Ratio)	CR= Current Assets / Current Liabilities	Ratio
2	Debt to Equity Ratio	DER= Total Debt/Total Equity	Ratio
3	Bond Ratings	Superior category investment grade = 18 to 11 Imperior category investment grade = 10 to 118	Nominal
4.	Earnings Management (Modified Jones Model)	$DA_{it} = \frac{TA_{it}}{A_{it} - 1} - NDA_{it}$	Ratio

Source: (Dechow et al., 2012), (Suyono, 2017), (Jones, 1991) and (Jensen & Meckling, 2019)

Referring to research (Gu & Zhao, 2011), (Sari, 2010) and (Arif, 2012) the scale used to convert bond ratings is code 18 to 1. Code 18 to 11 if the bond is classified as investment grade (AAA= 18, AA+= 17, AA=16, A+ = 14, AA-

=15, BBB+ =11, A- = 12, A=13) and code 10 to 1 if the bond is classified as non-investment grade (BBB=14, BB+ =8, BBB- = 9, BB- = 6, BB= 7, B- = 3 B=4, CCC = 2, and D = 1). In this research, the investment grade category is called Superior Investment Grade and the non-investment grade category is called Imperior Investment Grade.

The Path Analysis technique is a tool for testing what is known as an intervening variable in the mediation of a dependent variable. The direct effect of the independent variable on the mediator is divided by the mediator's immediate impact on either the dependent variable, ab or b , to determine the importance of the indirect influence. The stages in data analysis are as follows: (1) create a structural model; (2) create a measurement model; (3) create a path diagram; (4) estimate the model; (5) assess model suitability; and (5) testing and interpreting hypotheses.

Variable Debt to debt-to-equity ratio, Current Ratio, as well as Earnings management, will be involved in this path analysis, which will test the influence model between variables in the form of cause and effect. This will allow researchers to determine whether the hypothesized pathway is correct and supported by the data, or whether changes have occurred. The route coefficient illustrates the link between the independent and dependent variables.

4. Results and Discussion

4.1. Results

This is about the fundamental factors of bond ratings with the mediation of the modified Jones earnings management model. This research model is path analysis or path analysis using help software Lisrel version 8.8. Data processing in this software uses path next diagram use build simplis syntax to perform analytical estimates. The processing goes through various steps that are in line with the procedures for path analysis testing, for example, the inverse matrix value of the correlation matrix, as well as the path coefficients shown in the image below:

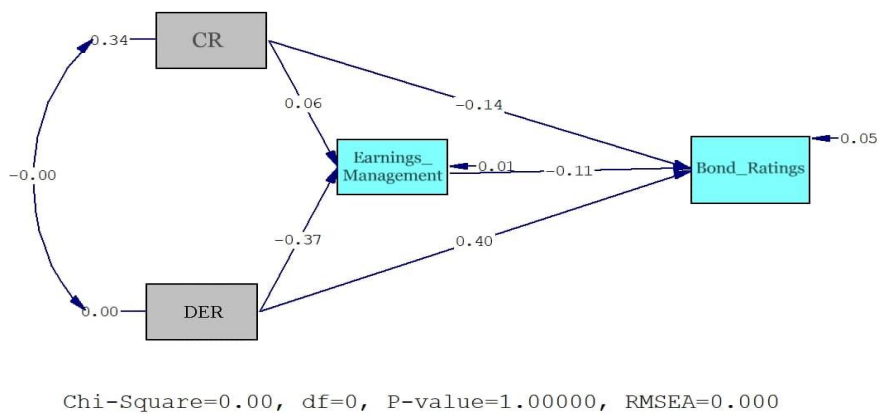


Figure 2. Estimated Influence Between Variables

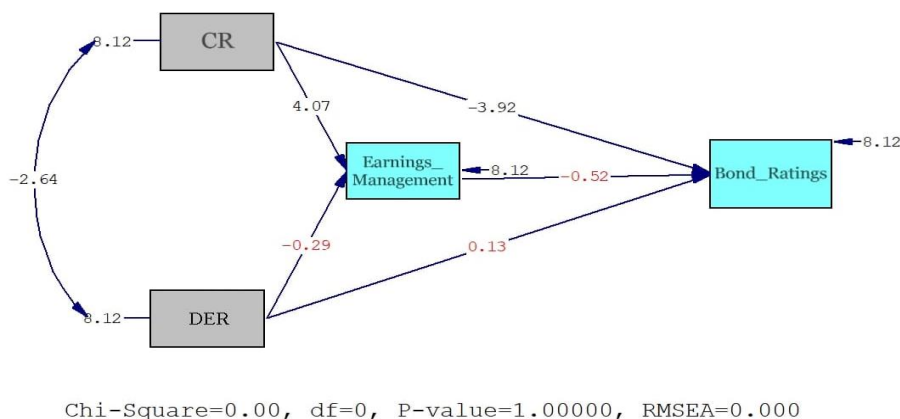


Figure 3. T-Statistical T-Value

Based on the image resulting from LISREL data processing, the details are described in a summary of estimates from the structural equation as follows:

Table 2. Structural Equation Estimation Results

Casual Influence Between Variables	Path Coefficient	T Value Calculate	T Value Table	Test Results A=0,05	Statement of Hypothesis
CR → Earnings management	0.059	4.07	1.65	Significant	Accepted
DER → Earnings management	-0.37	-0.29	1.65	Not significant	Rejected
CR → Bond Ratings	-0.14	-3.92	1.65	Significant	Accepted
DER → Bond Ratings	0.40	-0.13	1.65	Not significant	Rejected
Earning management → Bond Ratings	-0.11	-0.52	1.65	Not significant	Rejected

Source: Data processing results

Based on the output from LISREL data processing, a structural equation is obtained which is composed of 2 sub-structures. The path coefficient testing for Substructure 2 and Substructure 1 in more detail will be explained below:

Substructure Path Coefficient Testing 1

The interpretation of the analysis results is as follows, based on the findings of substructural measurement 1:

$$\text{EarningManagement} = 0.059 \times \text{CR} - 0.37 \times \text{DER}, \text{Errorvar.} = 0.0089, R^2 = 0.12$$

$$\begin{array}{ccc} (0.014) & (1.28) & (0.0011) \\ 4.07 & -0.29 & 8.12 \end{array}$$

Based on this equation, the score r is obtained² (influential coefficient) of 0.12 which gives an indication that the estimated percentage of earnings management is influenced by debt to equity ratio as well current the simultaneous ratio is 12%. Meanwhile, the partial influence of 0.059 is a variation of earnings management that can be explained through current ratio while it is -0.37 variations in earnings management which can be explained through Debt to Equity Ratio (DER).

Furthermore, hypothesis testing on substructural path 1 can be explained by the results of the hypothesis test as follows:

Hypothesis Testing Results 1

Based on the calculation findings, a significance threshold of $\alpha = 0.05$ yields a calculated t-value of 4.07, translating into a t-table of 1.66. Since the t-calculated value of 4.07 is greater than the t-table of 1.66, H_1 is acceptable. Where $t\text{-count} > t\text{-table}$, the path coefficient is 0.059, indicating a positive conclusion that H_0 is rejected and H_1 is accepted. Current ratio is high then earnings management will decrease which has a positive direction so it can be stated current ratio to wards earnings management has a significant influence.

Hypothesis Testing Results 2

The computed t-value = -0.29, with a significance level of $\alpha = 0.05$, according to the computation findings, means that the t-table is 1.66. As a result of the t-calculated value = -0.29 being less than the 1.66 t-table, H_0 is accepted and H_2 is denied. When $t\text{-count} < t\text{-table}$ and the path coefficient is negative (-0.37), it may be said that H_0 is accepted and H_2 is rejected. If debt to equity ratio is high then the company's earnings management is optimal so it has a negative direction so it can be stated that DER on earnings management does not have a significant influence.

Substructure Path Coefficient Testing 2

Based on the results of substructural measurement 2, the interpretation of the analysis results is as follows:

$$\text{BondRatings} = -0.11 \times \text{EarningsManagement} - 0.14 \times \text{CR} + 0.40 \times \text{DER}, \text{Errorvar.} = 0.050, R^2 = 0.13$$

$$\begin{array}{ccc} (0.21) & (0.036) & (3.04) & (0.0062) \\ -0.52 & -3.92 & 0.13 & 8.12 \end{array}$$

Bond ratings are estimated to be impacted by debt to equity ratio, current ratio, and earnings management at a simultaneous level of 13%. Meanwhile, the partial influence of -0.11 is a variation in bond ratings that can be explained through earnings management. Meanwhile, the value of -0.14 is a variation in the bond rating that can be explained by the current ratio. Meanwhile, several 0.40 variations in bond ratings can be explained through the Debt-to-Equity Ratio (DER).

Furthermore, hypothesis testing on substructural path 2 can be explained by the results of the hypothesis test as follows:

Hypothesis Testing Results 3

Using a significance threshold of $\alpha = 0.05$, the computed t-value = -3.92 and t-table = 1.65 are the computation outcomes. H_0 is rejected, and H_4 is allowed because the t-calculated value of -3.92 is more than the t-table of 1.65, indicating that the current ratio significantly affects bond ratings. When t-count < t-table and the path coefficient is -0.14, which is negative, it may be said that H_4 is accepted and H_0 is rejected. The current ratio is high, and the bond rating will be better, where a negative direction can be obtained so that it can be stated current ratio on bond ratings has a significant influence.

Hypothesis Testing Results 4

T-table = 1.66 was obtained, with a significant threshold of $\alpha = 0.05$. H_0 is approved and H_5 is refused because the t-calculated value of 0.13 is less than the t-table of 1.66. With a positive route coefficient of 0.40 and t-count < t-table, it is possible to deduce that H_0 is accepted and H_5 is rejected. It may be said that the DER on the bond rating does not significantly affect it if the debt-to-equity ratio is large since it leads the bond rating to drop in a positive way.

Hypothesis Testing Results 5

Based on the calculation findings, the t-count value = -0.52 is obtained with a significance level of $\alpha = 0.05$. Because the t-count value of -0.52 is less than the t-table amount, the t-table = 1.66 as a result. 1.66, meaning that H_0 is approved and H_3 is refused. With a route coefficient of -0.11, which is negative for t-count < t-table, H_0 is accepted and H_3 is rejected. It may be concluded that earnings management has no appreciable impact on the bond rating since the bond rating is high and trending positively regardless of how well or poorly earnings management performs.

Simultaneous Influence Current Ratio and Debt To Equity Ratio Against Earnings Management

The F test or simultaneous hypothesis test in this research aims to obtain information on the simultaneous influence debt to equity ratio as well as the current ratio on earnings management. The significance level set is $\alpha = 0.05$. The hypothesis is accepted and H_0 is rejected if the F-calculated value > F-table, according to the F test's testing conditions. On the other hand, if the F-count value is less than the F-table, H_0 is accepted and the hypothesis is rejected. Meanwhile, the F test calculation refers to the formula (Kusnendi, 2008) as follows:

It is recognized that the computed F value is 9.00 and the F-table value is 3.06 based on the F test computation findings. The hypothesis is accepted, and H_0 is rejected based on the F test findings, which show that the F-count is $9.00 > F\text{-table } 3.06$, indicating that the current and debt-to-equity ratios significantly affect earnings management simultaneously.

Simultaneous Influence of Earnings management, Current Ratio and Debt to Equity Ratio Regarding Bond Ratings

The F test or simultaneous hypothesis test in this research aims to obtain information on the simultaneous influence of earnings management, debt-to-equity ratio as well as current ratio on the bond rating. The significance level set is $\alpha = 0.05$. The testing criteria for the F test are if the F-calculated value > F-table, the decision is that the hypothesis is accepted and H_0 is rejected. Conversely, if the F-count value < F-table the decision is that the hypothesis is rejected and H_0 is accepted. Meanwhile, the F test calculation refers to the formula (Kusnendi, 2008) as follows:

Based on the results of the F test calculation, it is known that the calculated F value is 6.52 and the F-table value is 2.67. According to the results of the F test, it is concluded that F-count is $6.52 > F\text{-table } 2.67$, so the decision is that the hypothesis is accepted and H_0 is rejected, which means that at the simultaneous level of earnings management, debt to equity ratio as well as current ratio simultaneously has a significant influence on bond ratings.

Objective data showing that path analysis can explain the magnitude of direct and indirect effects is obtained in the explanation in Table 3, which refers to the results of data analysis. The path coefficient of the independent variable determines the magnitude of the direct effect, while the path coefficient multiplied in one direction between the independent variables determines the magnitude of the indirect effect.

By comparing the coefficients of direct and indirect effects, Table 3 shows whether the effects are truly direct or indirect. Multiplying the indirect coefficients yields the number of indirect effects. True influence is considered direct

if the coefficient of direct influence is higher than indirect influence. On the other hand, we can determine that the direct effect is a true effect if the indirect effect is greater than the direct effect.

Table 3. Influence between variables

Influence Between Variables	Track	Big Influence	
		Direct	Indirect
Current ratio (X_1) > earnings management (Y_1)	.	0.059	.
Debt to equity ratio (X_2) > earnings management (Y_1)	.	-0.37	.
Current ratio (X_1) > bond rating (Y_2)	$X_1 > Y_1 > Y_2$	-0.14	$0.059 \times -0.52 = -0.0307$
Debt to equity ratio (X_2) > bond rating (Y_2)	$X_2 > Y_1 > Y_2$	0.40	$-0.37 \times -0.52 = 0.19240$
Earnings management (Y_1) > bond rating (Y_2)	.	-0.52	.

Source: Data processing results

Known as Current Ratio (CR) or x_1 has a direct effect on earnings management (Y_1) with a path coefficient of 0.059. The results of the path analysis in Table 3 show earnings management (Y_1) does not mediate the Current Ratio (CR) as x_1 on the bond rating (Y_2) because the path coefficient has a direct effect of 0.40 > an indirect effect of -0.0307. The influence of variables also known as Debt to Equity Ratio (DER) or x_2 has no direct effect on earnings management (Y_1) with a path coefficient of 0.40. The results of the path analysis show earnings management (Y_1) does not have a mediating effect Debt to Equity Ratio (DER) as x_2 on the bond rating (Y_2) because the path coefficient has a direct effect of 0.40 > an indirect effect of 0.19240.

4.2. Discussion

Influence Current Ratio Against Earnings management

The study's findings demonstrate that the current ratio significantly affects earnings management. The current ratio is used to measure company capabilities in the context of paying short-term obligations or debts that are due soon, as a measure of the company's level of security. The aim of this earnings management practice is that stakeholders, namely shareholders and potential investors, will benefit the company, because with the additional capital received it can be allocated for debt repayment through discretionary *accruals*. The results of this study are in line with research (Sarif et al., 2023) and (Hung et al., 2021) The current ratio has a significant influence on earnings management.

Influence Debt to Equity Ratio Against Earnings management

The study's findings indicate little to no relationship between the equity ratio and earnings management. Because a rise in the debt-to-equity ratio will not impact management decisions related to profitability. The data needs to be more relevant since corporations mostly have long-term debt that must be repaid over an extended period, while earnings management strategies are implemented annually or over a single period. Naturally, trust investors will be impacted by significant debt concerns. With more long-term debt to finance the company's operational activities, the potential for opportunistic actions to manipulate profits will certainly not have an effect but will affect repayment and the company's ability to generate large profits with long maturities. signal positive for stakeholders as well as potential investors to invest as well as interested parties. The results of this research are in line with the research (Kalbuana et al., 2022) and (Hamzah et al., 2021) debt to equity ratio has no influence significant on earnings management.

Influence Current Ratio Regarding Bond Ratings

The study's conclusions demonstrate that the current ratio significantly impacts bond ratings. Related to the business's capacity to pay off short-term commitments as they are fully invoiced or immediately due debts. A company's strong financial capacity to meet short-term commitments and the level of security it provides are indicated by its high liquidity. This ratio helps the business assess how well it can meet its responsibilities, liquidity can inform investors in the company that a larger current ratio value corresponds to a higher bond rating. The results of this research are in line with research by (Ni'mah et al., 2020) and (Ramadhani & Juwita, 2022) which states that the current ratio has a influence significant on the bond rating.

Influence Debt To Equity Ratio Regarding Bond Ratings

The study's conclusions indicate that bond ratings are not much impacted by the debt-to-equity ratio. Depending on the maturity of the business's debt, if the firm can still pay the debt before maturity, the rating will not decline, indicating that the company's debt policy, whether expanding or reducing, does not affect the bond rating. Even when a firm's bond rating is poor, investors still believe in the company if the bonds it issues are sold. Investors will be willing to put their money into the business if it can still pay its short-term debt. Due to this circumstance, an evaluation of the bond rating cannot be made just based on the solvency ratio; instead, the use of debt may be verified insofar as it can be anticipated to be used and generate economic profitability higher than the debt's interest. The results of this research are in line with the research (Fadah et al., 2020) and (Santoso et al., 2023) show debt to equity ratio has no influence which is significant on the bond rating.

The Influence of Earnings Management on Bond Ratings

The study's findings demonstrate that earnings management does not significantly impact bond ratings. Because if the company's earnings management is high, the company's profits are high, and the possibility that the company will pay off or repay the debt before maturity is greater, but this will not affect the bond rating. Bond ratings cannot be influenced by earnings management because in company earnings management there is no funding or investment, which only prioritizes income coming in from operating cash without paying attention to funding sources from debt or other funding. The higher the earnings management and the company's accuracy in paying the company's debts sooner than due, the do not influence the bond rating. The existence of earnings management practices can show the good working capacity of the company, so investors will trust it to provide debt, but the bond rating cannot be influenced. The value of this research is in line with research (Syarifah, 2021), and (Arif, 2012) shows that earnings management does not have a significant influence on bond ratings and cannot mediate.

5. Conclusion

Based on research and discussion on critical bond rating criteria, the current study indicates that (1) The current ratio significantly affects earnings management, as mediated by modified Jones model earnings management; (2) This suggests that managing profits will be impacted by increased short-term liquidity, the debt-to-equity ratio has no appreciable effect on profit management; (3) Corporate debt has a maturity date over a year away, meaning adjustments to its debt load won't affect its profit-management tactics. The current ratio significantly impacts bond ratings; (4) Bond ratings are not significantly affected by the debt-to-equity ratio; (5) Earnings management has minimal impact on bond ratings as current and debt-to-equity ratio factors excessively influence bond ratings.

The suggestions that the author can convey are: (1) For corporate companies to further optimize the current ratio by increasing profits and productivity of assets such as cash, receivables, inventory, and securities which can increase investor confidence in the company; (2) For companies it is mandatory to provide attention to good debt policy by utilizing the asset structure to manage debt according to needs and utilize debt to focus on debt objectives such as investments that can generate profits for the company; (3) So that the value of the company's bond rating increases, company managers can carry out earnings management according to higher standards. well-controlled to increase company value by using accounting methods to present financial reports or carry out income smoothing.

The limitations of this research are: (1) The author did not pay enough attention to the variables used in research, so it is recommended for future researchers to add independent variables such as interest rates and inflation which represent external factors and replace the mediating variable with a yield to maturity bonds or company size; (2) From the results of this research it only focuses on corporate companies listed on the Indonesia Stock Exchange which are rated by PEFINDO so that other researchers can use other ratings such as PT Fitch's Rating which will affect the number of samples.

References

- Alfiani, A. P. (2013). The Influence of Solvency Ratios, Activity Ratios, Liquidity Ratios and Company Size on Corporate Bond Ratings (Non-Financial Companies Listed on the IDX in 2008-2011). *Jurnal Ekonomi*, September, 1–27. <http://ejournal.unp.ac.id/students/index.php/akt/article/viewFile/715/472>
- Aluman, S. N. A., Hais Dama, & Ishak, I. M. (2022). The Influence of Liquidity, Solvency and Profitability on Bond Ratings in Banking Sector Companies Listed on the Indonesian Stock Exchange for the 2016-2020 Period. *Jurnal Ilmiah Manajemen Dan Bisnis*, 5(2), 583–592.
- Arif, B. W. (2012). *The Influence of Earnings Management and Financial Ratios*. Arif, B. W. (2012). *The Influence of Earnings Management and Company Financial Ratios on Bond Ratings*. Arif, B. W. (2012). *The Influence of Earnings Management and Company Financial Ratios on Bond* (pp. 1–59).
- Christiana, I. (2020). Financial Ratio in the Analysis of Earnings Management. *International Journal of Accounting & Finance in*

- Asia Pasific*, 3(1), 8–17. <https://doi.org/10.32535/ijafap.v3i1.714>
- CNBCIndonesia. (2023). *The issue of BUMN Karya PT Waskita Karya Tbk (WSKT) continues to roll*.
- DataIndonesia.id. (2023). *Indonesian Bond Index (ICBI) Rises Again*.
- Dechow, P. M., Slean, R. G., & Sweeney, A. P. (2012). Detecting Earnings Management. In *Asian Financial Statement Analysis* (pp. 73–105). <https://doi.org/10.1002/9781119204763.ch4>
- Ekonomi Global. (2022). *Global Investors Reduce Investment in Bonds*. London. <https://www.kompas.id/baca/internasional/2022/10/06/para-investor-global-mengurangi-investasi-pada-obligasi>
- Fadah, I., Ayuningtyas, A., Puspitasari, N., & Yuswanto, I. B. (2020). Analysis of financial and non-financial factors affecting bond ratings. *IOP Conference Series: Earth and Environmental Science*, 485(1). <https://doi.org/10.1088/1755-1315/485/1/012019>
- Fahmi, I. (2014). *Introduction to Financial Management Theory and Questions and Answers* (Muslim A Djalil (ed.); Cet. 3).
- Fairuz omar, M.zubair, B. omar and B. M. (2009). *Turbidimeter Design and Analysis*.
- Felicia, F., & Natalova, K. (2022). The Influence of Profitability, Liquidity, Leverage, and Other Factors on Profit Management. *E-Jurnal Akuntansi TSM*, 2(3), 185–198. <https://doi.org/10.34208/ejatsm.v2i3.1700>
- Gu, Z., & Zhao, Y. (2011). Accruals, Income Smoothing and Bond Ratings. *SSRN Electronic Journal*, 412. <https://doi.org/10.2139/ssrn.817506>
- Hamzah, R. S., Gozali, E. O. D., & Khamisah, N. (2021). Earnings Management and Its Determinant (Study of Listed Companies on Indonesia Stock Exchange). *Akuntabilitas*, 15(1), 89–102. <https://doi.org/10.29259/ja.v15i1.13078>
- Hartono. (2009). *Statistics For Research*. publikasi Andi.
- Hung, S., Ginting, E. S., & Joe, S. (2021). The Effect Of Profitability, Liquidity, Leverage On Bond Rating Of Financial Companies. *Journal of Management Science (JMAS)*, 4(4), 106–112. <https://doi.org/10.35335/jmas.v4i4.114>
- Januri. (2020). Factors That Influence Profit Management in Property Companies. *Scenario 2020*, 407–419.
- Jensen, M. C., & Meckling, W. H. (1919). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Corporate Governance: Values, Ethics and Leadership*, 77–132. <https://doi.org/10.4159/9780674274051-006>
- Jones, J. J. (1991). Earnings Management During Import Relief Investigations. *Journal of Accounting Research*, 29(2), 193. <https://doi.org/10.2307/2491047>
- Kalbuana, N., Suryati, A., & Pertiwi, C. P. A. (2022). Effect of Company Age, Audit Quality, Leverage and Profitability on Earnings Management. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 6(1), 305. <https://doi.org/10.29040/ijebar.v6i1.4796>
- Kurniasih, S., & Surachim, A. (2019). Debt to Equity Ratio (DER) and Return on Assets (ROA) to increase share prices. *Strategic : Jurnal Pendidikan Manajemen Bisnis*, 18(2), 44. <https://doi.org/10.17509/strategic.v18i2.17590>
- Kusnendi. (2008). *Single- and multigroup Structural Equation Models*. CV Alfabet.
- Maghfiroh, U. A., & Fidiana, -. (2019). Earnings Management, Profitability and Liquidity as Bond Ratings. *Journal of Research and Applications: Accounting and Management*, 3(3). <https://doi.org/10.18382/jraam.v3i3.203>
- Maskami, S., Putra, R. B., & Pondrial, M. (2022). Bond Prices Through Bond Ranking As Intervening Variables: Liquidity,. *International Journal of Economics Development Research*, 3(April), 122–142.
- MediaAsuransiNews.Co.id. (2023). *Pefindo Revises Ricobana Abadi's Outlook to Negative from CreditWatch*.
- Mulyana, A., & Saputra, M. (2017). The Influence of Liquidity, Profitability and Leverage on Profit Management and Its Impact on Company Value in Manufacturing Company Listed on Indonesia Stock Exchange Year 2011-2015. *International Journal of Managerial Studies and Research*, 6(1), 8–14. <https://doi.org/10.20431/2349-0349.0601002>
- Ni'mah, A., Laila, N., Rusmita, S. A., & Cahyono, E. F. (2020). Determinants of Corporate Bond and Sukuk Ratings in Indonesia. *Journal of Islamic Monetary Economics and Finance*, 6(3), 689–712. <https://doi.org/10.21098/jimf.v6i3.1106>
- Pasardana.id. (2021). *Pefindo Ganjar Barata Indonesia's Debt Default Rating*. Pasardana.Id. <https://pasardana.id/news/2021/9/9/pefindo-ganjar-peringkat-utang-barata-indonesia-gagal-bayar/>
- Petty Arisanti, Eko Prasetyo, & Rini Ratna Nafitasari. (2022). The Influence of Earnings Management, Financial Ratios on Bond Ratings. *Indonesian Journal of Applied Accounting and Finance*, 2(1), 37–44. <https://doi.org/10.31961/ijaaf.v2i1.1293>
- Prihadi, T. (2019). *FINANCIAL STATEMENT ANALYSIS CONCEPT AND APPLICATION*. PT Gramedia Pustaka Utama.
- Purba, I. R., & Mahendra, A. (2023). The Influence of Profitability, Liquidity and Leverage on Bond Ratings in Property and Real Estate Companies Listed on the Indonesian Stock Exchange for the 2019-2021 Period. *Ekonomi*, 9(1), 55–74.
- Ramadhani, S., & Juwita, R. (2022). The Influence of Return On Equity (ROE), Current Ratio (CR), Debt To Equity Ratio

- (DER), Inventory Turnover (IT), and Price Earning Ratio (PER) on the Rating of Corporate Bonds Listed on the Indonesia Stock Exchange (BEI) for the 2016-2020 Period. *Jurnal Ilmiah Ekonomi Dan Bisnis Universitas Multi Data Palembang*, 11(2), 403–410.
- Rosita, N., Sholichah, M., & Santoso, R. A. (2022). Determinants of corporate bond ratings in Indonesia. *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan*, 5(3), 1333–1346. <https://doi.org/10.32670/fairvalue.v5i3.2457>
- Rusfian, effy zalfiana. (2021). *The influence of Apple visuals on online impulsivity*. 88.
- Santoso, B., Qizam, I., Noor Hazlina Wan Jusoh, W., & Olga Viktorovna, L. (2023). The Implementation of Stakeholder, Asymmetry, Signaling, and Agency Theories on the Determinant of Shariah Bond (Sukuk) Rating. *International Business and Accounting Research Journal*, 7(2), 224–252. <http://journal.stebilampung.ac.id/index.php/ibarj>
- Sari, S. R. K. (2010). *Earnings Management Practices Related to Bond Ratings*. 7823–7830.
- Sarif, S., Idrus, M., & Azis, M. (2023). *Sofyan Syafri Harahap's Theory Analysis of the Current Ratio in Consumer Goods Sector Companies on the Indonesian Stock Exchange*. 3(3), 136–142.
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. CV. Alfabet.
- Susanto, M. A. H., Mardi, W. N., & Susanto, H. (2022). The Influence of Financial Ratios on Bond Ratings with Earnings Management as an Intervening Variable in Companies Listed on the Indonesian Stock Exchange in 2019-2021. *Jurnal Mahasiswa*, 4(4), 152–167.
- Suyono, E. (2017). Berbagai Model Pengukuran Earnings Management: *Sustainable Competitive Advantage-7 (Sca-7) Feb Unsoed*, 7(September), 303–324.
- quidity Ratio, Solvency Ratio and Ratio Profitability of Bond Ratings in Manufacturing: (Case Study Sub-Sector Property and Real Estate Sector Companies listed on the IDX Indonesian) Syarifah. *International Journal of Business, Economics and Social Development*, 2(2), 89–97.
- Weniasti, A., & Marsoem, B. S. (2019). The Effect of Bonds Rating , Profitability , Leverage , and Firm Size on Yield to Maturity Corporate Bonds. *International Journal of Innovative Science and Research Technology*, 4(8), 286–295.
- Zuhri, M. S., Mardani, R. M., & Wahono, B. (2019). The Influence of Earnings Management and Financial Ratios on Bond Ratings in Companies Listed on BEI. *E-Jurnal Riset Manajemen, Fakultas Ekonomi Unisma*, 79–92.