Determinants on the Extent of Enterprise Risk Management (ERM) Disclosure in Annual Reporting: An Indonesian Study

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This study aims to analyse factors that determine the extent of Enterprise Risk Management (ERM) disclosure in a company’s annual report. This study analysed manufacturing companies listed on the Indonesian Stock Exchange for the years 2015-2018. Using linear regression analysis, we found that Risk Management Committee (RMC) and managerial ownership had a significant relationship with the extent of ERM disclosure. However, the proportion of independent board of commissioners, auditor reputation, liquidity and leverage does not relate to the extent of ERM disclosure in a company’s annual report. This study implies that companies that want extensive disclosure about Enterprise Risk Management can do so by forming Risk Management Committees and increase managerial ownership in the company.

Key words: Enterprise Risk Management, the proportion of independent board of commissioners, Risk Management Committee, managerial ownership, auditor reputation, liquidity, leverage, Firm size.

Introduction

Enterprise Risk Management (ERM) is a process that is influenced by firm management, board of directors, and other personnel within an organisation. ERM is designed to identify potential events that can affect an organisation, manage risks that arise in an organisation, and provide guarantees for the achievement of their goals (COSO, 2004). Companies that have implemented ERM will make disclosures related to implementing measures into the system. This ERM disclosure contains information about risk management carried out by the company which reveals its impact on the company's future. Risk information submitted must
be balanced, containing positive or negative information related to a company’s risk management.

Indonesia has enacted a Decree of the Chairman of Bapepam and Financial Institution No. Kep-134 / BL / 2006 concerning the obligations of issuers and public companies to submit annual reports. Through this regulation, issuers are required to include an explanation of the risks faced by the company and efforts made to manage these risks. Disclosure of information about the risks faced by the company will help external investors to estimate future cash flows, and estimate risks that are not diversified (Miikkinen, 2012). The broader disclosure of risk management shows the better ability of a company to manage its risk. The existence of this proves that the company is trying to satisfy the need for information by stakeholders (Kumalasari, 2014). Research by Iswajuni et al. (2018) shows a positive relationship between ERM and firm value.

ERM disclosure is related to the implementation of corporate governance, especially on the principle of transparency. The principles of good corporate governance (GCG) can prevent stakeholders from conflicts of interest and foster the confidence of shareholders that they will receive a return on their investment. Management commitment, quality of human resources, and conflicts of interest influence the successful implementation of risk management (Erlina et al., 2019). Many aspects of GCG have been carried out in Indonesia, such as in terms of supply chain management (Fitri et al., 2019) and tax aggressiveness (Buluhtoding, 2016). Whereas in this study aspects of Good Corporate Governance (GCG) consisting of the proportion of independent commissioners, risk management committee (RMC), managerial ownership, auditor's reputation will be analysed concerning ERM disclosure. In this study, we will examine whether GCG can determine the extent of ERM disclosure in the company's annual report. Independent commissioners and RMC will work together to review the risk management system established by the directors. Thus, the existence of RMC and independent commissioners are expected to provide better risk management through broader ERM disclosure (Kurniawanto et al., 2017). Another aspect of GCG is managerial ownership. Managerial ownership will encourage company management to improve performance and overcome risks that threaten its capital (Sulistyaningsih & Barbara, 2016). We argue that a higher level of managerial ownership results in a higher level of RMD disclosure in the company's annual report. Auditors also participate in the GCG process. Companies tend to disclose more information if the company is audited by a high-quality audit firm. The objective is to maintain the firm's reputation and avoid reputation costs if the auditor is not independent (Chalmers and Godfrey, 2004). The company will be faced with challenging conditions if the amount of debt exceeds the equity owned by the company. This leads to a higher risk for the company in terms of liquidity (Kasmir, 2014).
In general, research on COSO ERM in Indonesia uses the COSO ERM - Integrated Framework 2004 disclosure index. In contrast, ISO 31000: 2009 disclosure index consists of 25 disclosure items to measure the extent of COSO ERM disclosure. The sample in this study is drawn from companies in the manufacturing industry sector, which are listed on the Indonesian Stock Exchange (IDX) for 2015-2018. The data is analysed using the multiple linear regression method.

The results of this study indicate that the Risk Management Committee (RMC) and managerial ownership significantly influence the extent of disclosure of Enterprise Risk Management (ERM) in a company's Annual Report. While other aspects such as the proportion of independent commissioners, auditor's reputation, liquidity, and leverage do not significantly influence the extent of Enterprise Risk Management (ERM) disclosure in the company's Annual Report. This study implies that for companies that want full disclosure about ERM, it can be done by forming RMC and increasing managerial ownership in the company.

The remainder of this paper is structured as follows: Section 2 develops the research hypotheses; Section 3 describes the research design; Section 4 specifies the empirical result; and Section 5 summarises the paper and presents concluding remarks.

Literature Review and Hypothesis Development

Proportion of Independent Board of Commissioners and ERM Disclosure

Based on the agency theory of Jensen & Meckling (1976), an independent board of commissioners allows a company not to be dominated by management so that management can carry out its role more effectively. A higher proportion of people on the board of commissioners results in a higher level of effectiveness due to the greater independence of the corporate board. This is linked to better risk management. The risk management information disclosed in a company annual report where there is a strong board of commissioners will be more.

The board of commissioners has carried out their duties as an independent party in overseeing, directing, and evaluating the implementation of corporate governance and the company's strategic policies. In line with this, Kurniawanto et al. (2017) found that a higher proportion of members on the board of independent commissioners will increase the company's risk disclosure.

H1: The proportion of the Independent Board of Commissioners influences the Disclosure of ERM


**Risk Management Committee (RMC) and ERM Disclosure**

Based on the agency theory of Jensen & Meckling (1976), a stand-alone Risk Management Committee (RMC) can minimise management behaviour that threatens the health of a company, and avoid risk in making investment decisions (risk aversion). The higher size of a company will alter RMC form (Nasution, 2019). A risk monitoring committee in a company signals to stakeholders that the company has implemented risk management properly and is supported by better supervision compared to other companies that do not have an RMC. Larasati et al. (2019) show that a RMC has an impact on audit costs within a company. A Risk Management Committee's efforts reduce the risk that the auditor will face.

Research conducted by Agista & Mimba (2017) shows a RMC has a significant positive effect on the extent of Enterprise Risk Management disclosure in non-bank financial service institutions (LJKNB). We argue that the existence of a stand-alone RMC will provide intensive supervision in evaluating internal control, and result in a broader ERM disclosure compared to companies that do not have RMC. Based on the description, the following hypothesis can be formulated:

H2: Risk Management Committee (RMC) influences ERM Disclosure

**Managerial Ownership and ERM Disclosure**

Managerial ownership is one way to reduce agency conflict (Jensen & Meckling, 1976). Managerial ownership provides incentives to managers to increase shareholders' wealth and to align interests between shareholders and the management (Ismiyanti & Mahadwartha, 2017). Managerial ownership also includes monitoring the use of the companies' assets (Iskandar et al., 2012). The higher the percentage of managerial ownership, the more an increase will be experienced in the motivation of management to improve performance and take responsibility for raising the prosperity of shareholders.

Management has an essential role to play in the operation of a company because it determines all policies related to company sustainability, and should disclose management performance in its annual report. Greater managerial ownership means the management responsibility for decision making will be higher, thereby increasing the disclosure of risk management in a company's annual report. Soebyakto et al. (2018) show that managerial ownership has a significant and positive influence on Risk Management Disclosure (RMD). From this description, the authors have formulated the next research hypothesis as follows:

H3: Managerial Ownership influences ERM Disclosure
Auditor Reputation and ERM Disclosure

Agency theory explains that the possibility of information asymmetry occurs between the agent and the principal. The role of an independent party is needed to oversee management behaviour, and to act quickly under the wishes of the principal.

Manurung & Kusumah (2016) showed that corporate governance has a significant effect on ERM, including one of which is the reputation of auditors. Auditors with a good reputation encourage a broader audit scope and ensure the quality of internal control of the company. These results are in line with research by Subowo & Anisykurlillah (2014) and Kumalasari, et al. (2014). The result shows that companies that have used Big Four Public Accounting Firms usually gain more trust from stakeholders and the public. As a result, the company may only make voluntary disclosures according to the rules set by BAPEPAM LK. Based on the description above, the following hypothesis can be formulated:

H4: Auditor's reputation has an influence on ERM Disclosures

Liquidity and ERM Disclosure

The liquid firm tends to disclose more information. That information gives a signal to the public that the firm is in good condition. If liquidity is used as a benchmark for company performance, then small liquidity might indicate the weak performance of a company (Wallace et al. 1994).

According to Agustina & Ratmono (2014), a high level of liquidity will encourage companies to expand risk disclosure and show that the company is credible. On the other hand, previous literature also indicates that liquidity does not affect risk disclosure (Agustina and Ratmono, 2014; Alturki, 2014; Syaifurakhman & Laksito, 2016). This is due to the fact that liquidity is only considered as a measure of company performance and a measure of the company's ability to pay short-term debt so that it does not affect risk disclosure. Based on this description, in this study, the authors will formulate a hypothesis as follows:

H5: Liquidity affects the ERM Disclosure

Leverage and ERM Disclosure

According to the agency theory proposed by Jensen & Meckling (1976), leverage has a significant impact on company performance and is a tool to minimise agency problems or conflicts. Companies that have debt illustrate that not only shareholders (principals) oversee the company's performance, but external parties as creditors also monitor the company's
performance, thereby minimising opportunities for management to commit fraud. Shareholders will bind managers' prequisites using debt policy (Mahadwartha & Ismiyanti, 2009). Companies that have a higher level of debt risk in the capital structure will disclose more extensive information. Creditors can force the company to provide justification and explanation related to what happens in the company (Soebyakto et al., 2018). The research conducted by Alturki (2014) and Soebyakto et al. (2018) shows that leverage affects the disclosure of risk management. Based on these descriptions, the authors formulated the hypothesis as follows:

H6: Leverage affects the ERM Disclosure

Method

Data and Research Sample

This study uses secondary data obtained from annual reports and financial statements of companies in the manufacturing industry, which are listed on the Indonesian Stock Exchange (BEI) for the 2015-2018 period. The list of companies is obtained from the IDX website (www.idx.co.id), while the company's annual report is obtained from each company's website. Our final sample consists of 172 firm-year observations, which include of 43 different firms.

Measurement of Dependent Variable

The extent of Enterprise Risk Management (ERM) disclosure as the dependent variable is measured using the method of analysis of the ERM framework index approach from ISO 31000: 2009. ERM disclosure item calculations are performed using dummy variables, a value of 1 for the items disclosed, and a value of 0 for undisclosed items. Each item that was disclosed was added up, then the results were divided by the total items that should have been disclosed, namely as many as 25 items of disclosure.

Measurement of Independent Variable

The proportion of independent commissioners on a committee is measured using a ratio scale of the number of independent commissioners divided by the total members of the board of commissioners (Kurniawanto et al. 2017; Agista & Mimba, 2017). Managerial ownership is the management's right to participate in company capitalisation. Managerial ownership can be measured by dividing the number of management shares by the total ordinary shares outstanding. Ratio scale measurements used in this study follow previous research by Sulistynaningsih & Barbara (2016) and Soebyakto et al. (2018). Auditors' reputation can be
measured using a dummy variable, where companies that use auditors affiliated with the Big Four KAP are given a value of 1 and are not given a value of 0 (Sulistyaningsih & Barbara, 2016; Manurung & Kusumah, 2016; Alturki, 2014 and Subowo & Annisykurlillah, 2014). Liquidity is used to measure the company's ability to meet its short-term obligations. Liquidity is measured using the current ratio, which is current assets divided by current liabilities (Agustina and Ratmono, 2014). Leverage is used to measure the company's ability to meet short-term obligations with current assets owned by the company or fulfill liabilities with equity owned. In this study, leverage is measured using the debt to equity ratio (DER), according to Pristianingrum et al. (2018). DER is measured by comparing the total liabilities with the company's total equity. In this study, the control variable used is firm size. The size of the company is proxied by the logarithmic results of the company's total assets.

Methodology

This research was conducted using multiple regression analysis and tested using SPSS software. The regression equation model in this study is as follows:

$$ERMD = \alpha + \beta_1 PDKI + \beta_2 RMC + \beta_3 KM + \beta_4 RA + \beta_5 LIKD + \beta_6 LEV + \beta_7 SIZE + \epsilon$$

ERM is Enterprise Risk Management Disclosure; \(\alpha\) is a constant; \(\beta_1 - \beta_7\) is Regression coefficient; PDKI is the proportion of independent commissioners; RMC is a Risk management committee; KM is Managerial ownership; RA is the auditor's reputation; LIKD is Liquidity; LEV is Leverage and SIZE is Company size; \(\epsilon\) = error rate in the study (error term). Hypothesis testing in this study aims to determine the effect of the proportion of independent commissioners, Risk Management Committee (RMC), managerial ownership, auditor reputation, liquidity, and leverage on the extent of disclosure of Enterprise Risk Management (ERM). In this study the t statistical test was performed using a significance level of 0.05 (\(\alpha = 5\%\)).

Result and Discussion

Descriptive Statistic

Table 1 shows that the disclosure of Enterprise Risk Management (ERM) during the 2015-2018 period has an average disclosure of 75.8605. The proportion of independent commissioners in the company varies between 16.67% to 100%. The Risk Management Committee (RMC) has an average of 0.1628 with a standard deviation of 0.3701, meaning that only 16.28 percent of the observational data of 172 companies have a RMC. Managerial ownership has an average of 0.0378 with a standard deviation of 0.1017, meaning that, on average, only 3.78 percent of managers own company shares at the end of the period.
Auditor's reputation has an average of 0.4360 with a standard deviation of 0.4973, meaning an average of only 43.60 percent of the observational data of 172 companies that use audit services from the Big Four KAP. The company's liquidity is measured using the current ratio having an average of 2.0513. The company's leverage is proxied by Debt to Equity Ratio (DER) and has an average of 1.2706. Company size as a control variable has an average of 28.8778, with a standard deviation of 1.3763.

Table 1: Descriptive Statistics

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Main Analysis

Proportion of Independent Commissioners and Enterprise Risk Management (ERM) Disclosures in the Company's Annual Report

Based on the t statistical test results in Table 2, the proportion of independent commissioners does not significantly influence the extent of ERM disclosure in the company's annual report. The results showed a beta coefficient of 0.111 with a significance level of more than 0.05, which is equal to 0.980, so it can be concluded that hypothesis one (H1) was rejected. The results of this study are in line with Widyawati & Halmawati (2018) and Agista & Mimba (2017), who find that the proportion of the independent board of commissioners does not affect the extent of ERM disclosure. This shows that a large number of independent directors in a company does not affect the level of corporate risk disclosure.
Table 2: Ordinary Least Square Regression

<table>
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a. Dependent Variable: ERM

Risk Management Committee (RMC) and Enterprise Risk Management (ERM) Disclosure

Based on the results of the t statistical test in Table 2 it can be seen that the risk management committee (RMC) has a significant positive effect on the extent of ERM disclosure in the company's annual report. The results showed a beta coefficient of 10.454 with a significance level of less than 0.05 which is equal to 0.000, so it can be concluded hypothesis two (H2) is accepted. The results of this study are in line with research conducted by Agista and Mimba (2017) that RMC influences the extent of ERM disclosure. The RMC is tasked with assisting the board of commissioners in overseeing and reviewing the implementation of risk management and assessing risk tolerance that can be taken by the company (National Committee on Governance Policy, 2006). Companies that have an organised RMC separate from other supporting committees will increase risk management disclosures in the company's annual report with maximum results due to intensive supervision in evaluating all internal company controls (Agista and Mimba, 2017)

Managerial Ownership and Enterprise Risk Management (ERM) Disclosure in the Annual Report

Based on the t statistical test result in Table 2, it can be seen that managerial ownership has a significant negative effect on the extent of ERM disclosure in the company's annual report. The results showed a beta coefficient of -17.526 with a significance level of less than 0.05, which is 0.002, so it can be concluded that the hypothesis three (H3) was accepted. The results of this study are in line with research by Soebyakto et al. (2018), which shows managerial ownership has a significant influence on the extent of ERM disclosure.

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Auditor Reputation and Enterprise Risk Management (ERM) Disclosure in the Annual Report

Based on the results of the statistical t-test in Table 2, it can be seen that the auditor's reputation does not significantly influence the extent of ERM disclosure in the company's annual report. The results showed the beta coefficient value of -0.124 with a significance level of more than 0.05, which is equal to 0.405, so it can be concluded that hypothesis four (H4) was rejected. The results of this study are in line with research by Sulistyaniingsih, and Barbara Gunawan (2016) and Subowo and Anisykurillah (2014). Auditor reputation does not affect risk management disclosure because each auditor profession must have an independent attitude, both auditors from Big Four and non-BIG will make disclosures under the results of the audit of the company's financial statements.

Liquidity and Enterprise Risk Management (ERM) Disclosure in the Annual Report

Based on the t statistical results test in Table 2, it can be seen that liquidity has no significant effect on the extent of ERM disclosure in the company's annual report. The results showed a beta coefficient of -1.224 with a significance level of more than 0.05, which is equal to 0.792, so it can be concluded that hypothesis five (H5) was rejected. The results of this study are in line with research by Alturki (2014), Agustina & Ratmono (2014), Syaifurakhman & Laksito (2016), who find that liquidity does not affect the extent of ERM disclosure. Liquidity is only considered as a measure of company performance and a measure of the company's ability to pay the short-term debt, so it does not affect risk disclosure.

Leverage and Enterprise Risk Management (ERM) Disclosure in the Annual Report

Based on the results of the t statistical test in Table 2 it can be seen that leverage does not significantly influence the extent of ERM disclosure in the company's annual report. The results showed the beta coefficient of -0.264 with a significance level of more than 0.05 which is equal to 0.578, so it can be concluded that hypothesis six (H6) was rejected. These results are in line with research conducted by Abid & Shaiq (2015) and Pristianingrum et al. (2018) who found that leverage does not affect the extent of ERM disclosure.

Conclusion

The results of this study indicate that a Risk Management Committee (RMC) and managerial ownership significantly influence the extent of disclosure of Enterprise Risk Management (ERM) in the company's Annual Report. While other aspects such as the proportion of independent commissioners, auditor's reputation, liquidity, and leverage do not significantly influence the extent of Enterprise Risk Management (ERM) disclosure in the company's Annual Report.
Limitations in this study are the assessment of risk management disclosures based on ISO 31000: 2009 in the company's annual report is still subjective depending on the judgment of each researcher, so there is the possibility of different results with other researchers. Future studies can explore other variables such as Chief Risk Officer, foreign institutional ownership, and government regulation as a determinant of ERM disclosure. Further research can also use research subjects in other company sectors so that research results vary and can be compared, for example, the mining sector and the financial sector.

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