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Bond Prices Through Bond Ranking As Intervening Variables: Liquidity, *Leverage* , Company Size, Auditor's Reputation

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Abstract:

The purpose of this study was to determine the effect of liquidity, leverage, firm size, auditor reputation and bond ratings on bond prices. This type of research data obtained from secondary data. The sample in this study were 48 companies listed on the Indonesia Stock Exchange using the random sampling method. The results of this study indicate that liquidity, leverage , firm size, auditor reputation have no effect on bond ratings and leverage , firm size, auditor reputation have a positive and significant effect on bond prices, while liquidity, leverage , firm size, auditor reputation affect bond prices through bond rating.

Keywords: *bond prices, liquidity, leverage, firm size, auditor*

1. Introduction

In the midst of the increasingly worrying development of the corona virus (Covid-19) pandemic in Indonesia. The majority of investors relinquished their ownership in SBN, marked by an increase in *yields* across all benchmark SBN tenors (Pranata, 2021) . The decrease in the yield spread on long-term bonds was not as big as the decline in the yield spread on short-term corporate bonds, considering that investors still tend to be wary of economic uncertainty. On the other hand, if the expectation of economic recovery is even higher, it is not impossible that the demand for long tenor corporate bonds will be able to push the spread down even lower (Ramadhansari, 2021) . not only hit the stock market. and also the domestic bond market also experienced a correction due to investor concerns about the spread of the virus.

The phenomenon of bond ratings that occurred to PT Tiphone Mobile Indonesia Tbk (TELE) to "idD" from "idCCC". The downgrade reflects

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TELE's failure to pay the coupon bonds maturing on June 19, 2020 worth Rp19 billion, PEFINDO has also affirmed the Company's rating at "idSD" and its Shelf Registration Bond rating. longer due to the impact of the COVID-19 pandemic. several companies affected by the downgrade. The decline mainly occurred in companies experiencing liquidity problems related to maturing debt securities or a weakening credit profile due to the significant impact of the COVID-19 pandemic that affected business and financial conditions . the prospect of issuing corporate bonds in the rest of this year will be better than the conditions in 2020.

Indonesian bond market today is that there are still many markets that cause low liquidity, especially for corporate bonds, as well as the low level of corporate liquidity. Liquidity is an assessment of the level of liquidity ability of an entity by comparing current assets with short-term debt. The entity's ability to pay off short-term obligations can be seen in the company's liquidity. A company is said to be liquid if it is capable of paying off short-term obligations. And vice versa , because it is in accordance with the *trade off theory* which explains the balance between the benefits that will be obtained as a result of the use of debt, where when the company in its operations uses debt but the benefits derived from the use of debt are far greater than the amount of debt, the use of debt is allowed. Conversely, when the use of debt does not provide great benefits, the addition of debt is not allowed (Anugerah & Suryanawa, 2019) .

Auditor reputation is where the auditor is responsible for maintaining public trust and maintaining the good name of the auditor himself and the hood where the auditor works by issuing an opinion that is in accordance with the actual state of the company or the auditor's reputation is an achievement and public trust carried by the auditor on behalf of the auditor's big name. Auditors who have a reputation and big name can provide better audit quality, including in disclosing *going concern issues* in order to maintain the reputation of their auditors (indah dewita sari Putri & Primasari, 2016) . Big heads have a better auditing ability than small ones, so big heads provide better audit quality when compared to smaller ones, big heads or affiliated with international companies have better audit quality because the auditors are considered to have more experience. more because they have a larger number of clients and various types of clients so they are more experienced and are considered to produce better audit quality (Novrilia, Arza, & Sari, 2019).

2. Theoretical Background

Theory Signal

The theory of Bond Rating is the *signaly theory* . This theory briefly explains that the company's management as the signaling party, provides the company's financial statements and non-financial information to the selected rating agency. The bond rating agency then carries out a rating process according to the procedure so that it can issue bond ratings and publish them. This bond rating gives a signal about a company's debt repayment default

Effect of Liquidity on Bond Rating

The liquidity ratio is the ability of a company to meet its short-term obligations in a timely manner. There are generally 2 (two) liquidity ratios, namely the current ratio, quick ratio (Acid test Ratio). The measure used in this study is the Current ratio. Current ratio is a commonly used measure of short-term solvency, the ability of a company to meet current debt needs when it matures by using its current assets. The larger this ratio means the more liquid a company is. that Liquidity has an effect on the rating. This means that the higher the liquidity ratio, the better the corporate bond rating (Hidayat, 2018) . liquidity has an effect on bond ratings. that liquidity has a negative effect on bond ratings, (Kalsum hafizhoh & Anggraini, 2021) liquidity has a significant negative effect on bond ratings.

H1 : Liabilities have a significant effect on bond ratings of companies listed on the Indonesia Stock Exchange (IDX).

Effect of Leverage on Bond Rating

Not all companies with a high level of leverage will fail to pay because if the company is able to manage the funds it borrows properly it will be able to generate profits, for example, companies use them to expand, add new products, make investments, open new factories so they can earn profits. which is greater than the loan that the company can use to pay its obligations (Saputri & Purbawangsa, 2016) leverage has an effect on bond ratings because (Kurniawan & Suwarti, 2017) that *leverage* has a significant negative effect on bond ratings. The results of this study are in line with the concept that *Leverage has an* effect on Bond Rating. This ratio measures how far the company uses debt. Some analysts use the term solvency ratio which means measuring the company's ability to meet its financial obligations.

H2 : Leverage has a significant effect on bond ratings of companies listed on the Indonesia Stock Exchange (IDX).

The Effect of Firm Size on Bond Rating

Generally, large companies will get a good rating (investment grade), because companies that get a high rating have a strong financial capacity to meet long-term obligations. company size has no effect on bond ratings (Puspitasari, 2019) . company size has a significant effect on bond ratings. (Nuthasanah, 2019) the determination of the size of the company can be determined based on total sales so the size of the company has a negative effect on bond ratings.
H3 : Firm size has a significant effect on bond ratings of companies listed on the Indonesia Stock Exchange (IDX).

Effect of Auditor's Reputation on Bond Rating

Quality audits increase investor and creditor confidence in the reliability of financial statements in reflecting the company's true performance. Reliable financial reports are needed to assess investment risk. Reliable financial reports increase investor confidence in the company's ability to pay debt and bond interest. For rating agencies, the selection of the big four KAPs gives a positive signal about the company's efforts to convince creditors that the company has implemented sound business practices, including controlling business risks. By using KAP big four, companies are trying to convince rating agencies that default risk is under control so that they hope that the bond ratings they get will be better (Wijaya, 2019) .

Firm size has a positive effect on bond ratings, that the firm size variable has a significant effect on bond ratings (Rukmana, 2016) . Auditor reputation auditor reputation has a positive effect on bond ratings. The use of auditors from one of the public accounting firms, which is the big 4 KAP, has a good impact on the company's bond rating (jermi julianus Agung, Sarita, & Madi, 2017) .

H4 : Auditor reputation has a significant effect on bond ratings listed on the Indonesia Stock Exchange (IDX).

Effect of Liquidity on Bond Prices

Bonds that have fairly high bond liquidity, the changes in bond prices tend to be stable and increase. The reason is because of the frequency of bond trading which fluctuates and causes price changes in a bond but the price change is not considered by investors in deciding to invest in corporate bonds (Framuda, 2019) . liquidity has an insignificant negative effect on bond prices, coupons have a significant positive effect on bond prices (Barrunanto & Toto, 2019) , liquidity has a positive effect on corporate bond prices, maturity time has a negative effect on corporate bond prices (Yuliati, Wahyudi, & Murwarni, 2018) .

H5 : Liquidity has a significant effect on bond prices listed on the Indonesia Stock Exchange (IDX).

The Effect of Leverage on Bond Prices

Every increase in the Leverage ratio, the higher the ratio between debt and equity, the lower the price of bonds in the company due to a decrease in public trust in bonds and vice versa if the leverage ratio, the ratio of debt to equity is small, the bond level will rise due to high public trust. against these bonds (Hidayat, 2018) . leverage has a negative and significant effect on firm value, and firm size has a positive and significant effect on firm value (Anugerah & Suryanawa, 2019) . *leverage* has a significant negative effect on profitability and firm size has a significant positive effect on profitability. *Leverage* , firm size and profitability have a significant positive effect on firm value. Profitability significantly mediates the effect of leverage on firm value and profitability significantly mediates the effect of firm size on firm value (Dewi & Bundanti, 2019) .

H6 : Leverage has a significant effect on bond prices listed on the Indonesia Stock Exchange (IDX).

The Effect of Firm Size on Bond Prices

Large companies have higher bond prices than smaller companies. The larger the size of the company, the smaller the potential risk of the company's inability to meet long-term obligations and the less uncertainty investors have about the company's prospects in the future, so that the size of the company will affect the higher bond prices (Puspitasari, 2019) . firm size has a negative effect on firm value. Profitability has a significant effect on firm value. Simultaneously, firm size and profitability have a positive effect on firm value (Indriyani, 2017),

H7 : Firm size has a significant effect on bond prices listed on the Indonesia Stock Exchange (IDX).

Effect of Auditor's Reputation on Bond Prices

The higher the reputation of the auditor, it is expected that the better the results of the audit of the financial statements. The financial reports audited by big 4 KAPs are considered to be of higher quality when compared to non big 4 KAPs, because the opinions generated by big 4 KAPs will be more independent, so that it will be able to reduce agency risk so that it is possible to reduce default risk which will ultimately stabilize prices . julianus Agung et al., 2017) . Bonds Audit fees have no significant effect on audit quality, audit tenure has no significant effect on audit quality, KAP reputation has no significant effect on audit quality (Novrilia et al., 2019) .

H8 : Auditor reputation has a significant effect on bond prices listed on the Indonesia Stock Exchange (IDX).

Effect of Liquidity on bond prices through bond ratings

Current ratio is a commonly used measure of short-term solvency, the ability of a company to meet current debt needs when it matures by using its current assets. The larger this ratio means the more liquid a company is. that Liquidity has an effect on the rating. This means that the higher the liquidity ratio, the better the corporate bond rating (Hidayat, 2018). Liquidity affects the bond rating. But liquidity not proven to have an effect on bond prices directly or through bond ratings, liquidity has an effect on bond ratings. that liquidity has a negative effect on bond ratings, (Kalsum hafizhoh & Anggraini, 2021)

H9 : Liquidity has a significant effect on bond prices through the ratings of bonds listed on the Indonesia Stock Exchange (IDX).

The Effect of *Leverage* on Bond Prices through Bond Rating

level of *leverage* will fail to pay because if the company is able to manage the funds it borrows properly it will be able to generate profits, for example the company uses it to expand, add new products, make investments, open new factories so that they are able to obtain greater profits from on loans that the company can use to pay its obligations (Saputri & Purbawangsa, 2016) . *leverage* affects bond ratings, *leverage* it is not proven to have an effect on bond prices directly or through bond ratings, that *leverage* has a significant negative effect on bond ratings (Kurniawan & Suwarti, 2017)

H10: Leverage has a significant effect on bond prices through bond ratings listed on the Indonesia Stock Exchange (IDX).

The Effect of Firm Size on Bond Prices Through Bond Rating
Generally, large companies will get a good rating (investment grade), because companies that get a high rating have a strong financial capacity to meet long-term obligations. company size has no effect on bond ratings (Puspitasari, 2019) company size has no effect on bond ratings. However, the leveraged liquidity of the company's size and the reputation of the auditors are not proven to have an effect on bond prices directly or through bond ratings. company size has a significant effect on bond ratings. (Nuthasana, 2019) .
H11: Firm size has a significant effect on bond prices through the ratings of bonds listed on the Indonesia Stock Exchange (IDX).

Effect of Auditor's Reputation on Bond Prices through Bond Rating
Reliable financial reports increase investor confidence in the company's ability to pay debt and bond interest. For rating agencies, the selection of the big four KAPs gives a positive signal about the company's efforts to convince creditors that the company has implemented sound business practices, including controlling business risks. By using KAP big four, companies are trying to convince rating agencies that default risk is under control so that they hope that the bond ratings they get will be better (Wijaya, 2019) . auditor reputation is not proven to affect bond prices directly or through bond ratings. Auditor reputation auditor reputation has a positive effect on bond ratings (jermi julianus Agung et al., 2017) .
H12: Auditor reputation has a significant effect on bond prices through bond ratings listed on the Indonesia Stock Exchange (IDX).

3. Methodology

The population that will be observed in this study are publicly listed companies on the Indonesia Stock Exchange in 2016-2020 which are registered as many as 668 companies. for sampling in this study used random sampling method. random sampling is taking samples from members of the population which is done randomly regardless of the strata that exist in the population.

The source data used in this study are secondary data, namely data obtained indirectly by studying literature books and other scientific readings or documents related to the financial statements under study. Secondary data needed in this study is the financial data under study. obtained from the annual financial reports of companies listed on the IDX for the 2016-2020 period which can be accessed through www.idx.co.id.

Operational Definition of Research Variables and Measurement of Variables

Bond Price

The price of bonds is the result of the present value of the expected cash flows during the period of the bonds, therefore in determining the price of bonds, it is necessary to determine or estimate the value of cash flows during the period and an estimate of the expected yield. Cash flows from investor bonds are coupons and the value of the bonds at maturity.

Bond prices are formulated:

$$\rho = \sum_{t=1}^{n} \frac{Ct}{(1+i)^t} + \frac{Po}{(1+i)^n}$$

Bond Rating

Bond ratings are an indicator of the timeliness of principal and interest payments on bonds that reflect the scale of risk of the bonds being traded. Bond ratings are generally divided into two ratings, namely investment grade (AAA, AA, A, BBB) and non-investment grade (BB, B, CCC, D). The dependent variable in this study is different from previous studies because in this study the researchers used the criteria for the category of bond ratings that were high investment grade and low investment grade. This was due to the unavailability of non-investment grade data (BB, B, CCC, D) during the study period. the banking companies that are sampled. Thus, the idAAA, idAA, idA, and idBBB bond ratings are assigned a value of 2 while the idBB, idB, idCCC and idD bond ratings are assigned a value of 1.

Liquidity

Current Ratio (Current Ratio) is a ratio to measure the company's ability to pay short-term obligations or debts that are due immediately when billed in their entirety. **(Princess & Ukhriyawati, 2016) .** where the *Current Ratio* can be formulated as follows:

CR = Current Assets / Current Liabilities.

Leverange

Current Ratio (Current Ratio) is a ratio to measure the company's ability to pay short-term obligations or debts that are due immediately when billed in their entirety. **(Princess & Ukhriyawati, 2016) .** where the *Current Ratio* can be formulated as follows:

DAR= Total Debt / Total Assets.

Company Size
In general , companies that have relatively large total assets can operate with a higher level of efficiency than companies with low total assets. Company size can be formulated as follows:

Company Size = LN (Total Assets)

Auditor Reputation
That a reputable auditor has a high level of trust from the public or the public. *Now* , in a study that primarily examines the effect of auditor reputation on stock *underpricing* during an IPO, the measuring instrument generally used to measure auditor reputation is based on the auditor's capacity and big name . In this case it is KAP *The Big Four.* So, for a Public Accounting Firm (KAP) which is included in *The Big Four* , it will be given a value of 2. While a Public Accounting Firm (KAP) which is not included in *The Big Four* will be assigned a value of 1.

Analysis Data Analysis Method
Descriptive statistics
Statistics (descriptive test) is a test used to analyze data by describing or describing the data that has been collected as it is without intending to make conclusions that apply to the public or generalizations.

Panel Data Regression Estimation Model
Chow test
Of this specification test show the Chi-square probability is more than 0.05, then the model chosen is the Common Effect. On the other hand, if the Chi-square probability is less than 0.05, the model that should be used is Fixed Effect. The Chow test is used to choose between the Fixed Effect model or the Common Effect model that should be used.

Housman test
Of this specification test show a random cross-section probability of more than 0.05, the model chosen is the Random Effect. On the other hand, if the probability of a random cross-section is less than 0.05, the model that should be used is the Fixed Effect.
Analysis Techniques

Panel data regression analysis in this study aims to determine the effect of liquidity (CR), *leverage* (DAR), firm size (*Size*) and auditor reputation (KAP) with bond rating (RATING) as an intervening variable on bond prices (P) in companies that listed on the Indonesia Stock Exchange for the period 2016 – 2018. Equation in this research can be formulated . The equation for panel 1 data regression analysis in this study can be formulated as follows:

Rating = + $_1$ CR+ $_2$ DAR + $_3$ SIZE + $_4$ KAP + e

P = + $_1$ CR+ $_2$ DAR + $_3$ SIZE + $_4$ CAP + $_5$ RATING + e

4. Empirical Findings/Results

After all data and information has been collected, the data processing stage can be carried out immediately. The data processing is carried out with the help of the Eviews 9 program. Based on the stages of data processing that has been carried out, a summary of descriptive statistics of each research variable used is shown in table 1 as follows:

Table 1. Descriptive Statistical Results

	Y_P	X1_CR	X2_DAR	X3_SIZE	X4_KAP	Z_RATING
Mean	98.40473	1.418750	0.685105	20.57642	1.641667	1.591667
Median	98.60975	1.316406	0.692406	18.58243	2000000	2000000
Maximum	110.2570	3.772268	2.899874	32.45446	2000000	3,000000
Minimum	84.62563	0.150824	0.135460	14.41237	1.0000000	1.0000000
Std. Dev.	4.846264	0.674009	0.260902	5.127620	0.480513	0.533338
Observations	240	240	240	240	240	240

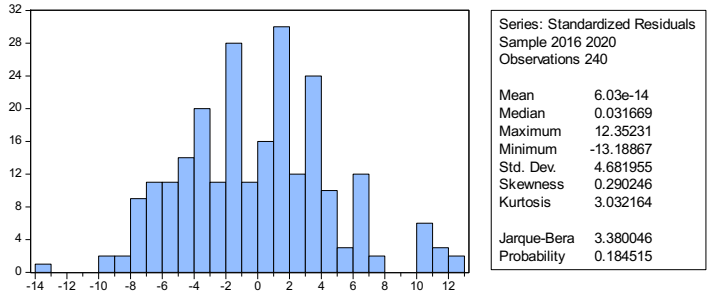
Notes: X1: liquidity, X2: leverage, X3: firm size, X4: auditor reputation, Y: bond price Z: bond rating

source : the results of data processing with eviews 9

Based on table 1 above, it describes descriptively the variables in this study, with a total of 240 observations on bond prices having an average (*mean*) of 98,40473 with a *standard deviation* of 4.846264, and the highest bond price of 110.2570 and the highest bond price is 84,62563. the liquidity variable has an average (mean) of 1.418750 with a standard *deviation* of 4.846264 and the highest liquidity is 3.772268 and the lowest liquidity is 0.150824. the *leverage variable* has an average (mean) of 0.685105 with a standard *deviation* of 0.260902 and the highest *leverage* of 2.899874 and the lowest *leverage* of 0.135460. The company size variable has an average (mean) of 20.57642 with a standard *deviation* of 5.127620 and the highest firm size of 32,45446 and size the lowest company is 14,41237. auditor reputation variable has an average

(mean) of 1.641667 with a standard *deviation* of 0.480513 and a company that has a maximum auditor reputation of 2,000000 and a minimum auditor reputation of 1,000000. on the bond rating with an average of 1.591667 the lowest bond rating is 1.0000000 and the highest rating is 3000000 with a standard deviation of 0.533338.

Classic Assumption Test Results
Normality Test Results



source : the results of data processing with eviews 9

Figure 1 Normality Test

Based on *the results of the* normality test using the Jarque - Bera statistical test there is picture 1 above *,* it can be seen that the probability is *Jar q u e - Bera is 0.641674* , which is smaller than the significance value (α) of 0.05 . It can be concluded that the residual data in this study is normally distributed .

Multicollinearity Test Result

Table 2. Multicollinearity Test Results

	Y_P	X1_CR	X2_DAR	X3_SIZE	X4_KAP
Y_P	1.0000000	0.171319	-0.169640	-0.092036	-0.307010
X1_CR	0.171319	1.0000000	-0.370858	0.227781	-0.306357
X2_DAR	-0.169640	-0.370858	1.0000000	-0.160451	0.167680
X3_SIZE	-0.092036	0.227781	-0.160451	1.0000000	-0.219791
X4_KAP	-0.307010	-0.306357	0.167680	-0.219791	1.0000000
Z_RATING	-0.064016	-0.060577	0.091661	-0.029444	0.014422

Notes: X1: liquidity, X2: leverage, X3: firm size, X4: auditor reputation, Y: bond price Z: bond rating

source : the results of data processing with eviews 9

Based on table 2 above, it can be seen that each of the *independent, dependent* and intervening variables shows a large value of 0.08. So it can be concluded that there is multicollinearity to the data being tested .

Heteroscedasticity Test Results

Table 3. Heteroscedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	2.945096	0.392395	7.505443	0.0000
X1_CR	0.617360	0.093809	6.581019	0.0000
X2_DAR	0.424672	0.193621	2.193315	0.0293
X3_SIZE	-0.038630	0.013909	-2.777382	0.0059
X4_KAP	0.011044	0.127010	0.086957	0.9308

source : the results of data processing with eviews 9

Based on table 4.4 above, it can be seen that the value is above or greater than 0.05 , on the auditor reputation variable so it can be concluded that the auditor reputation variable in this study has been free from heteroscedasticity symptoms, while liquidity, leverage, and company size are small from 0.05 so it can be concluded that the occurrence of heteroscedasticity symptoms .

Panel Data Regression Analysis Results

Table 4 Panel Data Regression Analysis Results Model 1

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	1.727460	0.242966	7.109877	0.0000
X1_CR	-0.062694	0.053104	-1.180576	0.2390
X2_DAR	0.183188	0.098914	1.851987	0.0653
X3_SIZE	-0.002095	0.007007	-0.299020	0.7652
X4_KAP	-0.067074	0.072787	-0.921501	0.3577

source : the results of data processing with eviews 9

The results of the analysis in table 4 show that liquidity (CR) has a t-statistic value of -0.062694 with the calculation probability value obtained is equal to 0.2390 > 0.05 (5%), then H0 is accepted, Ha $_{\text{is rejected}}$. So it can be concluded that liquidity (CR) has no significant effect on the bond rating (rating). that leverage (DAR) has a t-statistic value of 0.183188 with the calculation probability value obtained is equal to 0.0653 > 0.05 (5%), then H0 is accepted, Ha $_{\text{is rejected}}$. So it can be concluded that leverage (DAR) has no significant effect on the bond rating (rating). that the size of the company (*Size*) has a t-statistic value of -0.002095 with the calculation probability value obtained is equal to 0.7652 > 0.05 (5%), then H0 is accepted, Ha $_{\text{is rejected}}$. So it can be concluded that company size (*Size*) has no significant effect on the bond rating (rating). that auditor reputation (KAP) has a t-statistic value of -0.067074 with the calculation probability value obtained is equal to 0.3577 > 0.05 (5%), then H0 is accepted, Ha $_{\text{is rejected}}$. So it can be concluded that auditor reputation (KAP) does not have a significant effect on the bond rating (rating).

Table 5 Panel Data Regression Results Model 2

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	109.1097	0.970006	112.4835	0.0000
X1_CR	0.429741	0.233217	1.842666	0.0666
X2_DAR	-1.956725	0.753213	-2.597839	0.0100
X3_SIZE	-0.193781	0.032383	-5.984042	0.0000
X4_KAP	-3.331726	0.315117	-10.57298	0.0000
Z_RATING	-0.343180	0.251780	-1.363017	0.1742

source : the results of data processing with eviews 9

The results of the analysis in table 5 show that liquidity (CR) has a t-statistic value of 0.429741 with the calculation probability value obtained is equal to 0.0666 > 0.05 (5%), then H0 is accepted, Ha $_{\text{is rejected}}$. So it can be concluded that liquidity (CR) has no significant effect on bond prices (P). that leverage (DAR) has a t-statistic value of -1.956725 with the calculation probability value obtained is equal to 0.0100 > 0.05 (5%), then H $_{0\ \text{is}}$ rejected, H $_{a\ \text{is}}$ accepted. So it can be concluded that leverage (DAR) has a significant positive effect on bond prices (P). shows that the size of the company (*Size*) has a t-statistic value of -0.193781 with the calculation probability value obtained is equal to 0.0000 > 0.05 (5%), then H0 is accepted, Ha $_{\text{is rejected}}$. So it can be concluded that Firm size (*Size*) has a significant positive effect on bond prices (P). that auditor reputation (KAP) has a t-statistic value of -3.331726 with the calculation probability value obtained is equal to 0.0000 > 0.05 (5%), then H0 is accepted, Ha $_{\text{is rejected}}$. So it can be concluded that auditor reputation (KAP) has a significant positive effect on bond prices (P).

Path Analysis
Path Coefficient Analysis Model I

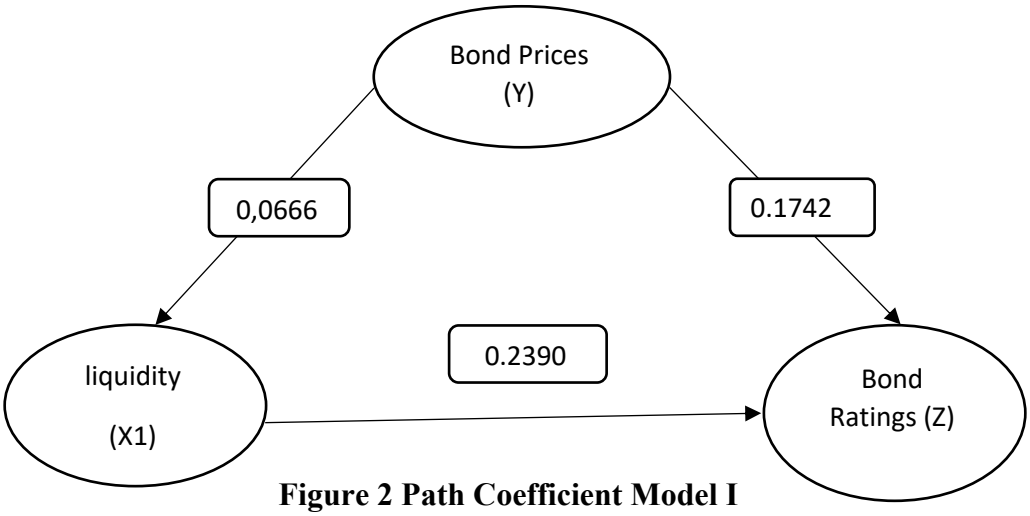


Figure 2 Path Coefficient Model I

Figure 2 shows the direct effect of liquidity on bond prices of 0.0666. Meanwhile, the direct effect of liquidity on bond prices through bond prices is 0.2390 X 0.1742 = 0.0416. From the calculation results obtained indicate that the indirect effect of liquidity on bond prices through bond ratings is smaller than the effect of liquidity on bond prices. With these results, it can be concluded that bond ratings are not an intervening variable between liquidity and bond ratings.

Path Coefficient Analysis Model II

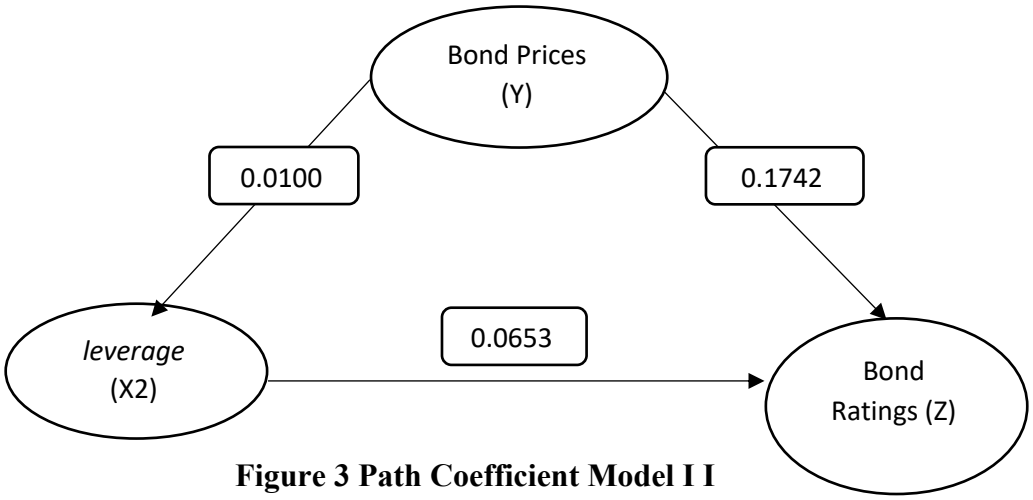


Figure 3 Path Coefficient Model I I

Figure 3 shows the direct effect of *leverage* on bond prices of 0.0100. Meanwhile, the direct effect of *leverage* on bond prices through bond ratings is 0.0653 X 0.1742 = 0.0113. From the calculation results obtained indicate that the value of the direct influence of *leverage* on prices through bond ratings is greater than the value of the direct influence of *leverage* on bond prices. With these results, it can be concluded that bond ratings are an intervening variable between *leverage* and bond prices.

Path Coefficient Analysis Model III

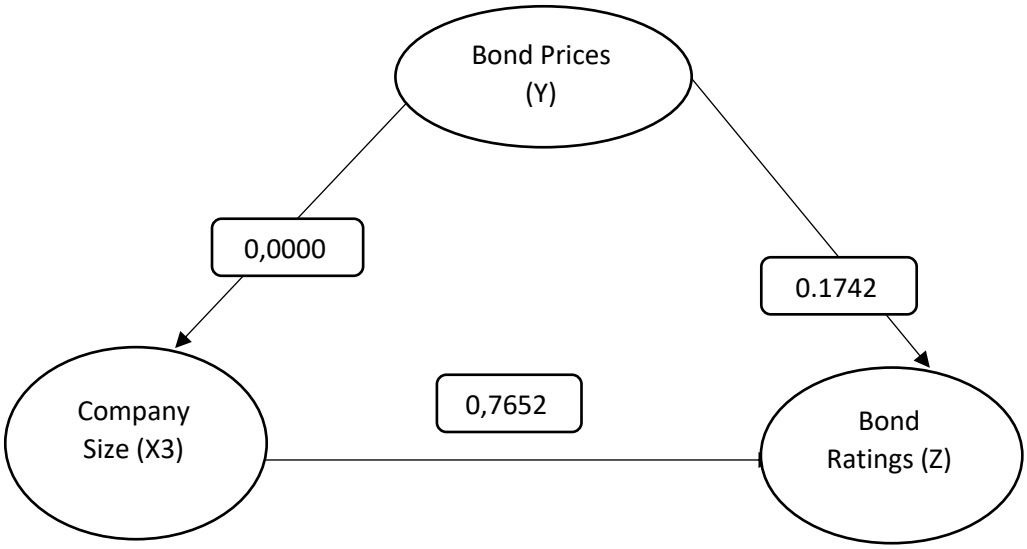


Figure 4 Path Coefficient Model III

Figure 4 shows the direct effect of firm size on bond prices of 0.000. Meanwhile, the direct effect of firm size on firm prices through bond ratings is 0.7652 X 0.1742 = 0.1332. From the calculation results obtained indicate that the direct influence of company size on company prices through bond ratings is greater than the value of the direct influence of company size on bond prices. With these results, it can be concluded that bond ratings are an intervening variable between firm size and bond prices.

Path Coefficient Analysis Model VI

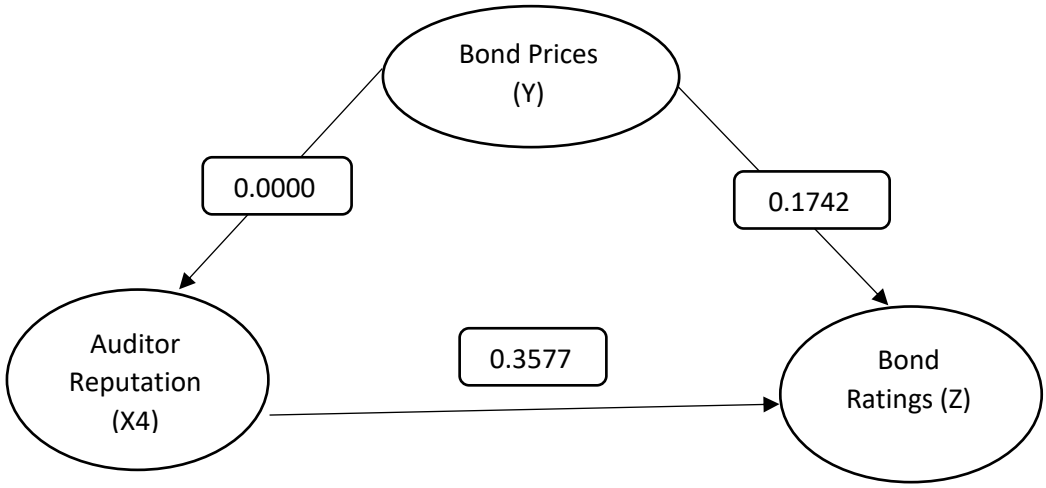


Figure 5 Path Coefficient Model I I

Figure 5 shows the direct effect of auditor reputation on bond prices of 0.000. Meanwhile, the direct effect through bond prices is 0.3577 X 0.1742 = 0.0623. From the calculation results obtained indicate that the value of the direct influence of auditor reputation on bond prices through bond ratings is greater than the value of the direct influence of auditor reputation on bond prices. With these results, it can be concluded that bond ratings are an intervening variable between auditor reputation and bond prices.

5. Conclusions

Based on the analysis by discussing the results of hypothesis testing it can be put forward several important conclusions which are the core answers to the problems discussed in this study, namely:

1. Liquidity does not affect the bond rating of companies listed on the IDX from 2016 to 2020.
2. *Leverage* does not affect the bond rating of companies listed on the IDX from 2016 to 2020.
3. Company Size does not affect the bond rating of companies listed on the IDX from 2016 to 2020.
4. Auditor reputation has no effect on bond ratings of companies listed on the IDX from 2016 to 2020.

5. Liquidity has no effect on bond prices in companies listed on the IDX from 2016 to 2020.
6. *Leverage* has a positive and significant impact on bond prices in companies listed on the IDX from 2016 to 2020.
7. Company Size Has a Significant Positive Effect on Bond Prices in companies listed on the IDX from 2016 to 2020
8. Auditor reputation has a significant positive effect on bond prices in companies listed on the IDX from 2016 to 2020.
9. Liquidity does not have a significant effect on bond prices through bond ratings on companies listed on the IDX from 2016 to 2020.
10. *Leverage* has a significant effect on bond prices through bond ratings on companies listed on the IDX from 2016 to 2020.
11. Company Size Has a Significant Influence on Bond Prices Through Bond Ratings on companies listed on the IDX from 2016 to 2020.
12. Auditor Reputation Significantly Affects Bond Prices Through Bond Ratings on companies listed on the IDX from 2016 to 2020.

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