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Impact of ISO 14001 Implementation and Financial Performance on Corporate Social Responsibility Disclosure

(Study on 2014-2016 Non Financial Companies)

Daniel T. H. Manurung, Radhi Abdul Halim Rachmat
Department of Economics
Widyatama University
Bandung, Indonesia
daniel.togi@widyatama.ac.id

***Abstract*—This study aims to determine the impact of the application of ISO 14001, Financial Performance measured by Return on Assets and Return on Equity on the Disclosure of Corporate Social Responsibility in non-financial companies listed on the Stock Exchange in 2014-2016. The method used is descriptive method. Data sources used in this study are secondary data used are annual financial reports and sustainability reports of Manufacturing Companies in the Basic and Chemical Industry sub-sectors listing on the Indonesia Stock Exchange in 2014-2015. Sampling was done by purposive sampling with a total sample of 20 manufacturing companies. Research method using multiple regression. The results showed that the impact of implementing ISO 14001 had a positive and significant effect on corporate social responsibility disclosure, financial performance through return on assets had a negative and significant effect on the disclosure of corporate social responsibility and financial performance through return on equity had a positive and significant effect on the disclosure of corporate social responsibility.**

Keywords—ISO 14001; ROA; ROE; disclosure of corporate social responsibility

I. INTRODUCTION

Globalization and awareness of environmental problems are increasingly pressing companies to adhere to international environmental standards and respond to customers and market demands especially with increasing consumer interest in the environmental implications of products and services. For example, since the early 1990s, U.S.-based surveys shows that 94% of the population will try to buy environmentally friendly products and nearly 90% state their willingness to pay more for such products [1]. Checking the supplier's environmental performance has become a major factor in decision making. In Europe and Asia, most national procurement policies require suppliers to be registered with ISO 14001 with many certified companies refusing to do business with non-certified partners [2, 3]. In fact, the number of companies that voluntarily adopted ISO 14001 continued to increase and spread: such companies in turn also encouraged their suppliers to become ISO 14001 certified as a prerequisite in choosing them. Some countries have even declared ISO 14001 as a national standard [4]. Evidently, market forces that encourage competition and cooperation (increasingly) play a significant role in the decision of an organization to implement environmental protection measures [1, 5].

According to research conducted by Fei-Baffoe et al conducted a study of the Impact of ISO 14001 Environmental Management System on Key Environmental Performance Indicators of Selected Gold Mining Companies in Ghana and the results were determined International standards for EMS have caused, in a relatively short time since its implementation, to important environmental improvements of the two mining companies [6]. The strongest environmental effects can be found in areas where environmental improvements and cost savings go hand in hand, namely waste management and an increasing number of reported environmental incidents. According to research conducted by Sambasivan & Fei found that this study was conducted in Malaysia among companies in the electricity and electronics sector [4]. The results show that the determinants of success in the order of importance are as follows: management approach, organizational change, technical aspects, and external and social aspects. The results also show the benefits that can be gained by implementing ISO 14001: improving the image and reputation of the company, increasing the company's processes and profits, increasing customer loyalty and trust, and increasing the working spirit of company staff and employees relationship. While the research conducted by Nurjanah the results showed that environmental performance variables were based on ISO 14001 certification, and the company profile proved to have a positive effect on CSR disclosure [7]. While the leverage variable as measured by the ratio of total debt per total asset does not affect CSR disclosure. Likewise, the growth seen from the growth of company assets also has no influence on CSR disclosure. Firm size as a control variable has a significant positive effect on CSR disclosure in manufacturing companies in Indonesia. The size of the company is determined based on its total assets.

Financial performance is an assessment of a company's performance which can be seen from the company's ability to generate profits. One of the factors that influence the company's value is the company's financial performance. Financial performance is the company's work performance that has been achieved by the company in a certain period and contained in the financial statements of the company concerned, so that one of the information that can be known by the interested parties or users of financial statements to determine the company's profit [8]. The effect of corporate social responsibility (CSR) disclosure on proxy financial performance Return on Assets (ROA), Return on Equity (ROE), and the company's proxy value to Price to Book Value (PBV) empirically [9]. Because knowing the existence of audit quality as a moderate variable whether it will influence the relationship between CSR disclosure on ROA, ROE, and PBV. The results of this study indicate that the disclosure of Corporate Social Responsibility (CSR) affects ROA, but has no effect on ROE and PBV, and audit quality as a moderating variable cannot affect the CSR disc loss relationship on ROA, ROE, and PBV.

Several studies that have been conducted related to the impact of the application of ISO 14011 and financial performance on disclosure of corporate social responsibility are the results of research using a sample of 30 public companies in Malaysia for the period 2010 to 2014, we examine the system and their environmental management tools and financial performance [10]. Our preliminary analysis shows that the profitability trend in financial performance is inconclusive, but most of the profitability measures record positive results. Surprisingly, we found a significant positive correlation with most financial variables such as ROE, ROI and ROA whenever the company was asked about their environmental management systems and devices. In addition, the application of environmental management systems and equipment in their companies turned out to go hand in hand with their financial performance. While research related to financial performance and disclosure of corporate social responsibility, factors that influence social responsibility disclosure in companies in Indonesia and the results show a significant positive influence on environmental performance on disclosure of social responsibility [11-13]. Whereas according to Rahman et al research concluded that companies only want good reputation in the eyes of the community even though the actual performance is still bad, it is necessary to do more testing to see the compatibility between environmental performance and environmental disclosure by companies in Indonesia [14]. If the company has good environmental performance, it automatically means that the company has carried out its CSR activities well especially in the environmental field.

In relation to the background that has been disclosed, the disclosure of corporate social responsibility is very important to maintain economic, environmental and social, so that the research is conducted to determine the impact of the application of ISO 14001 and financial performance on disclosure of corporate social responsibility.

II. METHOD

This research was conducted to determine the impact of the application of ISO 14001 and financial performance on corporate social responsibility disclosure, the understanding of corporate social responsibility disclosure is very important as a form of corporate awareness in protecting the environment and also to maintain economic and social in society.

The dependent variable in this study is the disclosure of corporate social responsibility while the independent variable in the study of the impact of the application of ISO 14001 and financial performance through the proxy of Return on Asset and Return on Equity.

Disclosure of corporate social responsibility using the GRI G4 index with ninety-one indicators, while the impact variable of implementing ISO 14001 uses a dummy variable to measure the company's environmental performance by being given the number one for companies that have been awarded ISO 14001 certificates and zeros for companies without ISO 14001 certification, measurement of this research has been used in the research of Lucyanda & Siagian [13]. Meanwhile for the variable financial performance using proxy return on assets, the results show that (1) ROA has a positive effect on firm value, (2) CSR disclosure is able to moderate the relationship between ROA and company value, but managerial ownership cannot moderate the link, by using the measurement of Return on Assets viewed from the total net profit after tax divided by total assets, and financial performance by using the proxy of return on equity [15]. Return on Equity (ROE) is the ratio between net incomes to total equity [16-18]. The higher ROE shows the more efficient the company uses its own capital to generate profits or net profits. ROE is used to measure the rate of return of the company or the effectiveness of the company in generating profits by utilizing the equity (shareholders' equity) owned by the company. The measurement of return on equity seen from Return on Equity is net income divided by total equity multiplied by 100%.

The population in this study is a basic industrial and chemical subsector manufacturing company listing in the Indonesia stock exchange in 2014-2016 with the sampling criteria using purposive sampling method and a total population of 20 companies. As for the sampling criteria, it is a basic and chemical industry sub-sector manufacturing company that has issued annual report and sustainability report for 2014-2016, has financial report data and ISO 14001 certification data on the company.

This study uses multiple linear regression to examine the impact of ISO 14001, financial performance and disclosure of corporate social responsibility. The test was carried out in two stages, namely testing with classical assumptions which were carried out by testing normality, heteroscedasticity, multicollinearity and autocedasticity. While the second step is by analyzing hypothesis testing, by testing the coefficient of determination (R2), simultaneous testing (Test F) and testing individual parameters (statistical test t) [19].

III. Results and Discussion

Normality test is to test whether the regression model, the independent variable and the dependent variable has normal or abnormal data distribution [19].

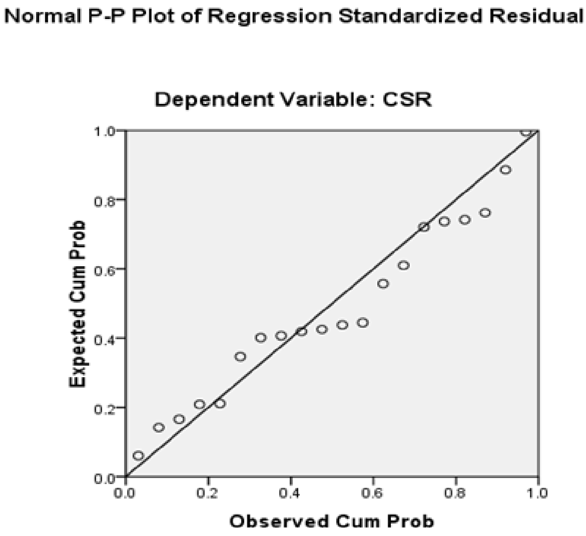

Fig. 1. Distribution of the kolmogrov smirnov normality test.

From the Histogram image above, it can be obtained that the data form bells as a characteristic of normal distribution. Whereas from the Normal P-p plot the data is obtained spread near the diagonal line and follow the direction of the diagonal line. From the two images above, it can be concluded that the data is normally distributed.

Autocorrelation Test, aims to test whether the model in the linear regression model has a correlation between bullies in period t with errors in the period t-1 (before). A good regression model is a regression that is free of autocorrelation [19].

TABLE I. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.375	.141	-.020	.1018886	1.248
Predictors: (constant), ROE, ISO 14001, ROA					
Dependent Variable: CSR Disclosure					

Based on the results of testing the correlation above in table 1 the results of the autocorrelation test, obtained DW-count value of 1.248 this value will be compared with a significant table value of 5% with a sample number of 20 (n) and the number of variables (k) of 4, then obtained DW values of 1,617 so that dl <DW <du is 0.8943 <1.248 <1.8283 based on the table criteria for the value of the durbin-watson test, this result shows that there is no positive autocorrelation meaning that the regression model of this study is free from autocorrelation. It can be concluded that there is no correlation between disturbance errors in period t with errors in period t-1.

Multicollinearity test aims to test whether the regression model found a correlation between independent variables [19]. The approach used to test the presence or absence of multicollinearity by Variance Inflation Factor test (VIF), with analysis if the tolerance value> 0.10 and VIF <10, it means that there is no multicollinearity in the study or if the tolerance value <0.10 and VIF> 10, it means that there is multicollinearity in the study.

TABLE II. Multicollinearity Test Results

Model	Unstandardized Coefficients		Collinearity Statistics	
	B	*Std. Error*	*Tolerance*	*VIF*
1 (Constant)	.348	.043		
ISO 14001	.028	.051	.953	1.050
Return On Asset	-.004	.002	.651	1.537
Return On Equity	.001	.001	.631	1.584
Dependent Variable: CSR Disclosure				

Test results from Table 2 Multicollinearity Test. shows that none of the independent variables have a tolerance value of less than 0.10. The results of the calculation of VIF values also show the same thing, that there are no independent variables that have a VIF value of more than 10. So, it can be concluded that there is no multicollinearity between independent variables in the regression model.

Heteroscedasticity test aims to test whether in the regression model there is variance and residual inequality one observation to another observation [19].

TABLE III. Heteroscedasticity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	*Std. Error*	*Beta*		
1 (Constant)	.348	.043		8.138	0.000
ISO 14001	.028	.051	.129	.542	.595
Return On Asset	-.004	.002	-.436	-1.517	.149
Return On Equity	.001	.001	.277	.951	.356
Dependent Variable: CSR Disclosure					

The test results in Table 3 of the Heteroscedasticity Test Results above show that the regression model used in this study does not occur heteroscedasticity, which can be seen the significance level for all variables above 0.05 or 5%. If the independent variable significantly influences the dependent variable indicated by a significance of less than 5%, the regression model does not occur heteroscedasticity.

A. *Multiple Regression Analysis*

Hypothesis testing is intended to decide whether to accept or reject the hypothesis based on data obtained from the research sample. The results of the hypothesis can be known after conducting a statistical test to determine the magnitude of the relationship between the variables studied. Statistical test consists of a test of the coefficient of determination (R2), simultaneous test (Test F) and Partial Test (Test T). Following the results of the hypothesis test:

The coefficient of determination (R2) is useful to test how far the ability of the research model in explaining the dependent variable (good of fit) [19]. The R2 value that has been adjusted is between 0 and up to 1. The R2 value that approaches 1 means the ability of the independent variables to provide almost all the information needed to predict the dependent variable. A small R2 value or below 0.5 means the ability of independent variables to explain the dependent variable is very small [19].

TABLE IV. DETERMINATION TEST RESULTS

Model	R	R Square	Adjusted R Square	Std. Error Estimate
1	.375	.141	-.020	.1018886
Predictors: (Constant), ROE, ISO 14001, ROA				
Dependent Variable: CSR				

Test results Table 4 results of the test of determination, the value of R-Square is 0.141 or 14.1%, meaning that 85.9% is obtained from other variables outside of the variable which means that 20% is present, this indicates that the ability of independent variables is ISO 14001, ROA and ROE.

Simultaneous statistical tests show whether the independent variables included in the model have an influence on the dependent variable [19]. Simultaneous test is used to test the influence of the independent variables impact of ISO 14001 and financial performance with the proxy Return on Asset and Return on Equity together or simultaneously have a positive effect on the variable disclosure of corporate social responsibility. The simultaneous results of this study can be seen in Table 5.

TABLE V. SIMULTANEOUS TEST RESULTS

Model	Sum of Squares	df	Mean Square	F	Sig
1 Regression	.027	3	.009	.875	.475a
Residual	.166	16	.010		
Total	.193	19			
Predictors: (constant), X_2, X_1					
Dependent Variable: Y					

The test results in Table 5 the results of the determination test indicate that the calculated F value of 0.875 is stated with a positive sign then the direction of the relationship is positive. Value statistically shows a significant result at α = 0.05, which is equal to 0,000, meaning that the significance value is 0.475 <0.005. This shows that simultaneously (together) independent variables have a significant positive effect on the dependent variable, namely the ISO 14001 Impact and financial performance with the proxy of return on assets and return on equity on disclosure of corporate social responsibility so that the H1 in this study is accepted.

Partial Coefficient (t test), partial test basically shows how far the influence of an independent variable individually in explaining the dependent variable [19]. Testing is done by using a significance level of 0.05 (α = 5%). Acceptance or rejection of the hypothesis is done if t count> t table or probability <level of significance (Sig <0.05), then Ha is accepted and Ho is rejected means that the independent variable affects the dependent variable. If t count <t table or probability> level of significance (Sig> 0.05), then Ha is rejected and Ho accepted means that the independent variable does not affect the dependent variable. The results of the t test (hypothesis testing) in this study can be seen in table 6.

TABLE VI. HYPOTHESIS TEST RESULTS

Variable	Regression Coefficient	Standard Error	Statistical Value t	Probability Value
ISO 14001	0.028	0.051	0.542	0.595
ROA	-0.004	0.002	-1.517	0.149
ROE	0.001	0.001	0.951	0.356
dependent variable: Y (disclosure of corporate social responsibility)				

Based on the results of table 6 results of hypothesis testing, shows that the magnitude of the influence of the independent variables consisting of Corporate Governance and Variables Ownership concentration on enterprise risk management variables is 7% and the remaining influence value 93% is explained by other variables that do not exist in the model.

- Variable impact of ISO 14001 statistically shows significant results at α = 0.5 that is a probability value of 0.595. It is known that with a t statistic value of 0.542 expressed with a positive sign, the relationship between the variables of the impact of ISO 14001 has a positive effect on the disclosure of corporate social responsibility. This proves the importance of implementing ISO 14001 (environmental management system) that is applied to companies as a basis for disclosing corporate social responsibility. The application of the implementation of ISO 14001 is to be able to assist organizations in controlling and improving environmental performance and can reduce the impact of excessive operations on the surrounding environment.

The findings of the study are in line with research on factors that influence the disclosure of social responsibility in companies in Indonesia and the results show a significant positive effect on environmental performance on disclosure of social responsibility [11-13]. Companies only want good reputation in the eyes of the community even though the actual performance is still bad, it is necessary to do more testing to see the compatibility between environmental performance and environmental disclosure by companies in Indonesia [20]. If the company has good environmental performance, it automatically means that the company has carried out its CSR activities well especially in the environmental field.

- The variable financial performance with the proxy of return on assets statistically shows the results of the significance of α = 0.5. That is, with a probability value of 0.149, it is known that with a t statistic value of -1.517 stated with a negative relationship, the relationship between financial performance variables and proxy return on assets has a negative effect on disclosure of corporate social responsibility. This shows that the company's ability to manage finances (return on assets) will have an impact on the disclosure of corporate social responsibility. Companies that have a good level of return on assets will conduct temporary corporate social responsibility disclosures, companies that are unable to manage the level of return on assets. Hence reluctant to disclose return on assets.

The results of this study are not in line with the research conducted by, according to Dewi conducting research on the role of CSRD on Company's Financial Performance and Earning Response Coefficient (ERC) showing the results showed that CSRD affects ROE [21]. The other side of CSRD does not affect ROA and ERC. Generally, investors tend to use short-term information so that they ignore CSRD which is considered as a medium and long-term source of information.

- Variable financial performance with proxy return on equity statistically shows the results of a significance of α = 0.5, that is, with a probability value of 0.356 it is known with a statistical value of 0.951 expressed with a positive relationship, then the relationship of financial performance variables with proxy return on equity positive influence on disclosure of corporate social responsibility. The results showed that the more return on equity, the company would disclose corporate social responsibility. Companies that have a good return on equity value will carry out corporate social responsibility conversations, this is proven as the importance of maintaining the surrounding environment and increasing the company's profits in building the company's image.

The results of the study are that environmental performance has a significant effect on ROA and ROE for gold ratings. CSR disclosure has a significant effect on ROE, but does not affect ROA. Disclosure of environmental performance and Corporate Social Responsibility (CSR) simultaneously have a significant effect on ROA and ROE. Meanwhile, the results of the study show partially that the financial performance variable (return on assets) does not significantly influence the value of the company, then partially the corporate social responsibility variable is able to moderate the relationship of financial performance to firm value.

IV. CONCLUSION

This study is intended to determine the impact of ISO 14001, financial performance through the proxy of return on assets and return on equity on disclosure of corporate social responsibility. From the results of the tests that have been conducted, the conclusion of this study, the results of the study of the impact of ISO 14001 have a positive and significant effect on the disclosure of corporate social responsibility. This study shows that companies that have implemented ISO 14001 means helping in reducing the impact of environmental damage, improving the company's image, company reputation and work spirit as a basis for corporate social responsibility disclosures carried out by the company. The results of the research on financial performance with proxy return on assets stated a negative and significant effect on the disclosure of corporate social responsibility. This study shows companies that have return on assets with the company's ability to manage finances (return on assets) will have an impact on the disclosure of corporate social responsibility, companies that have a good level of return on assets will conduct temporary corporate social responsibility disclosures, companies that do not able to manage the level of return on assets, so it is reluctant to disclose return on assets, while the importance of disclosing corporate social responsibility shows the company's ability to socio-economic and environmental. The results of financial performance research with proxy return on equity stated a positive and significant effect. This study shows the company's ability to manage profits to increase investor interest shows that it can maximally disclose corporate social responsibility.

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