

THE ROLE OF ENVIRONMENTAL PERFORMANCE IN MEDIATING CSR AND ENVIRONMENTAL COSTS TOWARDS SUSTAINABLE FINANCIAL PERFORMANCE (SDGs) IN GARMENT COMPANIES IN INDONESIA

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Abstract

This study investigates the mediating role of Environmental Performance in the relationship between Corporate Social Responsibility (CSR) and Environmental Cost on Sustainable Financial Performance. Employing a quantitative approach with secondary data, this research utilizes panel data regression analysis via EViews software to examine the influence of CSR and Environmental Cost on Sustainable Financial Performance, mediated by Environmental Performance. The findings indicate that CSR and Environmental Cost partially exhibit a positive effect on Environmental Performance. However, while CSR does not significantly impact Sustainable Financial Performance, Environmental Cost and Environmental Performance demonstrate a significant influence. Furthermore, Environmental Performance does not mediate the relationship between CSR and Environmental Cost on Sustainable Financial Performance. The findings of this research suggest that the more companies implement CSR and Environmental Cost effectively and efficiently, the more it will enhance Environmental Performance, despite the significant environmental costs incurred. The results imply that companies need to ensure that CSR and Environmental Cost are implemented with effective strategies to have a direct impact on environmental performance.

Keywords: Corporate Social Responsibility, Environmental Cost, Environmental Performance, Sustainable Financial Performance.

I. INTRODUCTION

In the decade 1980 to 2000 Indonesia was a garment producer with a large export market share, but along with the covid outbreak in 2019 there began to be a decline On the company's profitability, in Indonesia this sector experienced an average decrease in profit of 0.365 in 2020 to 0.17 in 2022 (kontan.co.id). Garment companies are one of the companies that have a fairly high environmental impact and rank second in the world as a waste producer, this is due to the process of using dyes derived from chemicals that can pollute the environment as well as the raw materials used (Nurfauziah & Utami, 2021).

The waste, if not handled appropriately, will have a negative impact on environmental sustainability and this causes the company to incur greater environmental costs due to the company's non-compliance with environmental regulations, this cost expenditure will certainly Affect the company's liquidity (Karjono, 2022). Increasing consumer awareness of the environmental impact of textile companies encourages the demand for environmentally friendly products so that companies strive to be able to meet this demand by producing

environmentally friendly goods so that companies must add new investments in environmentally friendly machinery or raw materials where the additional investment will certainly have an impact on the company's ability to fulfill its obligations (Ulfiyah, 2024).

Garment companies that are export-oriented especially to the European market and the American market will face strict regulations related to carbon emissions, textile waste and water use, the international market requires garment companies to meet the provisions of the export destination countries such as compliance with ISO 14000 certification and OEKO-TEX certification. Not to mention the demands from environmental organizations. The case that occurred in 2024 where PT Soedali Sejahtera in Surabaya had to pay 48 billion rupiah because it was proven to have polluted the environment, not to mention the case in West Java where there are several textile companies that dump their waste into the Citarum River without first processing waste.

The fulfillment of environmental regulations carried out by the company certainly helps the company in achieving environmental performance which will later have a positive impact on improving financial performance, but on the other hand, if environmental regulations are not fulfilled and even violated, the negative impact will be felt by the company, the increase in the company's expenditure on violations of environmental regulations will result in a decrease in financial (Imran et al., 2021; Zheng et al., 2023).

According to research conducted by (Anser et al., 2020), effective implementation of Corporate Social Responsibility (CSR) can lead to improved environmental performance, although it may be accompanied by increased environmental costs. Companies that successfully implement CSR often provide transparent sustainability reports, including key environmental performance indicators such as carbon emissions, energy consumption, and waste management.

However, (Karassin & Bar-Haim, 2019) research also suggests that CSR initiatives may not yield environmental performance improvements if they are merely symbolic or focused solely on fulfilling regulatory obligations. The strategic allocation of environmental costs towards targeted objectives can enhance environmental performance (Asiaei et al., 2022). In contrast, environmental costs that are not directly linked to pollution reduction or environmental enhancement, such as those solely for promotional purposes or documentation without tangible actions, are unlikely to drive improvements in environmental performance (Schniederjans & Hales, 2016).

While (Indriastuti & Chariri, 2021) suggests that Corporate Social Responsibility (CSR) positively influences financial sustainable performance by enhancing company image and ultimately increasing profitability in the long term, other research conducted by (Lu et al., 2018) indicates that CSR may not impact financial sustainable performance if it is not aligned with the company's core business.

Furthermore, environmental costs may not necessarily improve sustainable financial performance if companies fail to fully implement environmentally friendly initiatives, such as waste management, renewable energy, or environmental certification.

In contrast, research by Ong et al., (2019) finds that environmental costs can enhance sustainable financial performance through effective environmental management, which can lead to energy efficiency, consumer loyalty, legal risk mitigation, and brand strengthening. Additionally, environmental performance is likely to have a positive impact on sustainable financial performance, as companies that adopt environmentally friendly practices can increase operational efficiency, reduce costs, and enhance their financial sustainability in the long term (Zhang & Chen, 2017).

However, the benefits of environmental performance improvements may only be realized in the long term. This study focuses on the textile and garment industry, which is a significant contributor to environmental pollution in Indonesia. Notably, environmental performance has been understudied as an intervening variable between CSR, environmental costs, and sustainable financial performance. Moreover, while sustainable financial performance is often measured using profitability metrics, this study uses liquidity metrics to assess the impact of environmental costs on companies' ability to meet their short-term obligations.

II. THEORITICAL FRAMEWORK

Triple Buttom Theory

The triple bottom line (TBL) theory is applied by the Company in the form of Corporate Social Responsibility, where the concept of TBL is to prioritize the interests of stakeholders rather than the interests of shareholders, the interests of these stakeholders include the interests of profit sustainability, the interests of community sustainability (people) and the interests of environmental sustainability (Planet) (Ragazou et al., 2024b).

This concept adheres to fair trade and ethical trade in doing business (profit), emphasizes business practices by protecting the interests of labor, opposes the exploitation of minors, fair wage payments, safe working environment and tolerable working hours, pays attention to health and education for workers (people), this concept also emphasizes businesses that are able to manage energy use well, reducing production waste and reprocessing waste to be environmentally safe, reducing carbon emissions (Planet) (Khan, 2024) (Molina & Rajagopal, 2023).

These three pillars of TBL support the achievement of sustainability which has a non-mutually exclusive nature and can be mutually reinforcing, the role of the concept of TBL (Profit, people and Planet) is the main element in building sustainable development (Ragazou et al., 2024a)

Signaling Theory

Signaling theory explains how companies proactively disclose financial information to external stakeholders, providing valuable insights into their prospects. This action bridges the information gap between the company and external parties, who typically have less knowledge about the company's future plans and performance (Reber et al., 2022) This information is in the form of what actions have been taken by the management both in the past, current and actions that will be taken by the company in the future for the survival of the Company and

how it affects the company. The information provided by the Company will provide a signal for outside parties (investors) to make decisions in investing, The presentation of positive information typically sends a positive signal, whereas the disclosure of negative information yields a negative signal. (Bustani et al., 2021).

Companies that implement CSR and demonstrate good environmental performance send a positive signal to external stakeholders, potentially boosting profits. Research suggests that the public favors companies with high environmental concerns over those that neglect the environment(Shabbir & Wisdom, 2020)

Legitimasi Theory

The conclusion from the theory of legitimacy that the company is bound by contractual or obligatory commitments to adapt to environmental changes and the surrounding community, this adjustment can be made by implementing the values or norms that apply in the community in the Company's operational activities by paying attention to the fulfillment of community compliance and building welfare for the community where the company operates (Sisdianto et al., 2023).

The form of adjustment activities that many companies carry out is through CSR programs. This CSR program is a form of concern that the Company has in protecting the surrounding environment (El-Mallah et al., 2023) One of the efforts made by the Company in maintaining its business continuity is to seek recognition or legitimacy from all stakeholders, namely investors, creditors, consumers, the government and the surrounding community. from customers, always comply with all regulations to get recognition from the government and to get recognition from the public, the Company carries out social responsibility activities. According to legitimacy theory, the Company has weak environmental performance it will increase the threat of social legitimacy thus encouraging the Company to make CSR disclosures in annual reports (Herbert & Graham, 2022)

Sustainable Financial Performance

Financial sustainability is the capability of a Company or organization to achieve stable and High-return financial result in the long term without sacrificing social, environmental and ethical aspects (Ferrarini, 2021) society at large (Al Ahababi & Nobanee, 2019) In the study (Hou, 2019) stated that the main elements of sustainable financial performance are: 1). Long-term profitability, which is ensuring consistent revenue and cost efficiency in maintaining profits, 2). Risk management, which is the Firm effectively identifies and mitigates risks including environmental, social and governance risks, 3). Operational Efficiency, which is able to optimize business processes to reduce the waste of good resources. financial and environmental, 4). Social and environmental responsibility is to ensure that business operations do not damage the environment and have a positive impact on society,5). The Company's product innovation and sustainability initiatives focus on developing products and services that are environmentally friendly and meet market needs in a sustainable manner, 6). Compliance with regulations, the Company must be able to comply with laws and regulations related to finance, environment and business ethics.

Environmental Performance

Environmental performance refers to the measurement and reporting of a firm in managing its environmental impact, in this case it includes how the company identifies, measures and reports environmental aspects in its operations including measurements on carbon emissions, resource use and compliance with environmental regulations both in the country where the company is established and global environmental regulations (Darsono et al., 2024).

The company's environmental performance is usually reflected in environmental accounting or in sustainable reporting. Environmental accounting provides data on the measurement of costs and benefits of environmental policies which include environmental compliance costs, pollution prevention costs and environmental restoration costs which can be seen in financial statements or in environmental management accounting reports (Wijayanto et al., 2021). Sustainable reporting presents data on carbon emissions, energy use, water efficiency, and waste in a company's. The increasing demand for transparency and sustainability today encourages companies to integrate environmental performance in accounting systems, this disclosure helps companies in managing environmental risks so as to be able to improve their Business reputation among investors and stakeholders (Hidayat et al., 2023)

Corporate Social Responsibility

Corporate Social Responsibility (CSR) is a concept in which a company is responsible for the social, economic, and environmental impacts of its operations (Msosa & Govender, 2019). CSR extends beyond financial considerations and welfare of the community and environmental sustainability. CSR plays an important role in creating a balance between profit, people, and planet (environment). TBL concept although the implementation of CSR cannot have a direct impact on the company's profitability in the short term. The company's commitment to CSR is expected to generate sustained reputational gains in the future. The increasing public awareness of environmental sustainability is driving a shift towards eco-friendly consumption patterns, which in turn is prompting companies to adopt more sustainable business practices and prioritize community outreach and environmental responsibility (Bianchi et al., 2019). Effective CSR implementation can have a positive impact on customer retention, improved sales performance, and enhanced profitability for companies that prioritize social responsibility.

Environmental Cost

Environmental issues that continue to increase and the increasingly stringent environmental regulations cause people to increase their awareness of the environment, this requires companies to be able to manage environmental costs effectively for the company's enduring success. Environmental cost is an expense incurred due to a firm's activities that have an influence on the environment. This cost includes expenses to prevent, reduce, and reverse environmental degradation, as well as costs that arise due to non-compliance with environmental regulations (Qinitharah, 2024). The company's environmental expenses may include prevention costs or costs incurred to prevent pollution or negative environmental impacts, deduction costs or costs incurred to measure and monitor the environmental impact

of the company's activities, Internal Failure Costs or costs incurred due to environmental impacts that can still be controlled by the company and External failure costs or costs that arise due to environmental impacts that have occurred and often involve third parties or the community (Virnanda, 2023)

III. METHODOLOGY

Research Methodology

This study uses a causal quantitative approach, this method is used to see the extent of the influence between research variables. Statistical data in this study is used to verify the transferability of the research findings and answer the hypothesis regarding the role of environmental performance in mediating CSR and environmental costs towards sustainable financial performance (SGD)

Place and Time research

The objects focuses on textile and garment firms traded on the IDX for the year of 2019-2023 that have published financial reports, annual reports, and sustainability reports, thereby providing secondary data that can be accessed and downloaded through the internet.

Research Variable

The research framework consists of independent variables (CSR and environmental costs), dependent variable (Sustainable Financial Performance), and intervening variables. The measurement of these variables are explained below:

1. $CSRI = \frac{\sum X_{yi}}{N_i}$
2. $ECR = \frac{CSR\ Cost}{Revenue}$
3. $EPR = \frac{Environmental\ Cost}{Revenue}$
4. $CR = \frac{Current\ Asset}{Current\ Liability}$

Sampling method

Data sampling method employed in this research utilizes the criteria sampling method, which involves applying specific criteria to select samples that align with the research objectives. The criteria for sample selection are as follows:

1. Listed textile and garment companies on the Indonesia Stock Exchange (IDX) that have provided continuous annual financial reporting for the five-year period from 2019 to 2023.
2. Publicly traded companies on the Indonesia Stock Exchange (IDX) that provide annual financial reports containing data pertinent to the studied variables during the period spanning 2019 to 2023.

3. Entities that report comprehensive data on Corporate Social Responsibility (CSR) disclosures, environmental expenditures, environmental performance metrics, financial profitability, and other relevant corporate activities.

Data Retrieval Method

This study utilizes secondary data, which was collected through a thorough examination of existing literature and documentation, including financial statements and annual reports of Textile and garment sub-sector entities quoted on the IDX from 2019 to 2023. The data sources employed in this research comprise CSR disclosure reports, environmental cost reports, environmental performance reports, and comprehensive financial statements

Data Analysis Methode

The processing of research data uses e views, this program is used to process panel data using Path modeling. This analysis applied to uncover the influence of variables with other variables either directly or indirectly through the model's tendency in the closeness of the relationships that form the influence model.

- a. Descriptive statistics are utilized to characterize the data distribution, including measures of central tendency and variability, to assess normality.
- b. Panel data regression estimation, in this panel data estimation consists of 3 methods that are tested, namely CEM, FEM and REM.
- c. The technique of selecting the panel data model, to determine which model can be used in the panel data regression test, the chow test, the Hausman test and the multiplier langrage test are carried out.
- d. Goodness off fit, used to see the contribution of the influence of exogenous variables to endogenous variables.
- e. Hypothesis test, Hypothesis testing used is a t-test is done to see if the research hypothesis proposed is partially provable or acceptable and the F test is to find out if the regression model is acceptable.
- f. Sobel test, To evaluated the causal effect for variables in a system comprising independent variables, dependent variables, and mediating variables.

IV. RESULT AND DISCUSSION

Result:

Description of Research Object

This quantitative causal study investigates the relationships among variables using a sample of 21 textile and garment manufacturers listed on the IDX from 2019 to 2023. Selective sampling was utilized to select research samples, resulting in 15 companies that met the specified criteria. The list of sample companies is presented below:

Table 1: List Of Company Sample

NO	Code	Name of company
1	ADMG	PT. Polychem Indonesia Tbk
2	AGRO	PT. Argo Pantes Tbk
3	BELL	PT. Trisula Textile Industries Tbk
4	ERTX	PT. Eratex Djaya Tbk
5	ESTI	PT. Ever Shine Textile Industry Tbk
6	UCID	PT. Uni-Charm Indonesia Tbk
7	INDR	PT. Indorama Synthetics Tbk
8	MYTX	PT. Asia Pacific Investama Tbk
9	PBRX	PT. Pan Brother Tbk
10	POLY	PT. Asia Pasific Fibers Tbk
11	RICY	PT. Ricky Putra Globalindo Tbk
12	SRIL	PT. Sri Rejeki Isman Tbk
13	SSTM	PT. Sunson Textile Manufacture Tbk
14	TFCO	PT. Tifico Fiber Indonesia Tbk
15	TRIS	PT. Trisula International Tbk

Data Calculation

The first stage in the testing of this research is to conduct a descriptive statistical test, with the following results:

Table 2: Descriptive Statistics test results

	CR	CSR	ECR	EPR
Average	2.699957	0.687833	0.007246	0.583333
Med	1.506369	0.670000	0.001183	0.600000
Max	17.44953	0.990000	0.031993	0.600000
Min	0.095128	0.400000	0.000141	0.400000
Standard. Dev.	1.742901	0.145766	0.005214	0.055744

Table 2. shows that the results of the descriptive statistical test the mean value for each variable is greater than the standard deviation value, this shows that each variable has a data distribution that tends to be normal or homogeneous

Tabel 3: Model test Result

Test category	Equation 1		Equation 2	
Chow test	0.0001	FEM	0.0000	FEM
Hausman Test	0.1113	REM	0.5041	REM
Langrange Multiplier	0.0026	REM	0.0005	REM
Result		REM		REM

Table 4 : Panel data regression test results

Equation 1 (CSR, ECR to EPR)					Equation 2 (CSR, ECR, EPR, to CR)				
Variable	Coeff	std Error	t-statistic	Prob	Variable	Coeff	std Error	t-statistic	Prob
C	-0.04445	0.050383	-0.88231	0.3810	C	-0.04482	0.089166	-0.50266	0.61700
CSR	10.55422	4.740367	2.226457	0.0296	CSR	1.526671	7.570698	0.201655	0.84090
ECR	0.894881	0.121314	7.376569	0.0000	ECR	1.404676	0.273585	5.134327	0.00000
					EPR	0.145119	0.216286	3.670957	0.04800
R Square			0.480267					0.313364	
Adjusted R Square			0.463502					0.279595	
F. Statistic			28.64602					9.279619	
F. Statistic (prob)			0.000000					0.000038	

The table above can explain that:

1. CSR has an impact of 10.55422 on Environmental performance with a t value of 2.22647 > 2.003 and a Prob. Value of 0.0296 < 0.05
2. Environmental cost (ECR) has an effect of 0.894881 on environmental performance, t-value of 7.376569 > 2.003 and P value 0.000<0.05
3. Corporate social responsibility and environmental costs contributed to environmental performance of 0.480267 or 48.0267 percent
4. CSR has a coefficient value of 1.526671 in a positive direction and a t value of 0.201655 < 2.003 and a P value of 0.8409>0.05 which means that CSR does not impact to Sustainable Financial Performance
5. Environmental Cost (ECR) has a coefficient value of 1.404676 with a t value of 5.134327 > 2.003 and a p value of 0.000 < 0.05 which means that environmental cost has a significant influence with a positive direction on Sustainable Financial Performance
6. EPR has a coefficient value of 0.145119, t statistic of 3.670957>2.003 and Prob. Of 0.0480 < 0.05 which means that environmental performance has an effect on Sustainable Financial Performance in a positive direction

Tabel 5: Sobel Test

Remark	Sobel Test	Prob.	Ket.
CSR – EPR – CR	0.64240130	0.52061265	Un mediated
ECR – EPR – CR	0.66817784	0.50402008	Un mediated

The sobel test result were obtained that:

- a. ECR is not able to mediate CSR in affecting Sustainable Financial Performance, the sobel test value is 0.64240130 and value of prob. 0.52061265 > 0.05
- b. Environmental performance is not able to mediate environmental costs in affecting sustainable Financial Performance, sobel test value of 0.66817784 and probability value of 0.50402008 > 0.05

Discussion:

- a. The findings of this research CSR has a increasing impact on Environmental Performance in garment companies in Indonesia. The CSR activities implemented by these companies, including emission and waste reduction, energy and resource efficiency, environmental awareness education, and regulatory compliance, demonstrate that CSR initiatives have a beneficial impact on the companies. The positive impact of CSR implementation can enhance the company's image, as environmentally conscious practices attract customers and increase their loyalty. Furthermore, investors are more likely to invest in companies that prioritize sustainability. Effective CSR implementation can yield benefits for companies not only in social and economic aspects but also in maintaining and improving environmental quality.
- b. This study reveals that Environmental Cost has a positive impact on environmental performance, suggesting that expenditures on environmental initiatives can enhance environmental quality and promote sustainable business practices. Although environmental costs are often perceived as additional expenses, effective management of these costs can lead to improved environmental performance and long-term benefits for the company. Strategic allocation of funds towards clean technologies, waste management, and renewable energy investments can mitigate negative environmental impacts and achieve energy efficiency. Furthermore, companies that invest in environmental audits, certifications, and green innovation research can avoid legal sanctions, develop environmentally friendly products, and ultimately enhance their environmental performance and corporate image.
- c. The findings of this study indicate that Corporate Social Responsibility (CSR) does not have a significant impact on sustainable financial performance, suggesting that CSR initiatives implemented by garment companies in Indonesia do not substantially influence their long-term financial performance. This implies that CSR activities, while capable of enhancing the company's image and reputation, do not directly translate to increased financial profits in the short or medium term. The financial benefits of CSR are often limited due to the high costs associated with its implementation, which may not be offset by immediate financial returns. Furthermore, the lack of alignment between CSR programs and the company's core business model can restrict its financial benefits. Although CSR plays a crucial role in building the company's reputation and stakeholder relationships, its impact on sustainable financial performance may not be significant in the short or medium term. However, when managed with the right strategy, CSR can be a supporting factor for the company's financial sustainability.
- d. The findings of the hypothesis test indicate that Environmental Cost has a significant positive influence on sustainable financial performance, suggesting that investments in environmental protection have a beneficial impact on long-term financial sustainability. By complying with environmental regulations, companies can avoid substantial fines associated with environmental pollution or non-compliance. Furthermore, environmental expenditures allocated to research and innovation can lead to the development of green products that are highly attractive in the market, thereby reducing environmental risks and

improving operational efficiency. This, in turn, enables companies to adopt a more stable and sustainable business model in the long term.

- e. The findings of this study indicate that environmental performance has a positive and significant impact on Sustainable Financial Performance. Companies with strong environmental performance are able to achieve resource efficiency, waste management, compliance with environmental regulations, and obtain environmental certification, ultimately enhancing their financial performance in the long term. By adopting sustainable practices and producing environmentally friendly products, companies can capitalize on greater opportunities, including increased consumer interest and access to international markets. Environmental certification is often a prerequisite for competing in the global market, and companies that prioritize environmental performance can not only mitigate environmental risks but also improve their financial sustainability. By becoming more efficient, avoiding legal risks, attracting environmentally conscious consumers and investors, and increasing market competitiveness, companies can achieve long-term financial success while contributing to environmental protection.
- f. The findings of the Sobel test indicate that environmental performance does not mediate the relationship between Corporate Social Responsibility (CSR) and environmental costs in influencing Sustainable Financial Performance. Despite the implementation of CSR and incurrence of environmental costs, environmental performance does not serve as a significant intermediary in enhancing sustainable financial performance. This may be attributed to ineffective implementation of CSR and environmental cost investments, resulting in suboptimal environmental performance. Alternatively, environmental performance may not be the sole determining factor in the relationship between CSR, environmental costs, and sustainable financial performance, suggesting that other variables may also play a role.
- g. The findings of this research suggest that companies should ensure the effective implementation of Corporate Social Responsibility (CSR) and Environmental Cost strategies to directly impact environmental performance. Furthermore, companies may need to explore other factors, such as green technology innovation or operational efficiency, that could more effectively enhance sustainable financial performance.

V. CONCLUSION

This study concludes that Corporate Social Responsibility (CSR) and Environmental Cost have a positive impact on environmental performance, suggesting that companies that effectively implement these initiatives can enhance their environmental performance.

However, CSR does not directly influence Sustainable Financial Performance, likely due to a misalignment between CSR activities and the company's core business model, limiting its financial benefits. In contrast, Environmental Cost has a positive effect on Sustainable Financial Performance, indicating that investments in environmental research and innovation can lead to the development of attractive green products.

Furthermore, Environmental Performance positively influences Sustainable Financial Performance, as companies producing environmentally friendly goods and obtaining environmental certification can capitalize on increased consumer interest and access to international markets.

Notably, environmental performance does not mediate the relationship between CSR, Environmental Cost, and Sustainable Financial Performance, potentially due to ineffective implementation of these initiatives, which fails to enhance sustainable financial performance in garment companies listed on the Indonesia Stock Exchange.

Suggestions

Based on the research findings and conclusions the following recommendations are proposed:

1. Recommendation for companies

- a. Companies should ensure that their Corporate Social Responsibility (CSR) programs are aligned with their core business model to maximize financial benefits.
- b. Companies can increase their investment in environmental research and innovation to develop green products with high market appeal.
- c. Companies should enhance their environmental performance by adopting environmentally friendly business practices and obtaining environmental certifications to increase opportunities in international markets.
- d. Companies should ensure that CSR and environmental costs are implemented effectively to improve environmental performance and sustainable financial performance.

2. Recommendation for future researchers

- a. Future researchers can conduct further studies on the relationship between Corporate Social Responsibility (CSR) and financial performance, considering other factors that may influence this relationship.
- b. Researchers can analyze the factors that affect the effective implementation of CSR and environmental costs in enhancing environmental performance and sustainable financial performance.
- c. Future researchers can conduct case studies in other industries to determine whether the findings of this research can be generalized to other contexts.
- d. Researchers can employ different research methods, such as qualitative or mixed methods, to gain a more nuanced understanding of the relationships between CSR, environmental costs, environmental performance, and sustainable financial performance.

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