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The Effect of Environmental, Social and Governance Performance with Legal Institution on Earnings Management

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ESG scores can measure sustainability reports consisting of environmental, social, and governance (ESG) activities. This paper examines the role of the legal institution, including law, rules, and disclosures. The performance of the sustainability report is related to earnings management practice. The results show that the increase of a sustainability report or ESG score will reduce earnings management using discretionary accrual calculation. However, the role of the legal institution does not affect the relationship between the sustainability of companies and earnings management. This paper uses data from 12 countries in Asia and Europe.

Key words: *Sustainability, CSR, ESG, Legal Institution, Earnings Management.*

Introduction

A sustainability report is a report prepared by companies to disclose social and environmental activities to stakeholders. Nowadays, companies are obliged to submit more comprehensive reports than just their financial and annual reports. The sustainability report is getting more attention in global practice and has become one of the criteria in reviewing the social obligation of a company. The report is a measurement, disclosure practice, and accountability effort for *sustainability* activities aimed at achieving sustainable development (GRI, 2013; Khalil & Ozkan, 2016). The ability of a company to effectively communicate its' activities as well as social and environmental performance is regarded as essential for its' long term success, sustainability, and organization growth (KPMG, 2016).

A sustainability report directed to sustainable development has become a trend in many papers because it is dynamic, long term oriented, and covers many aspects. The empirical evidence indicates that regulators and investors give additional attention to sustainability performance when reviewing the performance of company finance and earnings quality. The disclosure of sustainability is related to the level of transparency and the confidence of the stakeholder. Transparency will lessen if the relevant information on earnings management is not fully disclosed. Kabir & Thai (2017), said that the disclosure of the sustainability report is expected to increase the transparency of the company so as to decrease the earnings management practice. Companies that make CSR contributions tend to not making earnings management through real activities to improve earnings quality and this will have a long term effect (Hong & Andersen, 2011). In other cases, managers performing earnings management will be urged to execute social and environmentally friendly activities to lift the image of the company, to cover the disadvantages of the company, and to protect themselves. The earnings quality will be considered better if the earnings management score is lower, while the count of sustainability performance is higher. In this case, sustainability disclosure plays an essential role in reducing asymmetric information (Zhong & Gao, 2017). It is stated that the sustainability report will hurt earning management or discretionary accrual. The use of discretionary accruals is considered cheaper than the decision on real operating and investing. Identifying accumulations and understanding their implications is a challenge not only for investors but also for financial analysts and auditors (Bradshaw, Richardson, & Sloan, 2001). Therefore, discretionary accruals are considered an attractive way for management to report earnings.

This paper takes into consideration the role played by legal institutions in the relationship between sustainability and earnings management. The legal institutions, in this case, include legal, judicial, and standard disclosures. The application of the law in countries where there are better legal regulations, and that require more transparent disclosures is expected to affect the disclosure of sustainability reports. The signs indicate that earnings management is significantly restricted to countries that have higher legal protection (Haw, Hu, Hwang, & Wu, 2004). The literature states that strict law that runs smoothly limits management control. Besides this, the effective standard of disclosure will restrict management control because it will make legally taking over of assets more risky and expensive (La Porta, Lopez-De-Silanes, Shleifer, & Vishny, 2000).

Although many papers indicate the effect of sustainability report or CSR towards earnings management, inconsistency can be found between earnings management and sustainability reports (Prior, Surroca, & Tribó, 2008). A paper from Sun, Salama, Hussainey, & Habbash (2010) also states that the relationship between corporate environmental disclosure and earnings management is inconsistent. Apart from that, this paper continues the results of (Haw, Hu, Hwang, & Wu, 2004), which considered the role of legal institutions in earnings management. Therefore, the problem and motivation of this paper are to examine whether earnings management caused by sustainability report performance will be reduced if the company is equipped with strong legal institutions. As for the moderation variable, the role of the legal institution is expected to lessen the effect of the performance of sustainability reports towards earnings management.

Compared to the previous studies, this paper used ESG (environmental, social, and governance) score to calculate the performance of the sustainability report. The Thomson Reuters ESG score is assumed to be more objective, independent, and globally compared. ESG score includes the aspect of governance performance and represents information that shows whether a company has attempted to achieve sustainability goals (Bradford, Earp, & Williams, 2017; Othman & Zeghal, 2006). Unlike other methods that take into consideration the absolute source of information such as websites or annual reports to built disclosure indices, Thomson Reuters methodology combines a more expansive source of information including CSR reports, annual reports, the website of the company, and the Thomson Reuters survey (Giannarkis, 2014).

This paper aims to test the effect of environmental, social, and governance performance on earnings management in going to public companies in several Asian and European countries. When many previous studies used only one country as a sample, such as Leuz, Nanda, & Wysocki (2003), this paper analyses earnings management at the company level with variations in cross firms among 12 countries. This paper is expected to identify that sustainability report disclosure will bring more measurable, significant, and comparable results. This result is also likely to motivate companies, especially in Indonesia, to disclose more and submit their sustainability activities for review, because these reports will be measured and reviewed both locally and internationally by an independent body. From an investors' view, as those who will be considering the disclosure aspect of the sustainability report, the results will become a consideration before and after they invest in a company. Meanwhile, from the view of shareholders, both majority and minority, the results will provide evidence and relation of the effect of sustainability performance on the practice of earnings management.

Theory and Hypothesis

The stakeholder theory is supported by Donaldson (1995), who argued that this theory will expand corporate responsibility to all stakeholders by making concrete efforts to accommodate the wishes and needs of the stakeholders. One way for the company to do that is by building and improving good relationship with the stakeholders by disclosing reports which have added values, such as the sustainability report (Cho & Chun, 2016; García-Meca, Sánchez-Ballesta, 2009; Weber, 2008).

The Agency theory explains the conflicts which arise in the company as a result of the separation between the shareholders and management as an agent (Eisenhardt, 1989). According to this theory, the need for a higher standard in monitoring the quality of continuous disclosure could restrict the movement of management. Thus will reduce the negative relationship between the quality of sustainability disclosure and discretionary income (Rezaee & Tuo, 2019).

According to Deegan (2004), legitimacy theory explains that there is a demand for the company to make efforts to ascertain the company performance of its' operational activities based on the norms or rules found in society. It is shown that the functional status and activities can be said as legal and accepted by those surrounding the company. The disclosure of the sustainability report is an effort to build the concerned image of the company so as to acquire legitimacy from the stakeholders.

This paper uses the ESG (environmental, social, and governance) score. Generally, objective and systematic ESG information could be used by professional investors as an investment analytic instrument (Giannarkis, 2014). Apart from that, the ESG score is frequently used as a complement to the company's financial rating to improve the accuracy of risk performance assessments (Achima & Borlea, 2015). Thomson Reuters ESG performance scores can rate the company's practice in the environmental, social, and governance spheres by utilizing data allocated for the public, annual and ongoing reports, direct communications, press releases, paper from third parties, and news (Tamimi & Sebastianelli, 2017).

The sustainability report has several social performance categories, including environment and governance. These categories illustrate the forms of a company's accountability to the stakeholders on social and environmental performance when the company conducts its' operations. The disclosure on the performance categories reflects the level of accountability, responsibilities, and transparency of the company to the investors and other stakeholders. The social dimension in sustainability reports concerns the impact that the organization has on its' social system, while the environmental aspect involves the effects of the organization on natural systems. Meanwhile, governance performance refers to ethical corporate practices.

La Porta, Lopez-De-Silanes, Shleifer, & Vishny (1998) state that cross-country variation in the level of the legal protection of shareholders' rights uses several legal and institutional factors such as legal tradition, the efficiency of the judicial system and the ranking for disclosure standards. The legal policy of common law restricts management control by decreasing the proof standard needed in legal suits and expands the reach of management decisions that are subject to judicial review (Johnson, Porta, Lopez-De-Salines, & Shleifer, 2002). Legal institutions also influence investors' review of the relevancy of the value of the incoming report and the accrual value (Ball, Kothari, & Robin, 2000; Haniffa, Rahman, & Ali, 2006).

A company that performs earnings management will disclose lesser information so that their actions cannot be detected. The more information disclosed by companies, the higher the

ESG score, which then shows a high commitment to transparency and accountability (Tamimi & Sebastianelli, 2017). A good ESG score could increase the reputation of the company, which will result in stakeholders ignoring the earnings management executed by the company (Martinez-Ferrero, Baberjee, & Garcia-Sanchez, 2016). As provided by Zhong & Gao (2017), the quality of the earnings will be considered to be higher if the earnings management acquired a smaller score than the ESG score. Therefore, the first hypothesis is: the increase in ESG will be negatively related or cause a decrease in earnings management.

Earnings management will respond and possibly will decrease when the investors are protected by strong and well-enforced legal institutions (Jalil & Rahman, 2010). A well-enforced legal system protecting the investors are common features of countries who uphold common law tradition rather than civil law tradition. The study by Leuz, Nanda, & Wysocki (2003) is relevant to the focus of this paper because it found that earnings management was reduced in countries with strong legal protections against the rights of shareholders. Several findings of that paper indicated that common law tradition, which includes the effect from legal institution factors, would reduce earnings management practices. This paper assumes that earnings management by ESG performance is significantly restricted in countries where protection toward shareholders are strong through common law and high standards of disclosure. Therefore, the second hypothesis is: legal institutions will affect an increase in ESG, which is negatively related or causes a decrease in earnings management.

Methods

The data is compiled from the Thomson Reuter database with a population of public companies registered in the Stock Exchange of 12 countries in South East Asia, East Asia, and Westerm Europe. These 12 countries were chosen as they have a scattered distribution, different characteristics, and various data on legal institutions. The countries are Indonesia, Malaysia, Singapore, Thailand, The Philippines, representing South East Asia. Japan, Hong Kong, Taiwan, and South Korea, representing East Asia, while France, Germany, and the United Kingdom represent Western Europe.

The sample selection begins with companies that have ESG scores from Thomson Reuters, then is decreased based on the completeness of the data in the Thomson Reuter database. The data needed is financial data to calculate earnings management with the discretionary accrual formula. The period of reports is 2017 and 2018. From all the public companies listed in the 12 countries, only 8.37% have ESG scores. This means that the disclosure of sustainability in these countries is still low but has the potential to increase. Out of these countries, the United Kingdom has the highest ESG score, followed by Japan, while Thailand and South Korea, based on the number of companies listed, have the lowest ESG score. After the samples are decreased by unavailable financial data, the observed samples are 859 companies.

The disclosure on Sustainability Report performance is measured using the Thomson Reuters ESG score. Meanwhile, the legal institution is measured using La Porta, Lopez-De-Silanes, Shleifer, & Vishny's (1998) index, which has several measurements. First, traditional law, where the countries are domiciling. If the company is using customary law, it will be valued as 1, and while using common law, it will be valued 0. Second, the rule is the assessment of the law and order tradition in the country that is produced using the average calculated on the monthly index. A scale of 0 to 10 is used with a lower score for a less strong tradition of law and order. Third, disclosure standard with an index made to examine and rank companies based on annual report items. These items are divided into seven categories that are general information, profit, and loss report, balance sheet, fund flow statement, accounting standards, data on stock, and select items.

This paper also calculates variable controls as generally used in previous studies, which are company size, ROA, and leverage. Company size is based on the value of the total asset. ROA is calculated from net income divided by the entire asset, while force is calculated from total liabilities divided by total equity.

To calculate earnings management, the dependant variable used is accrual earning management. This paper chooses the modified Jones Model to calculate discretionary accrual. The steps taken are first, calculate the value and total accumulations. Second, create a regression equation to calculate the values of the coefficients $\alpha 1$, $\alpha 2$, and $\alpha 3$. The values of each coefficient $\alpha 1$, $\alpha 2$, and $\alpha 3$ are then used to determine the non-discretionary accruals value. Finally, calculate the discretionary accruals value, which is a proxy for earnings management.

Result

To calculate non-discretionary accrual, the authors collected financial data regarding total assets, changes in revenues, changes of receivables, and PPE of 859 companies for the year 2017-2018. Full accrual is calculated from net income subtracted by cash flow from operation. Based on the financial data of the companies by country in US$ in 2018 and 2017, France has the highest average net income, cash flow, total asset, and PPE, while Malaysia is relatively very low. Based on the summary of Thomson Reuters ESG score performance, France acquired the highest score, and South Korea earned the lowest score. The legal index is between 0 and 1. Each country has its own Rule and Disclosure values. Meanwhile, only Indonesia does not have a score of 0 on disclosure.

Based on the calculation of non-discretionary accrual or proxy of earnings management, the highest earnings occur in Hong Kong and Taiwan for both years. Based on the count of variable control of size by looking at the total assets, the highest average companies are in France, followed by Germany, while Indonesia is the lowest. However, according to the ROA result, companies in Indonesia occupy the highest net income compared to total assets or asset efficiency, while Singapore has the lowest. Leverage is the ratio between liabilities and equity; the highest is produced by companies in Germany and France, although total equity in South Korea and Hong Kong is also quite high.

The correlation analysis is initially performed using STATA software to indicate that the score of ESG performance is negatively related to earnings management, which is by the first hypothesis. Likewise, the legal institution variables such as legal, rule, and disclosure are negative, which means that the increase in these variables will reduce the value of earnings management. It is also the second hypothesis. Besides, the variable control firm size, ROA, and leverage are positively related to earnings management, which is by the finding of the previous studies.

The regression test of the data panel is examined by also using STATA software. The result of random effect regression proves that the model is significant, showing the relation among ESG performance, Legal Institutions, and control variables towards earning management. Specifically, considerable relationship occurs on ESG, Company size, and ROA. If ESG performance increases, it will reduce or negatively correlate with earnings management. It supports the first hypothesis.

Table 1. Regression Result

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Random-effects GLS regression                   Number of obs     =      1,718
Group variable: Company                         Number of groups  =        859

R-sq:                                           Obs per group:
     within  = 0.2919                                         min =          2
     between = 0.0457                                         avg =        2.0
     overall = 0.0849                                         max =          2

                                                Wald chi2(10)     =     230.26
corr(u_i, X)   = 0 (assumed)                    Prob > chi2       =     0.0000
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DA	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
ESG	-.0006826	.0006101	-1.12	0.263	-.0018783	.0005131
legal	-.0182917	.0144027	-1.27	0.204	-.0465205	.009937
rule	-.000925	.0044342	-0.21	0.835	-.0096159	.0077659
disclosure	-.0000724	.0005527	-0.13	0.896	-.0011557	.0010109
LnSize	.0088519	.0013938	6.35	0.000	.0061201	.0115838
ROA	.1993165	.0140512	14.18	0.000	.1717766	.2268564
Leverage	.0000148	.0000649	0.23	0.819	-.0001124	.000142
esglegal	.0002405	.0002461	0.98	0.329	-.0002419	.0007228
esgrule	.0000172	.0000752	0.23	0.819	-.0001301	.0001646
esgdisc	5.45e-07	.0000102	0.05	0.957	-.0000194	.0000205
_cons	-.1663628	.0455707	-3.65	0.000	-.2556798	-.0770459
sigma_u	.03679819					
sigma_e	.04768106					
rho	.37328	(fraction of variance due to u_i)				

Similarly, the size and ROA of the company also affect significantly affect earnings management. Meanwhile, Legal Institutions such as law, rule, and disclosure, indicate negative effect in ESG, even though the result is not significant. Overall, R square does not show a big result at 8.37%, which means that there is another factor or variable that is not included in this paper, which has a stronger effect on the relationship between ESG performance and earnings management.

To test the 2nd hypothesis, this paper further adds analysis of 3 moderation variables which interact with the ESG variable, being legal, rule, and disclosure. The regression result of the moderation indicates there is a change in the ESG variable, which is no longer significant towards earnings management. Apart from that, moderation created among ESG scores with a legal institution does not show a significant effect. Therefore, the 2nd hypothesis cannot be proven. This means that legal institutions such as tradition, rules, and standard disclosure do not affect the relationship between environmental, social, and governance performance towards earnings management. Contextually the influence of legal institutions is less significant for the ESG score because the measurement is too focused on shareholder protection. At the same time, the meaning of ESG is more global and extensive. Although the paper uses the same La Porta index as in the previous articles (Haw, Hu, Hwang, & Wu, 2004), it does not guarantee the production of the same results. However, the size and ROA of the company indicate the same outcome of a significant relationship towards earnings management. The analysis is that bigger companies will comply with more considerable pressure from the stakeholders; therefore, for the interest of the users, the companies will disclose more social, economic, and environmental information. Companies with higher earning ability and ROA will have a bigger inclination to make a disclosure. In addition to the result, the moderation regression test indicates that there is a slight increase in R square at 8.49%, which suggests there is an additional effect of the independent variable towards earnings management.

Conclusion

The effect of ESG performance using Thomson Reuters data towards 859 companies from 12 countries for two years indicates that environment, social, and governance performances are related to the decrease in earnings management. However, moderating with legal institution variables such as traditional law, rules, and standard disclosure, although showing a negative relation, does not prove the effect towards the relationship between ESG and earnings management. ROA and the size of the company have a significant influence on earnings management. The result of this paper is expected to inspire companies to improve sustainability or CSR performance, as well as to provide stakeholders with additional considerations in companies.

Further studies can be performed by using other cross country indexes to interact with sustainability reports with earnings management. The ESG score could be explored further by looking at its' performance through each of the environmental, social, and governance aspects. If possible, with relevant problems, ESG assessment or sustainability reporting can be focused on one sector of the industry or its materiality.

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