

The Impact of Corporate Governance Implementation on Public Company Bond Ratings and Yield: a Case of Indonesia

Mafudi¹, Neginia Kencono Putri²

Abstract: This study aims to examine the effect of the implementation of corporate governance on bond ratings and yields. We used the sample of firms that issued bonds in Indonesia Stock Exchange during the period 2007-2011. Pool the Data observation period started on January 1, 2007 to December 31, 2011. Data obtained from PT PEFINDO ratings that bond rating is an independent institution in Indonesia. Data were analyzed by using logistic regression analysis (logit) and multivariate regression. Logit analysis is used to test the effect of corporate governance on bond ratings. Multivariate regression analysis is used to test the effect of corporate governance on bond yields. The results show that not all elements of corporate governance ratings and bond yields affect. The number of independent commissioners' positive effect on bond ratings and a negative effect on bond yields. In addition, the existence of an audit committee, statistically significant negative effect on bond yields. This shows that the existence of an audit committee is a variable to be considered by investors in the bond investment.

Keywords: corporate governance; bond ratings in Indonesia; bond yield

JEL Classification: M40; M41

1. Introduction

Bond is a debt instrument offered by the issuer which is also called the debtor or borrower to repay to the investor (lender) amount borrowed plus interest over a specified year. Until 2011, the Indonesia Stock Exchange had 102 listed companies are issuing bonds and 220 bonds traded. This shows the bond market is an instrument that can be used as an alternative investment.

Investors prefer to invest in bonds rather than stocks for two reasons, namely: (1) the volatility of the stock is higher than the bond, thereby reducing the attractiveness of investing in stocks, and (2) bonds offer a positive rate of return on fixed incomes (fixed income), so as to guarantee the bonds more than stocks. In

¹ Drs. M.Si., Ak.; Senior Lecturer at Jenderal Soedirman University; HR, Address: Boenyamin Street 708 Purwokerto, Central Java, Indonesia, Tel.: +62281636790, e-mail: mafudi@unsoed.ac.id.

² SE., M.Si., Ak.; Lecturer at Jenderal Soedirman University; HR, Address: Boenyamin Street 708 Purwokerto, Central Java Address City, Indonesia, Tel.: +628121569611, Corresponding author: negina_kp@yahoo.com.

determining bond investments, investors face the problem of information caused by varying the characteristics of the bond issuer. Rating bonds issued by an independent agency to help reduce the problem of information. In addition to the ratings, other factors considered by investors return bonds are bonds.

In 2001, the National Committee on Corporate Governance published guidelines for good corporate governance. This guide aims to make the business world has adequate basic reference regarding the concept and implementation of good corporate governance patterns in accordance with the international pattern of general and Indonesia in particular. Researches on corporate governance in Indonesian bonds are still rare research. This is due to lack of data and knowledge bonds to bond investors.

The purpose of this study was to test the effect of the application of corporate governance on bond ratings and yields. The results of this study are expected to provide insight to the reader in making an investment in bonds, especially in considering the application of corporate governance on corporate publishers. This study raised the issue of the influence of corporate governance on bond ratings and yields.

2. Literature Review

2.1. Corporate Governance

Corporate governance arising from the company's interests to ensure that the party funding (principal/investor) that invested funds are used appropriately and efficiently. In addition to corporate governance, the company gave the assurance that the management (agent) to act in the best interests of the company.

Implementation of corporate governance provides four benefits (FCGI, 2001), namely: (1) improve corporate performance through the creation process of making better decisions, improve the efficiency of the company, and further improve services to stakeholders, (2) facilitate obtaining funds cheaper financing and not rigid (because of the belief) that will ultimately improve corporate value, (3) restore the confidence of investors to invest in Indonesia, and (4) shareholders will be satisfied with the performance of the company as well as will enhance shareholders' s values and dividends.

One of the principles of corporate governance, according to the Organization for Economic Co-operation and Development (OECD) is related to the role of the board of commissioners. Form commissioners depending on the legal system adopted.

2.2. Bond Rating

The Bond represents medium-term debt securities that are transferable long, that contains a promise from the issuing party to pay interest in return for a certain period and repay the principal amount at a specified time to the purchasers of the bonds. Bonds provide a fixed income to the owner during the period of validity of the debt.

Bond rating is an indicator of the timeliness of payment of principal and interest bond debt. Bond ratings also reflect the scale of the risk of all bonds traded. Thus the bond ratings indicate the scale of the security bond to pay principal and interest obligations in a timely manner. The higher the rank, the more shows that the bonds avoid the risk of default.

2.3. Bond Yield

Another factor that is used as a consideration in investment bonds is the yield. Yield is a measure of factors that annual returns will be accepted by the investor, or the results will be obtained if the investors to invest their funds in bonds. There are two terms in the determination of yield, the current yield and yield to maturity (Fabozzi, 2000). Current yield is the annual coupon relation to the market price of bonds. Current yield formula is:

Current Yield = annual dollar coupon interest current yield/price

Yield to maturity (YTM) is the rate of return that would be obtained if the investor has a bond until maturity.

2.4. Agency Theory

Agency relationship is a contract between the principal agents. The essence of the agency relationship is the separation between ownership (principal/investor) and control (agent/manager). Ownership is represented by investors who delegate authority to the agent in this case the manager to manage the wealth of investors. Investors have hopes that the delegation of management authority, they would benefit by increasing investor wealth and prosperity.

Agency relationship can cause problems when the parties involved have different objectives. Owners of capital require increasing the wealth and prosperity of the owners of capital, while the manager also wants increased prosperity for managers. Thus arose a conflict of interest between the owners (investors) with the manager (agent). The contract is made between the owner of the managers are expected to minimize the conflict between the two interests.

2.5. Hypotheses

Evans et al. (2002) examined the relationship between corporate governance structure and corporate performance degradation with the sample companies in Australia. Evans et al. (2002) reported that there is no positive relationship between the ratio statistically significant independent commissioners with the company's performance.

Bhojraj and Sengupta (2003) examined the effect of corporate governance on bond ratings and yields. In this study, a proxy of corporate governance and institutional ownership is an independent commissioner. The results obtained by these studies indicate that the percentage of institutional ownership and the proportion of independent commissioners positively associated with bond ratings. While the percentage of institutional ownership and the proportion of independent commissioners negatively related to bond yields.

Therefore, the hypothesis to test the effect of institutional ownership and independent commissioners' ratings and bond yields are:

H1a:

There is a positive effect between institutional ownership with bond ratings.

H1b:

There is a positive effect between the independent commissioners with bond ratings.

H2a:

There is a negative effect between institutional ownership with bond yields.

H2b:

There is a negative effect of the independent commissioner with bond yields.

Cotter and Silvester (2003) study focuses on the composition of the board of directors and the supervisory committee (audit committee and compensation committee) in companies in Australia. This study proves that there is a positive relationship between the proportion of independent and oversight committee on the performance of companies with multiple regression analysis.

The effect of corporate governance and audit committee studied by Turley and Zaman (2004), to evaluate and synthesize some previous research on corporate governance relating to the audit committee. The study reported that evidence suggests a positive relationship between the existence of an audit committee with the quality and performance of the company's financial statements.

Therefore, the hypotheses to test the effect of the audit committee of the rank and bond yields are:

H1c:

There is a positive effect between audit committee with bond ratings.

H2c:

There is a negative effect of the audit committee with bond yields.

Sharma (2004) examined the effect of the board characteristics and ownership of the institution fraud. The results found in this study suggest that managerial ownership is not a statistically significant effect on the existence of fraud in the company.

Hermalin and Weisbach (1991), examined the effect of the composition of the test board of commissioners and the incentives that the company's performance. This study uses managerial ownership as independent variables. The results of this study showed that the higher the percentage of managerial ownership will degrade the performance of the company.

Based on these studies, the hypothesis to test the effect of managerial ownership on bond yields and ratings are:

H1d:

There is a negative effect between managerial ownership with bond ratings.

H2d:

There is a positive effect between managerial ownership with bond yields.

This study uses audit quality, firm size, and debt to equity ratio to the control variables, as done by Sanders and Allen (1993), Raman and Wilson (1994), Ziebart and Reiter (1992), and Bhojraj and Sengupta (2003).

3. Research Method

3.1. Sample Selection and Data Collection

This study used samples of all bonds outstanding in the period 2007-2011. The period of observation data pool made from 1 January 2007 to 31 December 2011. Data obtained ratings of PT PEFINDO which is an independent agency bonds in Indonesia. Purposive sample selection is done, the criteria bonds issued by companies that are not included in the banking industry, finance, and insurance; bonds issued and outstanding during the observation period; bonds issued by companies listed on the Indonesia Stock Exchange in the period 1 January 2007 through December 31, 2011; bonds are still active on the market and listed on the Indonesia Stock Exchange OTC FIS, and the bond issuer company listed in the rating of the bonds issued by PT PEFINDO during the period of observation.

3.2. Variables Measurement

3.2.1. Dependent Variable

Variable ratings (RATING) is determined by ranking classifies by category ranking. Is represented by a dummy variable, which is 0 if the entry in the category of speculative grade (high default) and 1 if in the investment grade category (default is low). Bond yield (YTM) calculated with the approach yield to maturity (YTM). YTM is the profit earned by the bondholders until the bond matures. YTM has accounted for the element of interest and the time value of money.

3.2.2. Independent Variable

Institutional ownership (INST) is a proxy of corporate governance. This variable is the amount of shares held by institutions divided by total shares outstanding. Test results are expected to rank the signs of a positive coefficient. Instead the results of tests on bond yields are expected negative coefficient sign.

Independent commissioner (KIND) is one proxy of corporate governance. This variable is measured by the ratio between the numbers of independent commissioners with the number of commissioners on the publishing company. Test results are expected to rank the signs of a positive coefficient. Instead the results of tests on bond yields are expected negative coefficient sign.

The audit committee (KAUD) is a committee formed by the commissioner as required under guidelines established corporate governance. Measurements made by the audit committee existence of audit committees on corporate issuers. The audit committee is measured by ordinal scale, e.g. 0 if there is no audit committee and 1 if there is an audit committee. Test results are expected to rank the signs of a positive coefficient. Instead the test results are expected to yield a negative coefficient sign.

Managerial ownership (KMAN) is the presence or absence of commissioners and directors who hold shares in the companies where they served as commissioners and directors. It uses a dummy variable, which is 0 if there is no managerial ownership and 1 if there is managerial ownership. In this study the managerial ownership is expected to negatively affect the rating of the bonds, and positively related to bond yields.

3.3. Model Analysis

This study uses logistic regression analysis techniques (logit) and multivariate regression. Logit analysis is used to examine the effect of

corporate governance on bond ratings (Kamstra et al., 2001). Multivariate regression analysis is used to examine the effect of corporate governance on bond yields, referring to tests performed by Jewell and Livingston (1998) and research Bhojraj and Sengupta (2003).

The research model used in testing hypothesis 1 is:

$$\text{RATING}_{it+1} = a_0 + a_1\text{INST}_{it} + a_2\text{KIND}_{it} + a_3\text{KAUD}_{it} + a_4\text{KMAN}_{it} + a_5\text{KUA}_{it} + a_6\text{LTA}_{it} + a_7\text{DER}_{it} + \varepsilon$$

Description:

RATING_{it} +1 = rating of corporate bonds issued by PT PEFINDO, in April after years of observation. These variables are categorical, e.g. 0 = speculative grade, 1 = investment grade.

INST = institutional ownership, as indicated by the percentage of common stock owned by institutions.

KIND = independent commissioners, as indicated by the percentage of the commissioners who have no connection with the company's management.

KAUD = audit committee, is a dummy variable, 0 if there is no audit committee, 1 if there is an audit committee.

KMAN = managerial ownership, a dummy variable, 0 if there is no managerial ownership, 1 if there is managerial ownership.

KUA = audit quality, a dummy variable, 0 if audited by non-Big 4 Firm, Firm 1 if audited by Big 4.

LTA = natural logarithm of total asset size of the firm.

DER = ratio of total liabilities divided by total equity.

While the research model used in testing hypothesis 2 is:

$$\text{YTM}_{it+1} = a_0 + a_1\text{INST}_{it} + a_2\text{KIND}_{it} + a_3\text{KAUD}_{it} + a_4\text{KMAN}_{it} + a_5\text{KUA}_{it} + a_6\text{LTA}_{it} + a_7\text{DER}_{it} + \varepsilon$$

Description:

YTM_{it} +1 = yield corporate bonds are calculated based on the price of bonds in April after years of observation.

INST = institutional Ownership, as indicated by the percentage of common stock owned by institutions.

KIND = independent Commissioners, as indicated by the percentage of the commissioners who have no connection with the company's management.

KAUD = Audit Committee, is a dummy variable, 1 if there is an audit committee, 0 if there is no audit committee.

KMAN = Managerial Ownership, a dummy variable, 0 if there is no managerial ownership, 1 if there is managerial ownership.

KUA = audit quality, a dummy variable, 0 if audited by non-Big 4 Firm, Firm 1 if audited by Big 4.

LTA = natural logarithm of total asset size of the firm.

DER = ratio of total liabilities divided by total equity

4. Results and Discussion

4.1. Hypothesis 1 Testing Results

After testing, the test results for the Logit first hypothesis is as follows:

Table 1. Logit Testing for First Hypothesis (H1)

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a) INST	-0.002	0.041	0.003	1	0.960	0.998
KIND	0.073	0.036	3.950	1	0.047	1.07
KAUD	-0.098	1.07	0.008	1	0.927	0.906
KMAN	1.00	1.05	0.915	1	0.339	2.73
KUA	2.11	1.13	3.497	1	0.061*	8.36
LTA	-0.939	0.418	5.050	1	0.025	0.391
DER	-0.001	0.002	0.675	1	0.411	0.999
Constant	26.8	12.1	4.847	1	0.028	0.541

* Significant at $\alpha = 0.10$

From these results, Logit equation can be expressed as follows:

$$Ln \frac{P}{1-P} = 26,813 - 0,002INST + 0,073 KIND - 0,098 KAUD + 1,006 + KMAN + 2,119 KUA - 0,939 LTA - 0,001 DER$$

Testing of hypothesis 1 proves that independent commissioners showed statistically significant results at $\alpha = 0.05$, is shown with a significance of 0.047 (<0.05). Based on this evidence, we can conclude that this study reject H1b. Signs positive coefficient is consistent with the expected investigators that the greater the number of independent commissioners' bond ratings will be higher. Positive coefficient is consistent with research Bhojraj and Sengupta (2003) which showed that the number of independent commissioners positively associated with bond ratings. The results of this study indicate that the bond ratings of the number of independent commissioners as a regulatory agency and a variable value of the company as a major determinant of bond ratings.

4.2. Hypothesis 2 Testing Results

Analysis of the test for the second hypothesis with multiple regression is as follows:

Table 2. Multiple Regression Testing Second Hypothesis (H2)

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Error	Beta		
(Constant)	10.928	4.366		2.503	0.018
INST	0.010	0.013	0.051	1.775	0.345
KIND	-0.054	0.016	-0.279	-3.447	0.001
KAUD	-2.106	0.419	-0.370	-5.025	0.002
KMAN	-0.262	0.410	-0.046	-0.639	0.534
KUA	-2.569	0.572	-0.429	-4.488	0.000
LTA	0.414	0.141	0.244	2.930	0.005
DER	-0.002	0.001	-0.125	-1.597	0.324

From these results, the results of multiple regression equations test the second hypothesis is stated as follows:

$$\text{YTM} = 10,928 + 0,010\text{INST} - 0,054\text{KIND} - 2,106\text{KAUD} - 0,262\text{KMAN} - 2,569\text{KUA} + 0,414\text{LTA} - 0,002\text{DER}$$

Testing of hypothesis 2 proves that independent commissioners, audit committee, and audit quality showing the results are statistically significant at $\alpha = 0.05$, is shown with a significance of 0.001; 0.002; 0.000 (<0.05). Signs negative coefficient is consistent with the expected investigators that the greater the number of independent commissioners lowers the bond yield. The negative coefficient is consistent with research Bhojraj and Sengupta (2003) which showed that the number of independent commissioners negatively related to bond yields. In accordance with the H1b which shows that the number of independent commissioners positive effect on the ratings, as well as testing of H2b indicating that the number of independent commissioners negative effect is statistically significant for bond yields. This shows that the number of independent commissioners is one of the variables to be considered investors in investing in bonds. The numbers of independent commissioners are expected to maximize the company's value. The higher the value of the company will reduce risk and raise the price of bonds, so bond yields lower.

Tests on the H2c prove that the existence of audit committee shows the results are statistically significant at $\alpha = 0.05$, is shown with a significance of 0.000. Based on

this evidence, we can conclude that this study refused H2c. The negative coefficient signs are as expected by the researchers that the audit committee will lower the bond yield. H2c Test results showed that the presence of audit committee will lower the company's risk. The existence of an audit committee increases the value of the company, so that investors would be willing to buy the bonds at a higher price. Thus, if the risk was low, bond prices high, the yield at the lower.

5. Conclusion and Future Research

This study aims to examine the effect of the implementation of corporate governance on bond ratings and yields. This study uses the sample of firms that issued bonds in Indonesia Stock Exchange during the period 2006-2008. Pool the data observation period started on January 1, 2006 to December 31, 2008. Data obtained from PT PEFINDO ratings that bond rating is an independent institution in Indonesia.

Data were analyzed by using logistic regression analysis (logit) and multivariate regression. Logit analysis is used to test the effect of corporate governance on bond ratings. Multivariate regression analysis is used to test the effect of corporate governance on bond yield.

Based on the results of testing the hypothesis, this study provides some empirical evidence in the form of: first, not all elements of corporate governance rankings and influence on bond yields. Second, the number of independent commissioners' positive effect on bond ratings and the negative impact on bond yields. Third, the existence of the audit committee was statistically significant negative effect on bond yields. This suggests that the existence of an audit committee variables considered by investors in investment bonds.

For further research, sample selection should include banking, finance and insurance, and include all listed companies to issue bonds in the capital market in Indonesia. Future studies can also use the ratings and bond yields in the aftermath of the announcement of the implementation of corporate governance.

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