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An effect of environmental disclosure on financial performance of manufacturing companies in Indonesia and Singapore

Noor Endah Cahyawati*, Almas Azizah
Department of Accounting, Universitas Islam Indonesia, Yogyakarta, Indonesia
*Corresponding Author: noor.endah@uii.ac.id

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ABSTRACT

This study aimed to analyze the effect of environmental disclosure on the financial performance of manufacturing companies in Indonesia and Singapore. The sample in this study consisted of 108 manufacturing companies from Indonesia and 102 manufacturing companies from Singapore. The data analysis technique used simple linear regression. The results of this study indicated that environmental disclosure affected financial performance (ROA, ROE, and NPM) in Indonesia. However, the research on the effect of Corporate Social Responsibility (CSR) on financial performance (ROA, ROE, and NPM) in Singapore showed the opposite results. Furthermore, the results of this study also showed that environmental disclosure did not affect EPS in Indonesia and Singapore. In addition, this study also proved that Indonesia and Singapore had different levels of CSR implementation in which Singapore had a better quality of CSR disclosure than Indonesia. Hopefully, the study can provide an overview of the non-monetary aspects that should be considered in investment.

Introduction

Environmental pollution is one of the significant issues that we are facing. One of its causes is pollution and waste generated by companies. Several types of waste generated by companies need further processing before disposal so as not to cause environmental damage, especially hazardous waste (hazardous materials). In other words, the companies have a close relationship with the environment. With this relationship, companies need to create an environmental disclosure as evidence of their responsibility to the environment (Asrori et al., 2019). Manufacturing companies have the highest contribution to the gross domestic product in Indonesia (Ferdian, 2021), yet the largest emissions and waste. Moreover, the fashion industry is ranked fourth in terms of contribution to waste in landfill (Nurjihanti, 2021).

Manufacturing companies are an indicator of a country's progress. They can meet domestic needs and compete with other countries in the economic sector. Moreover, the economic growth in Indonesia and Singapore is inseparable from the manufacturing companies. In Singapore, the sector that plays a significant role in the Singapore economy is the manufacturing industry (Edison, 2019). Similar to Singapore, the data from the United Nations Industrial Development Organization (UNIDO) in 2018 showed that in terms of manufacturing value added, the manufacturing industry in Indonesia continued to increase from USD 202.82 billion in 2014 to USD 236.69 billion in 2018. The Secretary General of the Ministry of Industry revealed that Indonesia was in the top 10 in the world as an industrial country with high added value (Kemenperin, 2017). On the other hand, along with the development of the manufacturing industry, several manufacturing companies in Indonesia often ignore environmental concerns that may harm the environment. As a result, manufacturing companies are one of the causes of environmental damage (Kurniawan, 2017).

One of the elements disclosed in corporate social responsibility (CSR) is environmental information (Nor et al., 2016). Disclosure of this information is a form of corporate responsibility to the environment in which the company stands. With CSR, the company can provide an overview of the environmental conditions and activities carried out by the company.

According to Berthelot et al. (2003), environmental disclosure is a set of information items related to past, current, and future environmental management activities and performance. Companies have different disclosure methods when reporting this disclosure (Rahman et al., 2009). Most companies provide the information in an annual statement or separate sustainability reports (Chaklader & Gulati, 2015).

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Previous research shows inconsistent results in terms of the influence of Corporate Social Responsibility (CSR) on the company's financial performance. Research by Rizkan et al. (2017); Pertiwi et al. (2018); Haninun et al. (2018); Aulia and Hadinata (2019); and Wulandari (2020) showed that CSR has an effect on ROA, while Heryanto and Juliarto (2017), Tahu (2019), and Yi et al. (2022) proved the opposite result. Furthermore, Manisa et al. (2017); Haninun et al. (2018); Wulandari (2020); and Yi et al. (2022) showed that CSR affects ROE. However, Heryanto and Juliarto (2017) stated that environmental disclosure does not affect ROE.

The other proxy for financial performance is NPM. Yi et al. (2022) show that CSR has an effect on NPM. On the other hand, Heryanto and Juliarto (2017) and Wulandari (2020) prove that CSR affects NPM. For the EPS proxy, Ningtyas and Triyanto (2019) and Yi et al. (2022) show that environmental disclosure affects these variables. Meanwhile, Heryanto and Juliarto (2017) prove the opposite result.

Research by Loh et al. (2016) states that Singapore is ranked second in ASEAN in environmental information. Furthermore, Loh et al. (2016) show that Singapore and Indonesia have similar values, namely 48.8 and 48.4, respectively. Therefore, this study also examines whether there are differences in the environment between Indonesia and Singapore.

This study aimed to examine the effect of Environmental Disclosure on financial performance as measured by ROA, ROE, NPM, and EPS. In addition, this study also examined whether there are differences in the level of environmental disclosure in Indonesia and Singapore, considering the contrast in their regulatory environments and corporate practices. These differences provide a comprehensive understanding of how varying contexts impact the relationship between environmental disclosure and financial performance. The results of this study provide input for capital market authorities regarding the relevance of environmental disclosure information in companies' annual report. Furthermore, this research can give input to companies in considering whether the companies should disclose environmental disclosure information in their annual report.

Literature Review

Environmental Disclosure and ROA

One form of corporate responsibility for environmental impacts arising from company operations is environmental disclosure (Solikhah & Maulina, 2021). This disclosure is also a tool for investors and other interested parties (Solikhah & Maulina, 2021). Based on the stakeholder theory, company management works in the interests of stakeholders. The form of corporate responsibility includes a more transparent disclosure of environmental information on the impacts of its operational activities. When the company can fulfil its commitment, it will maintain the trust of interested parties, especially customers. Customers will buy the products produced by the company because they believe that the company also protects the environment in producing its products. It will increase the company's profit over time. In other words, stakeholder trust in the company can increase Return on Assets (ROA) in the future (Aulia & Hadinata, 2019). Previous research has tested the effect of environmental disclosure on Return on Assets (ROA). The results of studies by Rizkan et al. (2017); Pertiwi et al. (2018); Haninun et al. (2018); Aulia and Hadinata (2019); and Wulandari (2020) proved that environmental disclosure affects ROA. Based on the explanation above, the alternative hypotheses of this research are:
H1a: Environmental Disclosure has a positive effect on the ROA in Indonesia.
H1b: Environmental Disclosure has a positive effect on the ROA in Singapore.

Environmental Disclosure and ROE

Environmental disclosure is a form of corporate responsibility to interested parties regarding the environmental impacts caused by the company. According to the stakeholder theory, management manages the company based on stakeholder interests. The community and customers are part of the stakeholders who have a significant role in the company. When companies disclose environmental responsibility, the companies can increase public and customer trust. It will increase the company's profit because the community and customers believe that in producing these products, the company is also responsible for the impact it has on the environment. In other words, the increase in the company's profit will increase the Return on Equity (ROE). Previous research on environmental disclosure and ROE showed consistent results. Studies conducted by Manisa et al. (2017); Haninun et al. (2018); Wulandari (2020); and Yi et al. (2022) showed that environmental disclosure has a positive effect on ROE. Based on the explanation above, the alternative hypotheses of this research are:
H2a: Environmental Disclosure has a positive effect on the ROE in Indonesia.
H2b: Environmental Disclosure has a positive effect on the ROE in Singapore.

Environmental Disclosure and NPM

The stakeholder theory describes the companies' responsibilities to interested parties. One of these responsibilities is environmental disclosure. The activities carried out by the companies have an impact on the surrounding

environment. Furthermore, the companies will get support from stakeholders when they disclose corporate social responsibility. The more the companies' contribution to protecting the surrounding environment, the more the support from stakeholders. One of the stakeholders who have a role is the buyers of the company's products. They can increase the company's product profitability, so the profit target can be achieved and the profitability ratio can increase. In other words, this increases the NPM ratio, which also increases the company's profit. Research conducted by Heryanto and Juliarto (2017) and Wulandari (2020) showed that environmental disclosure affects NPM. Based on the explanation above, the alternative hypotheses of this research are:
H3a: Environmental Disclosure has a positive effect on the NPM in Indonesia.
H3b: Environmental Disclosure has a positive effect on the NPM in Singapore.

Environmental Disclosure and EPS

Environmental disclosure is the disclosure of information needed by stakeholders related to the environmental impact of company activities (Solikhah & Maulina, 2021). By disclosing this information, the company has fulfilled its responsibilities to stakeholders. This is in line with the stakeholder theory that states management manages the company on behalf of the stakeholders. Disclosure of environmental information will increase the trust of the stakeholders in the company; one of which is the customers. When the company can increase the customers' trust, they will buy more products from the company. This form of support has an impact on increasing company profits. Not only does it bring benefits to the customers, but also to the shareholders because increased profits will also increase their earnings. In other words, environmental disclosure by the company can increase the company's earnings per share (EPS). Previous research by Ningtyas and Triyanto (2019) and Yi et al. (2022) examined the effect of environmental disclosure on earnings per share. The results showed that the disclosure affects the company's earnings per share. Based on the explanation above, the alternative hypotheses of this research are:
H4a: Environmental Disclosure has a positive effect on EPS in Indonesia.
H4b: Environmental Disclosure has a positive effect on EPS in Singapore.

Environmental Disclosure in Indonesia and Singapore

Loh et al. (2016) conducted a test among ASEAN Countries consisting of Indonesia, Malaysia, Singapore, and Thailand. The study explained that disclosure among ASEAN countries was still low and needed to be improved. The results in terms of environmental aspects showed that Indonesia was in the third position while Singapore was in the second position in ASEAN. This may be due to differences in the application of environmental disclosure in Indonesia and Singapore. Based on the explanation above, the alternative hypotheses of this research are:
H5: There are differences in the application of environmental disclosure between Indonesia and Singapore.

Research Methods

Population and Sample

The population in this study consisted of all companies listed on the Indonesia Stock Exchange, and the Singapore Stock Exchange for the period 2019. The study used purposive sampling based on certain considerations. The sample selection criteria are as follows: (1) Manufacturing companies listed on the Indonesia Stock Exchange and Singapore Stock Exchange that published sustainability reports in 2019, i.e., stand-alone reports and the GRI standard; (2) Companies listed on the Indonesia Stock Exchange and Singapore Stock Exchange that published annual reports in 2020; (3) The sustainability reports and annual reports of the company were published.

Table 1. Sample Selection Procedure

No	Description	Indonesia	Singapore
1	Manufacturing companies listed on the Indonesia Stock Exchange and Singapore Stock Exchange that published sustainability reports in 2019, including stand-alone reports and the GRI standard.	196	213
2	Companies that did not meet the sample criteria related to the research variables.	-88	-111
	Total Sample	108	102

The annual report and sustainability report data were obtained by directly accessing the companies' official website. The annual reports could also be obtained from the websites of the Indonesia Stock Exchange (www.idx.co.id) and the Singapore Stock Exchange (www.sgx.com).

Variable Measurement

The dependent variables in this study consisted of four variables covering: (1) Return on Assets (ROA), which is a ratio used to measure the rate of return on resources or assets owned by the company, (2) Return on Equity (ROE), which is a ratio used to measure the company's ability to generate a return on the company's capital, (3) Net Profit Margin (NPM), that is a ratio used to measure the company's ability to generate profit on sales made by the company, and (4) Earnings per Share (EPS), that is a ratio used to measure the total profit earned by investors for each share.

Meanwhile, the independent variable in this study was environmental disclosure. This variable was measured using the environmental disclosure guidelines framework issued by the Global Reporting Index (GRI) which contains 12 aspects and 34 items. The formula used in the calculation of this variable is as follows.

$$\sum \text{ED} = \frac{\text{Number of items disclosed}}{34}$$

Model Specification

To investigate the effect of ROA, ROE, NPM, and EPS on environmental disclosure, this research developed a regression model as follows:

Model (1) ROA $= \beta 0 + \beta 1\text{ED} + \text{e}$
Model (2) ROE $= \beta 0 + \beta 1\text{ED} + \text{e}$
Model (3) NPM $= \beta 0 + \beta 1\text{ED} + \text{e}$
Model (4) EPS $= \beta 0 + \beta 1\text{ED} + \text{e}$

Where: ED is environmental disclosure, ROA is Return on Assets, ROE is Return on Equity, NPM is Net Profit Margin, and EPS is Earnings per Share.

The hypothesis testing for models 1-4 in this study was carried out using simple linear regression tests. To conduct these tests, the determination coefficient test and the individual parameter significance test or (t test) were required. The simple linear regression tests were used to test the effect of one independent variable on the dependent variable. The relationship between these variables can be described by the equation in the formula above. The hypothesis testing for models 5-8 in this study was carried out using an independent sample t-test. This test was conducted to determine whether two unrelated samples had different mean values.

Results and Discussion

Table 2 indicates descriptive statistics for all the variables included in this study. In Indonesia, the environmental disclosure had mean of 0.0885, with the minimum value of 0.03 and maximum value of 0.65. This implies that the level of environmental disclosure in Indonesian companies were relatively low. The mean for return on asset was 4.87%. The mean for return on equity was 3.33%. The mean for Net Profit Margin was -2.71%. Earnings per share had mean of 1.25%. Meanwhile, in Singapore, the environmental disclosure had mean of 0.1404, with the minimum value of 0.03 and maximum value of 0.47. This implies that the level of environmental disclosure in Singapore companies was higher than Indonesia. The mean for return on asset was 0.73%. The mean for return on equity was -1.08%. The mean for Net Profit Margin was -7.19%. Earnings per share had mean of 4.20%.

Table 2. Descriptive Statistics

Variables	Indonesia					Singapore				
	n	MIN	MAX	MEAN	SD	n	MIN	MAX	MEAN	SD
Environmental Disclosure	108	.03	.65	.0885	.1047	102	.03	.47	.1404	.1041
Return On Asset	108	-.15	.61	.0487	.0985	102	-.49	.42	.0073	.1226
Return On Equity	108	-2.03	0,069	.0333	.3674	102	-1.05	0	-.0108	.2739
Net Profit Margin	108	-8.02	.75	-.0271	.7850	102	-4.69	.46	-.0719	.5271
Earnings Per Share	108	-.03	.41	.0125	.0423	102	-.17	0	.0420	.1748
Valid N (listwise)			108					102		

Table 3 shows the result of the multicollinearity test. The multicollinearity test used in this study examined whether the regression model found a correlation between independent variables. The VIF value in this study was less than ten, meaning that the data from both countries had no multicollinearity.

Table 3. Multicollinierity Test

Variables	Indonesia			Singapore		
	Multico. Stat.		Results	Multico. Stat		Results
	Tolerance	VIF		Tolerance	VIF	
ROA	1	1	There was no multicollinearity	1	1	There was no multicollinearity
ROE	1	1	There was no multicollinearity	1	1	There was no multicollinearity
NPM	1	1	There was no multicollinearity	1	1	There was no multicollinearity
EPS	1	1	There was no multicollinearity	1	1	There was no multicollinearity

Note: ROA is Return on Assets, ROE is Return on Equity, NPM is Net Profit Margin, and EPS is Earnings per Share

Furthermore, the heteroscedasticity test was used to test whether in the regression model there was an inequality of variance of the residuals. In this study, the test was carried out using the Glejser test and the results are presented in Table 4. Based on the results of the Glejser test, the ROA, ROE, NPM, and EPS variables in Indonesia and Singapore had significance greater than α (0.05), which means that the regression model did not have symptoms of heteroscedasticity.

Table 4. Heteroscedasticity Test

Variables	Indonesia		Singapore	
	Sig.	Results	Sig.	Results
ROA	0.086	There was no heteroscedasticity	0.123	There was no heteroscedasticity
ROE	0.476	There was no heteroscedasticity	0.114	There was no heteroscedasticity
NPM	0.443	There was no heteroscedasticity	0.199	There was no heteroscedasticity
EPS	0.178	There was no heteroscedasticity	0.479	There was no heteroscedasticity

Note: ROA is Return on Assets, ROE is Return on Equity, NPM is Net Profit Margin, and EPS is Earnings per Share

Table 5. Regression Test

Simple regression results	Model 1	Model 2	Model 3	Model 4
	Coeff. (t-value)	Coeff. (t-value)	Coeff. (t-value)	Coeff. (t-value)
ROA_IDN	0.133 (0.007)			
ROE_IDN		0.262 (0.013)		
NPM_IDN			0.174 (0.021)	
EPS_IDN				0.037(0.072)
ROA_SIN	-0.031(0.259)			
ROE_SIN		-0.168 (0.016)		
NPM_SIN			-0.091 (0.401)	
EPS_SIN				0.058 (0.517)

Note: ROA_IDN is Return on Assets in Indonesia, ROA_SIN is Return on Assets in Singapore, ROE_IDN is Return on Equity in Indonesia, ROE_SIN is Return on Equity in Singapore, NPM_IDN is Net Profit Margin in Indonesia, NPM_SIN is Net Profit Margin in Singapore, EPS_IDN is Earnings per Share in Indonesia, and EPS_SIN is Earnings per Share in Singapore

Table 5 reports the regression results using environmental disclosure as the independent variable. In Model 1, this study examined the effect of environmental disclosure on ROA in Indonesia and Singapore. In Indonesia, we found a positive and significant coefficient of the ROA variable (β= 0.1333, $p <0.05$). This finding supported our first hypotheses, implying that the higher the environmental disclosure, the higher the ROA in Indonesia. Meanwhile the effect of environmental disclosure on the ROA variable in Singapore was negative but not significant (β= -0,031, $p >0.05$). This finding did not support our first hypotheses. This research is in line with previous research conducted by Heryanto & Juliarto (2017), Tahu (2019), and Yi et al. (2022), showing that environmental disclosure did not affect ROA.

In Model 2, we investigated the influence of environmental disclosure on ROE in Indonesia and Singapore. The results found a positive and significant coefficient in Indonesia (β=0.262, $p <0.05$). Thus, our second hypothesis was supported, indicating that the higher the environmental disclosure, the higher the ROE. This study is in line with previous research conducted by Manisa et al. (2017); Haninun et al. (2018); Wulandari (2020); and Yi et al. (2022), showing that environmental disclosure had a positive effect on ROE. On the other hand, in Singapore the effect of environmental disclosure on ROE was negative and significant (β= -0,168, $p <0.05$). Thus, our second hypothesis was not supported in Singapore.

In Model 3, this study reported a positive and significant coefficient of NPM in Indonesia (β=0.174, p <0.05), thus supporting the third hypothesis. This finding is consistent with the findings of research by Heryanto & Juliarto (2017) and Wulandari (2020). The results indicated that the higher the environment disclosure, the higher the NPM. Unlike Indonesia, in Singapore, the effect of environmental disclosure on NPM was negative but not significant (-β=0.091, p >0.05)

In Model 4, this research documented a positive but not significant coefficient of EPS in Indonesia (β= 0.037, p >0.05). Hence, the fourth hypothesis was not supported. In addition, Singapore also showed the same results. It is consistent with the findings of Heryanto and Juliarto (2017) and Wulandari (2020).

Table 6 reports based on the group test results, there were 108 companies in Indonesia and 102 companies in Singapore. The average implmenetation of environmental disclosure in Indonesia was 8.85% and that in Singapore was 14.04%. This shows that the level of environmental disclosure implementation in Singapore was higher than in Indonesia.

Table 6. Group Test Results between Indonesia and Singapore

Group Statistics					
	Group	N	Mean	Std. Deviation	Std. Error Mean
Environmental Disclosure	Singapore	102	.1404	.10411	.01031
	Indonesia	108	.0885	.10474	.01008

Based on the results of the independent sample t test in Table 8, the sig. value of the Levene's test was 0.000 < α (0.05), meaning that there were differences in the implementation of environmental disclosure in Indonesia and Singapore, so the fifth hypothesis was supported.

Discussion

Environmental disclosure and ROA in Indonesia and Singapore

The results of testing the first hypothesis in Indonesia showed that environmental disclosure had a positive and significant effect on ROA. This is in line with the stakeholder theory: companies who publish environmental report show their responsibility for their activities to generate trust from stakeholders. This trust can be in the form of being a product user or a supporter of company funds. This can increase the return on product sales which will then increase ROA. This research is in line with previous research conducted by Rizkan et al. (2017); Pertiwi et al. (2018); Haninun et al. (2018); Aulia and Hadinata (2019); and Wulandari (2020) that environmental disclosure has a positive and significant effect on the company's financial performance.

However, the results of the first hypothesis testing in Singapore showed that environmental disclosure has a negative effect on ROA. This mean that the higher the environmental report, the lower the ROA. This may be due to the mandatory disclosure regulations in Singapore that oblige companies to disclose their environmental activities to the stakeholders. However, the higher the company's environmental disclosure, the higher the costs, thus reducing company profits. This finally can lower financial performance as proxied by ROA. This research is in line with previous research conducted by Heryanto and Juliarto (2017), Tahu (2019), and Yi et al. (2022) that environmental disclosure does not affect ROA.

Environmental disclosure and ROE in Indonesia and Singapore

The results of the second hypothesis testing in Indonesia showed that environmental disclosure had a positive and significant effect on ROE. This means that the higher the environmental statement, the higher the ROE. The signalling theory states that corporate social responsibility provides a good reputation for the company. A good reputation is a consideration for stakeholders, especially investors who will invest their capital. The higher the trust of stakeholders, the easier the company to obtain investment. In addition, a good reputation can also increase sales because customers will prefer the company's products over competitors' products. Then, it will increase the profits and affect the ROE value. It will benefit the company because companies with good performance have a high ROE value. This study is in line with previous research conducted by Manisa et al. (2017); Haninun et al. (2018); Wulandari (2020); and Yi et al. (2022) that environmental disclosure has a positive effect on ROE.

On the other hand, Singapore had a different outcome than Indonesia. The results showed that the higher the environmental disclosure, the lower the ROE. This may be due to the fact that Singapore has regulations that oblige environmental disclosure, so investors do not have an interest in environmental information disclosed by companies. In addition, companies tend to disclose information about good environmental practices yet cover up the bad ones. This then reduces investor interest in investing and can affect the company's annual return. Thus, it can reduce the profitability ratio, so the company's ability to manage capital will also decrease. Moreover, the ROE of the company will also decline. This study is in line with previous research conducted by Heryanto and Juliarto (2017) that environmental disclosure does not affect ROE.

Environmental disclosure and NPM in Indonesia and Singapore

The results of the third hypothesis testing in Indonesia showed that environmental disclosure had a positive and significant effect on NPM. The results indicated that the higher the environment disclosure, the higher the NPM. This is in line with the stakeholder theory that companies who issue environment disclosures would get support from stakeholders. This is because companies tend to care about the environment around them. This then may attract stakeholders, especially the community that buys the company's products. This will increase the return on product sales which will also affect NPM. This research is in line with Heryanto and Juliarto (2017) and Wulandari (2020) that Corporate Social Responsibility (CSR) positively affects NPM. On the other hand, the results of testing the third hypothesis in Singapore showed the opposite result: environmental disclosure does not have a positive effect on NPM. This could be due to the fact that Singapore has a government regulation which requires all companies to report environmental disclosures annually as a form of responsibility to stakeholders. The company's financial performance will decline, and so will the company's profit. This is because the company must report the costs associated with all their environmental activities. A declining profitability ratio can also reduce the company's ability to generate a return on sales. In other words, NPM will also decline. This study is in line with Yi et al. (2022) that environmental disclosure does not affect NPM.

Environmental disclosure and EPS in Indonesia and Singapore

The results of the fourth hypothesis testing in Indonesia and Singapore showed the same results that environmental disclosure did not affect EPS. This is because companies publishing environment disclosures merely report information about good practices yet cover up the bad ones. In addition, companies incur costs that can reduce profits when disclosing environmental reporting. When profits fall, investors will reconsider their decision to invest in the company. This will then decrease EPS. This study is in line with Heryanto and Juliarto (2017) that environmental disclosure does not affect EPS.

Differences in environmental disclosure levels between Indonesia and Singapore

The results of the research proved that Singapore and Indonesia had differing levels of environmental disclosure. This disparity can largely be attributed to the different regulatory frameworks between the two countries. In Indonesia, Law Number 40 of 2007 concerning Limited Liability Companies and Law Number 25 of 2007 concerning Investment mandate certain environmental reporting requirements. Despite these legal provisions, there remains a significant gap in awareness and commitment among companies regarding environmental reporting, resulting in suboptimal disclosure practices. Conversely, Singapore has more stringent regulations that require all companies to disclose their environmental activities comprehensively.

Nevertheless, while Singapore's environmental regulations foster higher disclosure rates, the quality of CSR disclosure in Indonesia still lags behind. Suastha (2016) highlights that a high volume of reporting does not necessarily equate to high-quality CSR disclosure, indicating that quantity alone does not guarantee effectiveness. Lawrence Loh has also noted that, in practice, the quality of CSR disclosures from companies in Singapore and Thailand surpasses that of their counterparts in Indonesia and Malaysia (Suastha, 2016). This underscores a broader issue where regulatory requirements alone are insufficient to ensure the depth and effectiveness of environmental and CSR disclosures, necessitating a more robust approach to improving both the quantity and quality of such disclosures in Indonesia.

Conclusions

The results of this study indicated that environmental disclosure affected financial performance (ROA, ROE, and NPM) in Indonesia. However, the results of the research on the effect of Corporate Social Responsibility (CSR) on financial performance (ROA, ROE, and NPM) in Singapore showed the opposite results. Furthermore, the results of this study also showed that environmental disclosure did not affect EPS in Indonesia and Singapore. In addition, this study also proved that Indonesia and Singapore had different levels of implementation of CSR, in which Singapore had a better quality of CSR disclosure than Indonesia.

Based on the explanation above, companies in Indonesia can use the results of this study to improve their financial performance. The results indicate that corporate environmental disclosure in Indonesia can increase the company's Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). Additionally, this suggests that enhancing transparency and commitment to environmental practices could be a strategic move for Indonesian companies seeking to boost investor confidence and achieve better financial outcomes. Conversely, Singaporean companies might need to revisit their CSR strategies to align them with better financial performance, ensuring that the superior quality of their CSR disclosure translates into tangible financial benefits. From an investor perspective, these findings highlight the importance of evaluating environmental disclosure practices as part of the investment decision-making process. Investors in Indonesia should consider companies with strong environmental disclosure practices, as these are linked to better financial performance. This could lead to more informed investment choices and potentially higher returns. In Singapore, investors might need to look beyond CSR disclosure quality and assess how effectively these practices are integrated into the company's overall financial strategy. This comprehensive evaluation could help investors identify companies that not only disclose high-quality CSR information but also achieve strong. From a governance perspective, these findings imply that regulatory bodies in Indonesia should consider strengthening guidelines and enforcement related to environmental disclosure to foster better corporate governance and financial performance. In Singapore, these suggest that there may be a need to integrate financial performance metrics more closely with CSR activities in governance frameworks to ensure that high-quality disclosures could effectively lead to financial success.

This study has some limitations. First, the observation period was only one year, namely 2019, so the sample was limited. Second, this study only used four variables to proxy financial performance (ROA, ROE, NPM, and EPS). Future research should expand the research object, not only manufacturing companies but all types of companies, to compare the disclosure index of various companies. In addition, the additional variables that influence the company's financial performance, for instance, Return on Investment (ROI), Return on Sales (ROS), and Gross Profit Margin (GPM).

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