

# Integrating Corporate Social Responsibility Disclosure and Environmental Performance for Firm Value: An Indonesia Study

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**Abstract.** The firm value is the basis for achieving short, medium, and longterm goals. It empowers the company to compete so that it maximizes its value. This study aims to investigate which variables can increase the firm value. The samples were 165 annual reports of manufacturing companies in 2015–2019. It is analyzed using a structural equation model. The research results proved that corporate social responsibility disclosure affects financial performance. On the other hand, environmental performance did not affect financial performance. The variables of corporate social responsibility disclosure and environmental performance affected firm value. Meanwhile, financial performance did not affect firm value. It means that firm value can only be influenced by the corporate social responsibility disclosure and environmental performance so that it can influence investors' perceptions of manufacturing companies.

**Keywords:** Corporate social responsibility disclosure · Environmental performance · Financial performance · Firm value

# 1 Introduction

Firm value is an indicator of how the market values the company as a whole. In other words, investors will choose a company with a good performance, which can provide a high return on shareholders' investment. As a result, it creates shareholders' prosperity. The company's high and low value is reflected in the closing share price listed on the Indonesia Stock Exchange. In 2015 the Indonesia Composite Index was at the level of 1,151.68, and in 2016 it increased to the level of 1,368,697. The Indonesia Composite Index also experienced a significant increase in 2017, at the level of 1,640,176. However, in 2018 there was an insignificant decline at the level of 1,618,123. Further, in 2019 there was an increase again at the level of 1,689,388 [44]. Based on the data mentioned, the stock prices of manufacturing companies have fluctuated during 2015–2019. It is intriguing to analyze factors that can increase firm value, including the corporate social responsibility disclosure, environmental performance, and financial performance.

Corporate social responsibility disclosure (CSRD) is a form of concern from a company to the environment. Specifically, the company discloses its annual financial statements. Social disclosure can make the public trust the companies that they care about the environment. Thus it can increase purchasing power and share prices [12], financial performance [2, 10, 14, 16, 17, 25, 29, 36], also company's image and values [1, 6, 21, 43]. Otherwise [5, 35] pointed out that CSRD reduces financial performance. [33] concluded that CSRD does not affect firm value and company reputation [15, 20].

The factors that can increase firm value is not only CSRD but also environmental performance. It is considered to get a positive response from investors through an increase in stock prices. The higher the stock price, the higher the firm value will be. Company owners want high firm value because high firm value indicates the prosperity of shareholders. Improving a company's environmental performance can enhance financial performance [23, 26, 30]. Studies by [11, 21, 37] found that good environmental performance causes firms to prepare more extensive environmental disclosures, and this eventually leads to a higher firm value [21]. Meanwhile, [31, 32] explained that environmental performance has a negative effect on financial performance and firm value [13, 28].

Another factor that affects firm value is financial performance. Financial performance is a benchmark that describes a company's success on the achievements of operational activities that the company has carried out during its operation [17]. Investors will predict the profits they will get through published financial reports. The better the company's financial statements, the easier it will be for investors to invest in the company. Consequently, it can increase the stock price [27, 37]. On the other hand, [17] reported that financial performance does not directly affect firm value.

The previous studies' inconsistency encourages researchers to investigate financial performance variables further in mediating the effect of CSRD and environmental performance on firm value. This study's results are expected to contribute to manufacturing companies always pay attention to the impact of their production on the environment. Moreover, for regulators, it can impose strict sanctions on companies that destroy the environment and provide guidance in making investment decisions for investors.

# 2 Literature Review and Hyphotesis Development

#### 2.1 Literature Review

Firm value is a market value that can give maximum prosperity to shareholders. It is reflected in the increase of the company's share price [8]. Firm value can also show the value of assets owned by the company, such as securities. One of the alternatives used in assessing firm value is by using Tobin's Q. Tobin's Q is calculated by comparing the ratio of the company's stock market value to the book value of the company's equity [42].

Corporate social responsibility (CSR) is a form of responsibility for operational activities carried out by companies. It affects several aspects such as the environment, humans, and communities [4]. CSR disclosure is a form of correcting social

incongruities over environmental damage as a result of company operations. Due to this gap, companies are required to focus on the impact of company activities.

Environmental performance is defined as the result of an environmental management system related to its environmental aspects. Environmental performance can also be interpreted as a company's effort to create and preserve a good environment. If the level of environmental damage is low, it shows the company's environmental performance is good. Conversely, if environmental damage is high, it shows the company's environmental performance is terrible [23].

Financial performance is the company's real financial condition by applying agreed standards and criteria to achieve the desired performance in a certain period. The better the company's financial condition can minimize internal risk because investors get good financial performance information. Investors' confidence in good financial performance can increase firm value [34].

#### 2.2 Hyphotesis Development

#### **Corporate Social Responsibility Disclosure and Financial Performance**

Corporate social responsibility disclosure is a form of reporting aimed at stakeholders regarding environmental and social issues. This disclosure is done voluntarily, but companies must be aware that they are responsible for the environment. Every company that discloses its CSR will get several benefits, including customer loyalty and public sympathy. Thus, stakeholders will appreciate the company's disclosure of social responsibility, which will improve financial performance. It is in line with the research results of [2, 10, 14, 16, 17, 25, 29, 36] who found that CSR Disclosure has a positive effect on financial performance.

H1: CSR Disclosure has a positive effect on financial performance

#### **Environmental Performance and Financial Performance**

Environmental performance can affect financial performance. Following the legitimacy theory, companies with good environmental performance and implement CSR will have good financial performance. A company that performs good environmental performance and discloses good company information is also expected to be considered by investors. Investors do not only see the company's performance from a financial perspective but also the environmental performance. The better the environmental performance of the company, the better its financial performance [23, 26, 30].

H2: Environmental performance has a positive effect on financial performance.

#### Corporate Social Responsibility Disclosure and Firm Value

In making investment decisions, investors always pay attention to the company's CSR disclosures. CSR disclosure on firm value has a significant effect because it can gain the community's trust by contributing and being responsible for its activities towards the environment. Thus the higher the CSR disclosure of a company, the higher the share price [12] and company profits. Consequently, it it impacts the company's image and value [1, 6].

H3: CSR Disclosure has a positive effect on firm value.

#### **Environmental Performance and Firm Value**

Organizations must be able to align economic goals with environmental and social goals. Thus, if the company wants the firm value to increase, it must improve its environmental performance/management. Environmental performance is a company's effort to enhance and preserve the environment as a corporate responsibility that impacts the environment. Companies with good environmental performance tend to report their performance to stakeholders. The company's concern in the field of environmental management can give added value to a company. As a result, it can attract investors to invest their shares. Studies by [11, 21, 37] showed that good environmental performance causes companies to prepare more extensive environmental disclosures, which eventually leads to a higher firm value [21].

H4: Environmental performance has a positive effect on firm value.

#### **Financial Performance and Firm Value**

Companies with high profitability can increase firm value because companies can easily attract investors to invest in big profits. Through the company's profits, investors will be more interested in investing in getting large profits in the following year. The more investors who invest their capital, the stock price will increase [27, 37] so that impacts firm value.

H5: Financial performance has a positive effect on firm value.

### **3** Research Method

This study's population comprised all companies listed on the Indonesia Stock Exchange in the 2015–2019 period [44]. The sample was determined by purposive sampling method with the following criteria: manufacturing companies on the Indonesia Stock Exchange that published annual reports and have complete data related to research variables. Based on these criteria, the research sample consisted of 165 annual reports (33 manufacturing companies x five years).

Corporate social responsibility disclosure uses the Global Reporting Initiative (GRI-G4) measurement [19]. GRI-G4 is a reporting framework consisting of reporting guidelines, reporting principles, and disclosure standards with 141 disclosure items covering the themes: economic, environment, labor practices, human rights, society, and product responsibility. This measurement is by placing a checklist (V) on the items disclosed by the manufacturing company. If the company discloses item i, it is given a value of 1, but if item i is not disclosed, 0 will be on the checklist. The entire checklist is then calculated so that the company disclosed the number of items.

Environmental performance is measured based on PROPER (i.e., Company Performance Assessment in Environmental Management), adjusted to ISO 14001 [9]. Financial performance is measured by return on assets (ROA). It is a ratio that measures a company's ability to generate net income based on a specific asset level [45]. The firm value represented by Tobin's Q compares the company market value with the replacement cost of the company's assets [42]. The data analysis technique in this study used structural equation modelling based on partial least square with the SmartPLS 3.0 application [18] and the following equation:

$$\begin{split} \eta \mathbf{1} &= \gamma \mathbf{1} \boldsymbol{\xi} \mathbf{1} + \gamma \mathbf{2} \boldsymbol{\xi} \mathbf{2} + \varsigma \mathbf{1} \\ \eta \mathbf{2} &= \beta \mathbf{1} \eta \mathbf{1} + \gamma \mathbf{3} \boldsymbol{\xi} \mathbf{1} + \gamma \mathbf{4} \boldsymbol{\xi} \mathbf{2} + \varsigma \mathbf{2} \end{split}$$

Information:

η1	: Financial Performance.
η2	: Firm Value.
γ1-γ4	: Coefficient.
ξ1	: Corporate Social Responsibility Disclosure.
ξ2	: Environmental Performance.
$\varsigma 1$ - $\varsigma 2$	: Residual Value.

# 4 Result and Discussion

#### 4.1 Result

#### The Result of the Determination Coefficient Test (R2)

Table 1 shows that the R-Square value on the financial performance variable is 0.933 or 93.3%. These results indicate that the financial performance variable can be explained by the CSRD and environmental performance variables of 93.3%. Meanwhile, the remaining 6.7% is explained by other variables. Furthermore, the firm value variable R-square value is 0.945 or 94.5%. It means the firm value variable can define the CSRD, environmental performance, and financial performance of 94.5%, whereas other variables explain the remaining 5.5%.

Table 1. K-Square (K)						
	R-Square	R Square adjusted				
Financial performance	0,933	0,931				
Firm value	0.945	0.943				

**Table 1.** R-Square  $(R^2)$ 

#### Hypothesis Result (t-Test)

Table 2 shows that CSRD on financial performance has a p-value of 0.000 (p-value < 0.050) and a t-statistic of 16.334 (t-statistic > 1.96) thus **H1 is accepted**. In other words, CSRD has a positive effect on financial performance. Environmental performance on financial performance has a p-value of 0.008 and a t-statistics of 2.651,

**H2 is rejected**, or environmental performance has no effect on financial performance. CSRD on firm value has a p-value of 0,000 and a t-statistic of 7.082. In conclusion, **H3 is accepted**, or CSRD has a positive effect on firm value. Environmental performance on firm value has a p-value of 0.001 and t-statistics value of 3.225; hence **H4 is accepted**. It implies that environmental performance has a positive effect on firm value. Financial performance on firm value has a p-value has a p-value of 0.334 and t-statistics of 0.967. Therefore **H5 is rejected**, and financial performance does not affect firm value (Fig. 1).

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (  O/STDEV )	P values	Decision
$CSRD \rightarrow Financial$ Performance	0.845	0.855	0.052	16.334	0.000	H1 accepted
Environmental Performance $\rightarrow$ Financial Performance	0.177	0.165	0.067	2.651	0.008	H2 rejected
$CSRD \rightarrow Firm Value$	0.950	0.913	0.134	7.082	0.000	H3. accepted
Environmental Performance $\rightarrow$ Firm Value	0.176	0.180	0.055	3.225	0.001	H4. accepted
Financial Performance $\rightarrow$ Firm Value	0.130	0.170	0.134	0.967	0.334	H5. rejected

Table 2. Path coefficients

#### 4.2 Discussion

#### **Corporate Social Responsibility Disclosure and Financial Performance**

CSR disclosure has a positive effect on financial performance. It signifies that the more CSRD a manufacturing company does, the greater its financial performance. In other words, manufacturing companies in Indonesia have disclosed all CSR activities fully so that investors have responded positively through fluctuations in stock prices that have increased from period to period. Investors believe that all of the company's operational activities have a concern for the environment. Therefore trust has an impact on improving their interest in purchasing power of shares [12]. In summary, manufacturing companies' various social activities result in stakeholders providing added value to the company. It has a positive impact on internal companies as well as increased financial performance. The higher the share price of the company, the higher its financial performance [2, 10, 14, 16, 17, 25, 28, 36]. On the contrary, [5, 35] showed that CSRD reduces the company's financial performance.

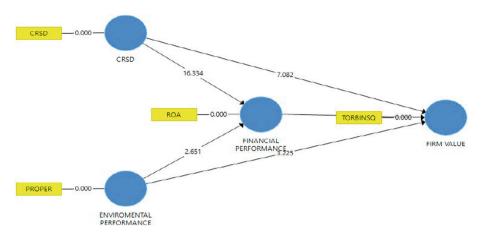


Fig. 1. PLS algorithm line model

#### **Environmental Performance and Financial Performance**

Environmental performance does not affect financial performance. It shows that the company's activities in managing the environment cannot affect financial performance. The aspects of PROPER assessment in manufacturing companies refer to compliance with water pollution control, air pollution control, waste management, and marine pollution control. Moreover, the aspects of compliance assessed include environmental permits, supervision, and provision of company data. These aspects of the assessment do not directly encounter the community's interests. The community cannot instantly feel the results of the environmental performance. Besides, to meet the compliance aspects that have been determined, the company must incur additional costs to impact the decline in company profits. It is consistent with the findings of [24] that environmental performance does not affect financial performance. Also, [31, 32] concluded that environmental performance reduces financial performance. Otherwise [23, 26, 30] argued that environmental performance improves financial performance. Studies by [11, 21, 37] found that good environmental performance causes companies to prepare more extensive environmental disclosures, which eventually leads to a higher firm value.

#### Corporate Social Responsibility Disclosure and Firm Value

CSR disclosure has a positive effect on firm value, indicating that full CSR disclosure can increase firm value. Companies that have disclosed and reported CSR can give an excellent contribution to society, where manufacturing companies are fully responsible for their activities and impacts on the surrounding environment. Stakeholders appreciate CSR disclosure with an increase in share prices and company profits to increase firm value. Thus, manufacturing companies in Indonesia already have a vision for operational performance that realizes profit and can improve the community's welfare or its social environment. Corporate social responsibility is a program that provides added value to all stakeholders, including improving the company's performance and added value in the long term. The higher the level of CSR disclosure made by the company, the higher the firm value [1, 6, 21, 43]. Otherwise, [33] concluded that CSRD does not affect firm value and company reputation [15, 20].

#### **Environmental Performance and Firm Value**

Environmental performance has a positive effect on firm value. It is because the positive response from investors through an increase in stock prices can increase firm value. Firm value is an indicator for the market to assess the company. It implies that investment opportunities provide a positive signal about the company's future growth, which will impact the shareholders' prosperity. The higher the stock price, the higher the firm value [21]. Besides, environmentally friendly companies can gain economic benefits, including competitive advantages such as more efficient operations, increased productivity, and minimal environmental damage [3, 40]. Companies with strong environmental performance can reduce operating costs, increase access to resources, and minimize employee turnover [7]. Improving environmental performance has the potential to increase firm value [22, 32, 38, 41]. On the other hand, environmental performance can reduce [11, 25, 39].

#### **Financial Performance and Firm Value**

Financial performance does not affect firm value. It can be a mechanism to increase the firm value. However, this does not indicate that the contribution to the increase in earnings or an increase in the ratio value of return on assets can increase firm value. The less productive use of these assets makes investors reconsider investing in the company. It will affect the company's share price in the capital market. Investors' decision to invest in the company is based on the company's financial performance first through its published financial statements. This information in the financial statements will show the good or bad condition of the company. Companies with poor financial performance will give negative signals to investors who want to invest their shares in the company. Consistent with the study of [17] that financial performance does not directly affect firm value. On the other hand, financial performance affects firm value, which is reflected through the increase in stock prices [27, 37].

# 5 Conclusion

Based on 165 annual reports on manufacturing companies in Indonesia for 2015–2019, it indicates that CSR disclosure affects financial performance. Meanwhile, environmental performance does not affect financial performance. CSR disclosure and environmental performance affect firm value, whereas financial performance does not affect firm value. Briefly to conclude, CSR disclosure and environmental performance can directly create high firm value without financial performance. The results of this study suggest that the government establishes a standard and mandatory CSR disclosure for all companies. Standard CSR disclosure is valuable information for all stakeholders in making decisions. This research's practical implication is that environmentally friendly companies will get economic benefits in the form of higher firm value. This study has limitations, especially in the limited number of sample companies during the study period that use the GRI indicator. Therefore future research can use other measurement alternatives in measuring CSR disclosure. Further, there were differences between the

numbers of financial reports with the annual reports. Thus the future research can use the latest annual report data which are published on the websites of each company to result in a relied outcome.

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