

# Effect of Firm Size, Leverage and Institutional Ownership on Disclosure Enterprise Risk Management (ERM)

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**Abstract**— This study aims to determine the effect of firm size, leverage and institutional ownership on ERM disclosure. This research is a quantitative research using multiple linear regression analysis method with the help of SPSS version 24 software. The population in this study are mining sector companies listed on the Indonesia Stock Exchange (IDX ) in 2016-2017. The selection of research samples using purposive sampling and the number of samples used were 61 companies. The results showed that: (1) company size had a positive and significant effect on ERM disclosure; (2) leverage does not affect ERM disclosure; (3) institutional ownership has a positive and significant effect on ERM disclosure.

**Index Terms**- firm size, leverage, institutional ownership, ERM

## I. INTRODUCTION

At the moment the competition in the business world is getting tighter and riskier. Plus the existence of globalization in the economic field gives companies the opportunity to compete with each other into a wider business environment, such as the existence of the MEA (Asean Economic Community) which is a free market in the Southeast Asia region which is an opportunity and challenge for the company to further improve its business (Main, 2017). The wider the business environment, the higher the risk that will be borne by the company.

The phenomenon of financial cases of global concern was WorldCom in 2002 and Enron in 2001, where the company's bankruptcy was a clever financial game by company executives. Other financial cases also occurred in Japan, Toshiba companies falsified financial reports because Toshiba had difficulty reaching profit targets since 2008 when the global crisis occurred. In Indonesia, financial cases were carried out by PT Kimia Farma in 2001 by marking up net income in the 2001 financial statements of Rp 132 billion, which should only have a profit of Rp 99 billion. ). Some cases of financial scandals are examples of internal company risks that can occur due to weak corporate risk management (enterprise risk management). The implementation of Enterprise Risk Management (ERM) in the company will help control management activities so that companies can

minimize the occurrence of financial scandal cases that can harm the company.

Some of the factors indicated to affect ERM disclosure are company size, leverage and institutional ownership. The first factor is the size of the company, the larger the size of the company, the greater the operation and investment activities carried out by the company. Large-sized companies have more complex business activities which may have a greater impact on the wider community and the environment, so that ERM disclosures are made to show the company's accountability to the public. The second factor is leverage, the level of leverage shows how the company is at risk for its debt (Gunawan, 2016). Capital obtained from loans from external parties or creditors, certainly requires accountability of the company. In these conditions the company will make higher disclosures for the needs of creditors (Rafiudin, 2014). The third factor is institutional ownership, the higher the institutional ownership of a company, the higher the supervision on management performance because it can control management behavior so that the company can run its operations more effectively and also reduce the risks faced.

Mining sector companies in Indonesia are one of the sectors that have influence in national development because they act as providers of energy resources such as coal, oil and natural gas, metals and minerals, and rocks that are indispensable to the community.

From the explanation above, the purpose of this study was to examine the effect of firm size, leverage and institutional ownership on ERM disclosures on mining companies listed on the Indonesia Stock Exchange

## II. LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

### A. ERM Disclosures

Enterprise Risk Management (ERM) is a strategy or planning Firm that is carried out to manage and evaluate risks in an integrated manner (Mimba, 2017). Risk management information is very beneficial for stakeholders, especially for investors because this information is used to carry out risk analysis so that the returns expected by investors can be fulfilled. ERM disclosure is a Firm way to inform users of annual reports about what threatens the Firm, so that it can be used as a consideration in decision making.

### B. Firm Size

Firm size is a scale that can classify the size of a Firm according to various ways including total assets, log size,

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stock market value and others (Mawikere, 2011).

C. Leverage

Leverage is a measure that shows the amount of fixed income securities (debt and preferred stock) used in the Firm's capital structure (Sanjaya, 2015). Leverage is a policy that relates to a Firm's decision to finance a Firm. Companies that use debt have obligations on interest expense and loan principal costs so that the use of debt (external financing) has a considerable risk if the debt is not paid so that the use of debt needs to pay attention to the Firm's ability to generate profits (Badera, 2017).

D. Hypothesis Development

1) Firm Size on ERM Disclosures

The bigger the Firm, the more investors will invest in the Firm (Gunawan, 2013). This has an impact on the broader risk management disclosures carried out by the Firm and the information provided to investors will be more accurate and complete. The results of Yanto (2013) and Majidah (2016) research explain that Firm size affects the ERM disclosure. Based on the explanation, the hypothesis formulated in this study, namely:

H1: Firm size affects the ERM disclosure of mining companies listed on the Indonesia Stock Exchange (IDX)

2) Leverage on ERM Disclosures

The higher the Firm's debt obtained from the creditors, of course, requires the Firm's accountability. In high debt conditions the Firm will make ERM disclosures higher for the needs of creditors. The results of research by Chariri (2014) and Tarigan (2013) explain that leverage affects ERM disclosure. Based on the explanation, the hypothesis in this study was formulated, namely:

H2: leverage affects the ERM disclosure of mining companies listed on the Indonesia Stock Exchange (IDX)

3) Institutional Ownership of ERM Disclosure

The higher the institutional ownership of the Firm, the higher the supervision on management performance and can reduce the risks faced. High institutional shareholding causes the Firm to conduct ERM disclosures to meet investor needs. The results of Almilia (2013) explains that institutional ownership affects ERM disclosure. Based on the explanation, the hypothesis formulated in this study, namely:

H3: institutional ownership affects the disclosure of ERM mining companies listed on the Indonesia Stock Exchange (IDX)

III. RESEARCH METHODS

This research is a quantitative research. quantitative research is a study based on the philosophy of positivism and emphasizes the testing of theories through the measurement of research variables with numbers and perform data analysis using statistical procedures. The population in this study is mining Firm listed in Bursa Efek Indonesia (BEI) period 2016 - 2017 as many as 88 companies. The technique of selecting the sample using purposive sampling, with the selection criteria, among others: (1) mining sector companies listed in Indonesia Stock Exchange 2016 - 2017; (2) companies that disclose the full annual report; (3) have data relating to the variables used in the study. By using a purposive sampling

technique, the number of samples that met the criteria of 61 companies was determined.

The independent variables (X) in this study are firm size (X1), leverage (X2) and institutional ownership (X3), while the dependent variable is ERM (Y) disclosure. The Firm size variable is measured using the Firm's total assets. The Firm size formula is as follows:

$$\text{Firm Size} = \ln (\text{Total Asset})$$

The leverage variable (X2) is measured using Debt to Equity Ratio (DER). The DER formula is as follows:

$$\text{DER} = \frac{\text{Total Liability}}{\text{Total Equity}}$$

Institutional ownership variable (X3) is measured using a percentage of the number of shares owned by the Firm institution. The formula for calculating institutional ownership is as follows:

$$\text{Institutional ownership} = \frac{\text{Number of Institutional Shares}}{\text{Total outstanding shares}}$$

ERM disclosure variables are measured using the ERM framework issued by COSO. There are 108 items of disclosure covering 8 dimensions: (1) internal environment; (2) goal setting; (3) identification of events; (4) risk assessment; (5) response to risks; (6) supervision activities; (7) information and communication; (8) monitoring (Meizaroh and Lucyanda, 2011). Each disclosure of an item will be given a value of 1 and an undisclosed item will be given a value of 0. The formula for measuring ERM disclosures is as follows:

$$\text{ERM} = \frac{\text{Total ERM items disclosed}}{108}$$

Testing the hypothesis in this study uses multiple regression methods to examine the direct effect of independent variables (firm size, leverage and institutional ownership) on the dependent variable (ERM disclosure). Statistical test analysis tool uses SPSS version 24. Data analysis techniques use descriptive statistical tests, classical assumptions (normality test, heteroscedasticity, multicollinearity), and hypothesis testing. Regression equation for this research are:

$$Y = \alpha + \beta_1 \text{ size} + \beta_2 \text{ leverage} + \beta_3 \text{ institutional ownership} + e$$

IV. RESULTS AND DISCUSSION

A. Descriptive Statistical Analysis

Table 1. Research descriptive statistics

Var	Min	Max	Mean	Standar Deviasi
X1	26,18	32,15	29,3354	1,31226
X2	,02	3,38	,9509	,78719
X3	,28	1,00	,6681	,20210
Y	,51	,89	,7470	,09467

The results of the data analysis in table 1 explain that the variable standard deviation value is greater than the average value, so that the test can be continued.

**B. Classic Assumption Test**

**1) Test Data Normality**

The test results depicted in Figure 1 show the data spread around the normal line and follow the direction of the diagonal line or histogram graph so that it shows the normal distribution pattern and the regression model meets the assumption of normality.

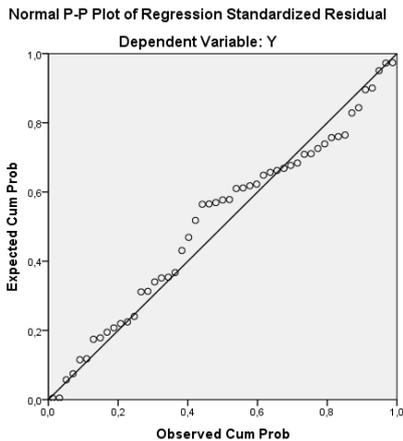


Figure 1. Normality Test Chart

**2) Heterocedasticity Test**

From the scatter plot graph in Figure 2 the spots appear to be randomly distributed and scattered above and below the number 0 on the Y axis. So it shows no heterokedasticity in the regression model

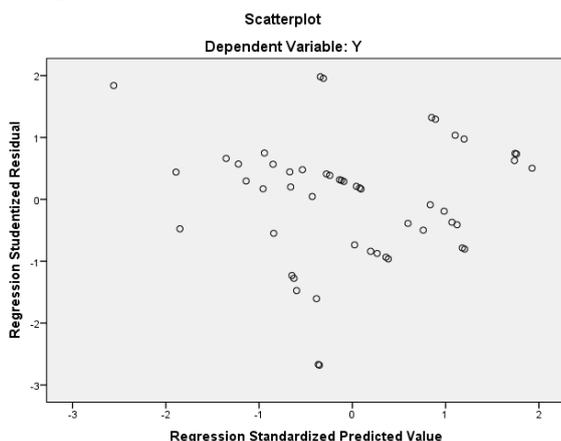


Figure 2. Graph of Heterocedasticity Test

**3) Multicollinearity Test**

Table 2 : Multicollinearity Test

Var	Tolerance	VIF
X1	0,937	1,068
X2	0,917	1,091
X3	0,960	1,042

In the results of the multicollinearity test, shows all the variables of tolerance value > 0.1 and VIF < 10 so that all variables show that there is no multicollinearity.

**C. Hypothesis Test**

Table 3. Hypothesis Test

Var	B	Sig.
X1	0,033	0,001
X2	-0,023	0,128
X3	0,166	0,008

Based on the results of the analysis in table 2, it can be concluded that the results of the hypothesis test are as follows:

- a) Hypothesis 1 (H1) which states the unstandardized beta coefficient of firm size on ERM disclosure is 0.033 with a significance value of 0.001 < 0.05 ( $\alpha = 0.05$ ). This shows that Firm size has a positive and significant effect on ERM disclosure, so hypothesis 1 is accepted. The greater the size of the Firm, the higher the ERM disclosure carried out by the Firm.
- b) Hypothesis 2 (H2) which states the unstandardized beta leverage coefficient on ERM disclosure is -0.023 with a significance value of 0.128 > 0.05 ( $\alpha = 0.05$ ). This shows that leverage does not affect ERM disclosure, so hypothesis 2 is rejected. Companies with high leverage will hide risks to avoid negative assessments from investors.
- c) Hypothesis 3 (H3) which states the unstandardized beta coefficient of institutional ownership on ERM disclosure is 0.166 with a significance value of 0.0081 < 0.05 ( $\alpha = 0.05$ ). This shows that institutional ownership has a positive and significant effect on ERM disclosure, so hypothesis 3 is accepted. The greater the institutional ownership, the higher the ERM disclosure is carried out by the Firm to meet the needs of investors.

**V. CONCLUSION**

Based on the results of research and discussion, the conclusions in this study are as follows

- a) Firm size has positive and significant impact on ERM disclosure, so hypothesis 1 is accepted.
- b) Leverage has no effect on ERM disclosure, so hypothesis 2 is rejected
- c) Institutional ownership has a positive and significant impact on ERM disclosure, so hypothesis 3 is accepted

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