

## How Do Profitability and ISO 14001 Certification Impact Sustainability Reporting?

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### Abstract

**Introduction/Main Objectives:** The research aims to explain how Profitability and ISO 14001 certification impact sustainability reporting. The extent of disclosure in sustainability reporting was influenced by several things, including Profitability and ISO 14001 certificate. It was crucial for mining companies and the primary and chemical sectors that negatively impact the environment and society. **Background Problems:** Companies were concerned about economic growth, social development, and environmental welfare. Profitability was a measure of company performance, and the ISO 14001 certificate was a reward for implementing the triple bottom line. Activities related to GCG and CSR could be reported separately by the company on the company's website or in the annual report and sustainability report. **Research Methods:** This study uses dummy variables for the dependent variable sustainability reporting, so the study used logistic regression analysis. This study uses a sample of mining and elemental and chemical industry companies whose operations significantly impact the environment. **Finding/Results:** The study results explain that profitability did not affect sustainability reporting because some profitable companies consider it unnecessary to disclose non-financial information. In contrast, companies that experience losses focus on the company's financial performance. On the other hand, the ISO 14001 certification obtained by the company, which means that the company had carried out environmental management, had a positive impact in that the company discloses sustainability reporting. **Conclusion:** The ISO 14001 certification had the ability to explain sustainability reporting.

**Keywords:** ISO 14001; ROA; ROE; Sustainability reporting

**JEL Classification:** M40; M41

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### INTRODUCTION

Concern for economic growth, social development, and environmental welfare were the reasons for the company's longevity (going concern). Activities related to CSR could be reported separately on the company's website or in the annual report and sustainability reporting. In 1992, the initiative to publish a sustainability report emerged and began to be regulated by international reporting standards compiled by the Global Reporting Initiatives (GRI) committee in Amsterdam, the Netherlands, in 2000. However, until now, the disclosure and publication of sustainability reports by companies in many countries had been voluntary because there was no obligation. According to Hapsoro & Sulistyarini (2019), the extent of disclosure in sustainability reporting was influenced by several things, including the company's Profitability.

Profitability was a measure of company performance. Each company had a target that had been made to ensure Profitability. The higher the company's Profitability, the higher the opportunity

to disclose sustainability reporting (Hermawan & Mulyawan, 2014). High corporate Profitability could encourage managers to implement programs that support and increase corporate responsibility for environmental conservation (Majidah, 2019). This was in line with several studies conducted by previous researchers (Christi, 2015; Ningrum, 2018; Kiswanto, 2016; and Majid, 2015), which state that profitability positively influences the disclosure of sustainability reporting. However, research by Septriyawati & Anisah (2019), P. C. Pratiwi & Sari (2016), Cahya & Hanifah (2017), Ayuni (2019), and Irwhantoko & Basuki (2016) shows otherwise. Suppose the company had a high level of profit. In that case, the company did not need to report things that could interfere with the company's financial information, which, of course, was not in line with Presidential Regulation No. 61 of 2011, which states that companies must take part in reducing carbon emissions reported in sustainability reporting.

The government shows its role in dealing with company operations that had environmental impacts through the concept of environmental management adopted by the Indonesian government, namely ISO 14001, to provide support for environmental preservation through a system that supports continuous environmental improvement. Companies that previously only focused on profit were now starting to pay attention to the impact of their operational activities on people and the planet and contribute to environmental conservation to overcome environmental damage (Christi, 2015). The reward for implementing the triple bottom line was given as an ISO 14001 certificate for the company. ISO 14001 was a standard, guideline, and policy regulating proper environmental management by certified organizations. In previous research, Rankin, Windsor, & Wahyuni (2011), Christi (2015), Rahmawati & Budiwati (2018) and Majidah (2019) stated that ISO certification affects the disclosure of carbon emissions, which was part of sustainability reporting. Yusoff and Lehman (2014) stated that ISO 14001 certification significantly affects voluntary environmental disclosure initiatives in Malaysian and Australian companies. However, in research, Dianawati (2012) and Ningrum (2018) stated that ISO certification did not influence sustainability reporting. Research Majidah (2019) stated that environmental performance, as measured by ownership of ISO 14001 certification, positively affects sustainability reporting. This previous study's results indicate that companies with ISO 14001 certification will affect sustainability reporting.

Legitimacy theory explains the company's relationship with society (Septriyawati & Anisah, 2019; Ridwan, 2017; Andriani, 2015). Therefore, the company's operations must align with the wishes of the community to provide positive added value for the company, community and government. The Sustainability Report (S.R.) model was based on the triple bottom-line business theory. ISO 14001 was an international standard that specifies requirements for structured management methods for environmental protection (Rahmawati & Budiwati, 2018). ISO 14001 includes statutory requirements, goals and objectives, and environmental management programs (Hadiwiarjo, 1997).

This research differs from previous research because it uses the ISO 14001 variable, which was very important for mining companies and the primary and chemical sectors. After all, companies had been confirmed to hurt the environment and society. This research also suggests that when a company had poor financial performance, it will focus on improving that performance rather than carrying out CSR activities, which were considered to burden the company's finances even though its operations will hurt social and environmental issues.

## RESEARCH METHOD

This study used a quantitative research approach that emphasizes theory testing by measuring the variables used in the study. The samples used were mining sector companies and elemental and chemical industry sectors listed on the Indonesia Stock Exchange in 2019 because these sector companies contribute significantly to social impacts and environmental damage that occurs. In this



article, the disclosure of sustainability reporting (S.R.) was used as the dependent variable measured using a dummy variable (companies disclosing S.R. were given a value of 1, if not a value of 0. S.R. data comes from the company's website. The independent variables used in this article include ISO 14001 certification, which shows the company's ownership of ISO 14001 certification. This Variable was measured using a dummy variable (companies with ISO 14001 certification will be given a value of 1, otherwise given a value of 0). Another independent variable was Profitability, which was measured using ROA (Return on Assets) and ROE (Return on Equity). Independent variable data comes from the company's annual report.

The research data analysis used logistic regression, which was processed with the help of SPSS 25 software because the data used in this study were unmeasured dependent variables. In contrast, the independent variables were a mixture of continuous (measured data) and categorical (unmeasured data) variables. Due to the mixed scales in the independent variables, the assumption of multivariate normal distribution could not be met. This causes the function to change to logistic, and there was no need to assume that the independent variable data was standard. The dependent Variable did not require homogeneity of each independent Variable. Therefore, the analysis stage only involves interpreting descriptive statistics and testing the research hypotheses.

Descriptive statistics provide descriptive data that could be seen from the mean (mean) value, standard deviation, variance, and maximum and minimum values. In hypothesis testing, using a significance level of 0.05 ( $\alpha = 5\%$ ), the hypothesis will be accepted if the significance value was  $<0.05$  and vice versa. The significance test in logistic regression could be divided into simultaneousness and partial tests. It could be tested individually or partially through the Wald Test. At the same time, simultaneous testing must be conducted.

As used in this study, the classic assumption test performed in logistic regression analysis with cross-section data was only the multicollinearity test. A multicollinearity test was used to test whether there was a correlation between independent variables in the regression model in the regression model. Multicollinearity could be seen from the tolerance value  $<0.10$  and the Variance Inflation Factor (VIF) value  $VIF > 10$ . Therefore, the regression model was considered free from multicollinearity if it had a tolerance value  $> 0.10$  and a VIF value  $<10$ .

To obtain the coefficient of determination, which could be interpreted as the R<sup>2</sup> value in multiple regression, Nagelkerke R Square was used. They were testing the feasibility of the regression model using Hosmer and Lemeshow's Goodness of Fit Test. The model was said to be able to predict the value of its observations or an acceptable model because it matches the observation data; if the statistical value of Hosmer and Lemeshow's Goodness of Fit Test  $> 0.05$  and vice versa, the model was said not to match the observation data if the statistical value of Hosmer and Lemeshow's Goodness of Fit Test  $<0.05$ .

The regression model equation in this study was as follows:

$$SR = \beta_a + \beta_1ROA + \beta_2ROE + \beta_3ISO + e \quad (1)$$

Where:

S.R.: sustainability reporting;

$\beta_a$ : constant;

$\beta_1$ - $\beta_3$ : regression coefficients of ROA; ROE; and ISO 14001;

e: error.

## RESULTS AND DISCUSSION

### Descriptive Statistics

Based on the results of descriptive statistical tests in Table 1, the minimum value of ROA and ROE showed a negative number, which meant that there were companies that experience losses in terms of asset utilization (ROA) and equity management (ROE).

**Table 1.** Descriptive Statistics of ROA and ROE Variables

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	105	-15.383,00	1.994,00	291,429	175.531,209
ROE	105	-75.558,00	3.780,00	-8.010,190	821.584,733

Source: SPSS output processed by researchers

**Logistic Regression Analysis**

This study used dummy variables to measure dependent variables and then used the logistic regression test to test the hypothesis. In Table 2 of the logistic regression analysis results, the following regression equation could be arranged in this study:

$$SR = -2.913 + 0,000 (ROA) + 0,000 (ROE) + 1,576 (ISO) + e$$

Where:

S.R.: sustainability reporting;

ROA: Return On Asset;

ROE: Return On Equity;

ISO: ISO 14001;

e: error.

Table 2 showed that the chi-square value of 8.527 with a significance of 0.500 shows the results of testing the Hosmer and Lemeshow Test model. The test results had a significant value.  $0.500 > 0.05$  indicates that the regression model used was declared fit or suitable. This means that ROA, ROE, and ISO 14001 influence companies to disclose sustainability reporting. Table 2 also showed the chi-square value of 8.527 with df 3, which was the difference between the -2 Log likelihood value of the constant alone and the -2 Log likelihood value of the continuous and independent variables, as presented in Tables 2 and 3 above. According to Table 4, the model's significance value was  $0.036 < 0.05$ , so ROA, ROE, and ISO 14001 simultaneously affected sustainability reporting (S.R.).

The Wald test results presented in Table 2 could be seen regarding partial testing. Table 2 shows that the world value of Return On Asset (ROA) was 0.465, with a significant value.  $0,495 > 0,05$ . Furthermore, the world value of Return On Equity (ROE) was 0.01 with sig.  $0,971 > 0,05$ . ROA and ROE were proxies of profitability variables. Based on these results, the first hypothesis was rejected: profit. Profitability did not affect sustainability reporting. Table 2 also shows that the wald value of ISO 14001 was 5.146 with sig.  $0.023 < 0.05$ , meaning that the third hypothesis was accepted. Companies with ISO 14001 had a positive effect on sustainability reporting. This was supported by the B value of the ISO 14001 variable showing a positive sign (1.576). The odd ratio value of the ISO 14001 variable shows 4.834, which means that companies that were ISO 14001 certified will had an impact of 1.576 times on the company's disclosure of sustainability reporting.



**Table 2.** Hypothesis Testing Results with Logistic Regression

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	ROA	0,000	0,001	0,465	1	0,495	1,000
	ROE	0,000	0,000	0,001	1	0,971	1,000
	ISO 14001	1,576	0,695	5,146	1	0,023	4,834
	Constant	-2,913	0,627	21,598	1	0,000	0,054
Nagelkerke R Square					=	0,139	
Hosmer and Lemeshow Test					=	7,346	(0,500)
-2 Log likelihood Constanta					=	86,124	
-2 Log likelihood constant dan Variable independent					=	77,598	
Chi-Square					=	8,527	

a. Variable (s) entered on step 1: ROA, ROE, ISO 14001.

Source: SPSS output processed by researchers

Table 2 shows the magnitude of the coefficient of determination in this study's logistic regression model, with a Nagelkerke R Square value of 0.139. This means that 13.9% of the variability of sustainability reporting disclosure could be explained by ROA, ROE, and ISO variables, and the remaining 86.1% was explained by other variables outside the model in this study.

### Effect of Profitability on Sustainability Reporting

Based on the logistic regression test results, it was known that Profitability, as measured using ROA and ROE, shows that the first hypothesis was rejected, meaning that Profitability did not affect Sustainability Reporting. This was because changes in company profitability will keep the company's policy disclosing its social and environmental responsibilities (Ariyani & Hartomo, 2018). Companies with a high level of Profitability do not consider it necessary to report things that could interfere with the information in their financial statements (SR-sustainability report). This causes Profitability not to affect S.R. disclosure. However, this differs from Presidential Regulation No. 61 of 2011, which states that companies must reduce carbon emissions reported in sustainability reports.

The lack of effect of Profitability on sustainability reporting was also because some of the profitability performance of the sample companies in this study had negative ROA and ROE values, meaning that the company could be more profitable. Therefore, companies must focus on improving financial performance first rather than reporting activities that add to the company's burden. Social and environmental activities reported in sustainability reporting were considered to increase company expenses and losses or worsen the company's financial performance. The results of this study were in line with the research by Ayuni (2019), Sepriyawati and Anisah (2019), and Irwhantoko and Basuki (2016).

### Effect of ISO on Sustainability Reporting

Based on the results of the logistic regression test, it was known that the second hypothesis was accepted, meaning that ISO had a positive effect on Sustainability Reporting. ISO 14001

certification was an international standard that specifies the requirements for a structured management approach to environmental protection; where this certification will be obtained by the company if, in its operational activities or products, it had met the predetermined standards by the ISO 14001 certificate. In addition, a company that had been ISO 14001 certified means that the company had carried out environmental management activities so that it will report it in sustainability reporting. This informs us that if the company was ISO 14001 certified, it will disclose sustainability reporting. The results of this study support research by Majidah (2019) and Yusoff and Lehman (2014).

## CONCLUSION

This study examines the effect of Profitability and ISO 14001 certification on sustainability reporting disclosure. The results showed that Profitability had no impact on sustainability reporting because some profitable companies consider it unnecessary to disclose non-financial information, while companies that experience losses focus on the company's financial performance. On the other hand, the ISO 14001 certification obtained by the company, which means that the company had carried out environmental management, had a positive impact on the company's disclosure of sustainability reporting.

## AUTHORSHIP CONTRIBUTION STATEMENT

All authors contributed to this article by discussing the topic, compiling the content, collecting data, analyzing the data, structuring the discussion, and drawing conclusions.

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