AFRE Accounting and Financial Review, 7(3): 411-422, 2024
https://jurnal.unmer.ac.id/index.php/afr

The Role of Environmental Disclosure in Mediating Independent Commissioners and Environmental Costs on Profitability

Dhela Septian Anggaretta, Siti Anisyah, Amin Pujiati, Sucihatiningsih Dian Wisika Prajanti

Faculty of Economics and Business, Universitas Negeri Semarang, 50229, Indonesia

Article info

Keywords:
Environmental Costs, Environmental Disclosure, Independent Board of Commissioners, and Profitability

Abtract

This study aims to determine the effect of the independent board of commissioners and environmental costs on profitability through environmental disclosure either directly or indirectly in construction industry companies listed on the Indonesia Stock Exchange. This research is quantitative descriptive research. The sample determination process in this study used a purposive sampling method with a total sample of 20 construction industries during 2021-2022. The results of this study indicate that there is no effect of independent board of commissioners on profitability, there is no effect of environmental costs on profitability, there is no effect of environmental disclosure on profitability, there is an effect of independent board of commissioners on environmental disclosure, there is no effect of environmental costs on environmental disclosure, there is no effect of independent board of commissioners on profitability through environmental disclosure, and there is no effect of environmental costs on profitability through environmental disclosure. Future research is expected to use other independent variables and company sectors.

ISSN (print): 2598-7763
ISSN (online): 2598-7771

Citation: Anggaretta, D.S,. Anisyah, S., Pujiati, A., Prajanti, S.D.W., (2024). The Role of Environmental Disclosure in Mediating Independent Commissioners and Environmental Cost on Profitability. AFRE Accounting and Financial Review, 7(3): 411-422

✉ Corresponding Author:
Dhela Septian Anggaretta
E-mail:
dhelaseptiananggaretta29@mail.unnes.ac.id

JEL Classification: G38, M14, Q56
DOI: https://doi.org/10.26905/afr.v7i3.12850

1. Introduction

Today's business competition requires people to improve their performance to maintain survival and achieve their company's goals, maximizing company value or shareholder prosperity. The success of a company can be seen from the success or failure of the company to achieve its goals by looking at the growth and performance of the company. This company's growth can be seen from its financial performance, one of which is profitability. Each company must be able to assess the condition and development of the company through the analysis of financial statement ratios to maintain the company's existence in economic growth with increasingly fierce business competition (Buch, 2018; Harinurdin, 2023; Rashid et al., 2024). Profitability is a comparison between profit and assets or capital. According to, the profitability ratio is used to measure the efficiency of using company assets. however, with the rules from Pujiati et al. (2023) regarding the application of sustainable finance for institutions, issuers, and public companies, companies do not need to concentrate only on how to get big profits. As we know, every company activity has effect on the environment (Bing & Li, 2019; Lee & Cho, 2021; Karwowski & Raulinajtys-Grzybek, 2021; Barauskaite & Streimikiene, 2021; Khan et al., 2021; Sadiq et al., 2022; and Rahi et al., 2024).

From year to year, there is an increase in the amount of energy distributed to the industrial sector. Meanwhile, as we know, electricity competition produces greenhouse gas emissions such as carbon dioxide, methane, and nitrous oxide. Therefore, the government and policymakers must implement special rules for industry and society to use electricity wisely. With these rules, to measure the achievement in electricity consumption, it is necessary to have a forum as a place for companies to increase the trust of stakeholders that the company's activities are committed to protecting the environment and society. With this interest, the sustainability report is given a sustainability report that contains good corporate governance, social performance, and environmental disclosure, along with increasing public awareness of environmental issues. So, the company should include environmental costs in its sustainability report. This is very important because the company will be responsible for all its activities by including environmental costs in its sustainability report. This responsibility prevents pollution, manages natural resources, and protects biodiversity. Greenhouse gas (GHG) emissions are one of the results of pollution, where GHGs cause climate change caused by human activities. According to Irahadi et al. (2020), construction industry activities cause 25% of greenhouse gas emissions in Indonesia. Efforts to reduce GHG emissions include the use of more efficient standards and the use of more environmentally friendly power. In forming these efforts, an independent board of commissioners is needed to help regulate and supervise using more efficient and environmentally friendly materials. This is in line with the thoughts of Riyadh et al. (2019); Maulia & Yanto (2020), which state that several board members have a role in conducting more effective monitoring and have a strong enough influence on management performance in disclosing environmental responsibility. In addition, an independent board of commissioners is expected to ensure that environmental information disclosure is transparent and credible. Previous research on profitability. Research related to profitability has been conducted, showing several influencing factors. These factors include the board of independent commissioners, environmental costs, and environmental disclosure.

This study will concentrate on the construction industry sector listed on the IDX, as this sector is characterized by energy use that generates emissions that contribute to greenhouse gas effects. Furthermore, the study integrates three often-separated perspectives: the financial scope (such as profitability), positional interests (independent commissioners), and environmental aspects (including environmental costs and environmental disclosures).

However, there are differences in results, such as the research produced by Raja (2016) and Safietrie (2017), which shows that the independent board of commissioners influences profitability. Meanwhile, Sunarto et al. (2021), and Puspaningsih et al. (2022) stated that the independent board of commissioners did not affect profitability. Environmental costs also have different results. Septiadi (2016), Wicaksono (2024), and Amin et al. (2024) explain that environmental costs affect a company's financial performance. However, research conducted by Meiyana & Aisyah (2019), Dewi & Wiyono (2023), Putri & Khairani (2024), and Wulandari et al. (2023) explains that environmental costs do not affect financial performance. Not only on the independent board of commissioners but also on environmental costs. The difference in results also occurs in environmental disclosure. According to Wijayanti (2020), and Dewi & Wiyono (2023), environmental disclosure affects profitability. However, in contrast, Celvin & Gaol (2015) explains that environmental disclosure does not affect profitability.

Solikhah et al. (2021) and Wahyuningrum et al., (2020) indicate that the independent board of commissioners influences environmental disclosure. However, Hidayah et al. (2023), and Sukirman et al. (2021) argue that no such influence exists. Regarding environmental costs, Adyaksana et al. (2022) state that environmental costs affect environmental disclosure, whereas Elviani et al. (2022) claim that they do not. Given these differing perspectives and research outcomes, this study aims to contribute more specifically and relevantly to developing sustainable business practices within Indonesia's construction industry.

Based on previous research, issues related to profitability are very interesting because of the discrepancy in the factors that influence it. The difference in research results can be called inconsistency of results, so based on this, it is necessary to add an intervening variable, namely environmental disclosure. Environmental disclosure (Xie et al., 2019; Ramlawati et al., 2022) shows how companies contribute to maintaining and caring for nature by minimizing the risks of all company activities. By using the environmental disclosure variable as an intervening variable, it is expected to encourage the influence of the independent board of commissioners and environmental costs on profitability. So it is very interesting to examine the Role of Environmental Disclosure in Mediating Independent Commissioners and Environmental Costs on Profitability. This study aims to determine the effect of the independent board of commissioners and environmental costs on profitability through environmental disclosure either directly or indirectly in construction industry companies listed on the Indonesia Stock Exchange

2. Hypothesis Development

According to Wulandari (2020), stakeholders are a very broad and diverse group; some are supportive and beneficial, but some have a negative and obstructive influence, depending on different needs and aspirations. According to Zain et al. (2021), the theory of stakeholders means that the existence of an entity or company requires support from stakeholders so that the company's activities also consider recognition from other stakeholders. When stakeholders have power, the business needs to adapt to stakeholders. According to LSPR News (2023), there are 2 types of stakeholders: internal and external. Internal stakeholders include management and executives, employees, and shareholders. External stakeholders include customers, partners, communities, governments, and the media.

According to Ahmad et al. (2020); Nishitani et al. (2021); Sakinah et al. (2022); Salunkhe et al. (2023); and Kuźniarska et al., 2023) stakeholders have an important role in a company's survival. Because the resources needed for the Company's operations are basically under the control of stakeholders. According to El-Baz & Ruel (2024), the success or failure of a company is influenced by stakeholders. This is also reinforced by Sivalingam & Ramaswamy (2024), who say that stakeholder involvement is very important for planning, designing, implementing, and ensuring program effectiveness in a company. Managing relationships with internal and external stakeholders is key to long-term business success.

The company's growth can be seen from its financial performance, one of which is profitability. Profitability is a percentage used to measure the extent to which the company can generate profits within a certain period. According to Yusuf et al. (2022), profitability is how every business actor can profit maximum. Where certain achievements can measure these profits. The company can obtain the profit ratio. Suryadi & Yusnelly (2024) explain that the greater the profit level, the better the company's management. One of the profitability measurements can be done by calculating the return on assets (ROA). ROA can generally be seen in each company's annual financial overview report.

The internal board of commissioners is one of the company's stakeholders. The independent board of commissioners can improve the company's supervisory function, so with this function, it is hoped that the independent board of commissioners will be able to increase company profitability. According to Raja (2016); Safietrie (2017); and Martinus & Kusumawati (2021) a company's independent board of commissioners is hoped to reduce agency problems and prevent opportunistic behavior. according to Muliasari & Hidayat (2020); Ifada et al. (2021); Sunarto et al. (2021); Puspaningsih et al. (2022) an independent commissioner has no affiliation with shareholders, directors, or board of commissioners and does not have a board of directors position in the company concerned. This independent commissioner mediates between company management and owners in making strategic or policy decisions to avoid violating applicable regulations.

H_1: Independent board of commissioners effect on profitability

The company, in every activity, must have an impact on its environment. Therefore, companies need to pay attention to their environment by providing environmental management costs. In the theory of costs and benefits, environmental costs are often considered as expenses that can reduce a company's profits. However, today, environmental costs are an obligation of every company for all its activities, especially with the obligation of companies to publish sustainability reports. Adyaksana & Pronosokodewo (2020) explain that environmental costs are an allocation of costs used to reduce the environmental impact that results from a company's operational activities. According to Malik & Kashiramka (2024), it explains that companies make decisions to increase short-term profits despite the enormous negative impact on the environment and governance. Furthermore, Lalo & Hammidin (2021) explain that environmental costs include costs associated with process processes impacting the environment and repairing damage due to waste generated in company activities.

However, according to Sarli & Wira (2022), the company's financial condition must also be considered when calculating environmental costs because the costs incurred will be very large and beyond the company's operational costs. Meiyana & Aisyah (2019); Putri et al. (2023); Handayani et al. (2023); Wicaksono (2024); Amin et al. (2024)

also explain that environmental costs will affect profitability.
H_2: Environmental Costs Affect on Profitability

Environmental disclosure is a non-financial report that is currently considered by the public. Environmental disclosure is one of the report components of a company's sustainability report. According to Kartal et al. (2024), increasing awareness of the disclosure of environmental, social, and governance activities has encouraged companies to focus on sustainability and triggered the development of CSR indices in various stock markets worldwide. A sustainability report, or what is commonly referred to as a sustainable report, is a report that is compiled based on the GRI (Global Reporting Initiative). Anisah & Silfia (2023) explain that GRI helps companies and governments worldwide understand and communicate the impact of sustainability issues such as climate change, human rights, governance, and social welfare. Tarigan & Semuel (2015) explain that environmental disclosure in sustainability reports can increase a company's value and profit because of the stakeholders' support. Dewi & Wiyono (2023), and Wijayanti (2020) explain that environmental disclosure has an effect on profitability.
H_3: Environmental Disclosure effect on Profitability

A sustainability report is a report that can provide views to the public about social and environmental responsibility, either positively or negatively. Based on theUndang-Undang Republik Indonesia Nomor 40 Tahun 2007 about Limited Liability Companies (PT), concerning limited liability companies (PT) article 1 paragraph 3 explains that companies have social and environmental responsibilities, namely the company's commitment to participate in sustainable economic development to improve the quality of life and the environment that is beneficial, both for the company itself or local groups and society in general or known as CSR.

Khamisu et al. (2024) explained that industrial economic practices towards the environment are often criticized because of the impact of company activities that are detrimental to the welfare of the environment and society, one of which is using non-renewable energy. Because of this, Pujiati, Yanto, et al. (2023) explained that the heavy dependence on energy must end.

The independent board of commissioners is a party that has no affiliation with any party in the industry. Therefore, the independent board of commissioners must play an active role in ensuring effective environmental disclosure. Wahyuningrum et al. (2020) and Solikhah et al. (2021) explain that the independent board of commissioners has an effect on environmental disclosure.
H_4: Independent Board of Commissioners influences Environmental Disclosure.
H_6: Independent Board of Commissioners influences Profitability through Environmental Disclosure.

Environmental disclosures based on GRI Standards include indicators of materials, energy, water and waste, biodiversity, emissions, waste, environmental compliance, and supplier environmental assessment. Where each of the above disclosure items has 32 environmental disclosure items. More comprehensive environmental disclosures can help companies to monitor trends and make informed decisions regarding environmental cost management. In addition, by working together, environmental costs and environmental disclosures are expected to help achieve the common goal of protecting the environment and creating value for the company. Adyaksana et al. (2022) said that environmental costs affect environmental disclosure. However, Elviani et al. (2022) found that environmental costs have no effect on environmental disclosure.
H_5: Environmental Costs Influence Environmental Disclosure
H_7: Environmental Costs Influence Profitability Through Environmental Disclosure

3. Data and Methods

This type of research is quantitative research that collects secondary data. Furthermore, testing will be carried out on the variables of the independent board of commissioners, environmental costs, environmental disclosure, and profitability, which will be submitted in the sustainability report. This research was conducted in the construction industry listed on the Indonesia Stock Exchange from 2021 to 2022. The process of determining the sample in this study using a purposive sampling method, namely companies that publish sustainability reports by GRI standards from 2021 to 2022.

Profitability calculations are calculated using the ROA (Return on Assets) formula. Independent variables, such as the independent board of commissioners, are calculated using the ratio between independent commissioners and total commissioners. Environmental costs are costs incurred to address environmental damage caused by a company's activities. This cost also includes the cost of preventing the environment from being damaged. Environmental costs are calculated using the ratio between environmental costs and the company's net income. while the mediating variable, namely environmental disclosure, is calculated using the ratio between the number of environmental items disclosed and the number of environmental items expected to be disclosed—descriptive analysis using SPSS 22 and hypothesis testing using SmartPLS 3.0 with a significance of 0.05.

4. Result

Table 2 explains that the independent board of commissioners has a minimum value of 0.167 and a maximum value of 0.667. The company with the lowest ratio of independent commissioners is PT Pembangunan Perumahan (Persero) Tbk in 2022, and the maximum ratio is owned by PP Presisi Tbk in 2021. The environmental cost has a minimum value of -0.020 and a maximum value of 0.242. The company with the lowest environmental cost ratio is PT Hutama Karya (Persero) in 2022, and the maximum ratio is owned by PT Totalindo Eka Persada Tbk (TOPS) in 2021. The environmental disclosure has a minimum value of -0.125 and a maximum value of 0.783. The company with the lowest environmental disclosure ratio is PT Paramita Bangun Sa-rana Tbk in 2021, and the maximum ratio is ow-ned by PT Jaya Konstruksi Manggala Pratama Tbk (JKON) in 2022. The Profitability has a mini-mum value of -27,700 and a maximum value of 14.600. The company with the lowest profitability ratio is PT Acset Indonusa Tbk in 2021, and the maximum ratio is owned by PT Nusa Raya Cipta Tbk in 2022.

The average value of the independent board of commissioners, environmental cost, and environmental disclosure is greater than the standard deviation, so variable independent board of commissioners, environmental cost, and environmental disclosure have a data distribution that is not much different and can be called a relatively small data deviation. Different from the average value of profitability greater than the standard deviation, the profitability variable has a far different data distribution and can be called a relatively large data deviation.

Table 2. Results of Descriptive Statistics

Variable	Min.	Max.	Mean	Std. Dev.
BCI	0.167	0.667	0.414	0.101
Env_Cost	-0.020	0.242	0.021	0.051
Env_Dis	0.125	0.783	0.439	0.183
Profit	-27.700	14.600	0.408	7.315

Where: BCI= Independent Board of Commissioners; Env_Cost= Environmental Costs; Env_Dis= Environmental Disclosure; Profit= Profitabilty

Table 3. Results of the Inner and Outer Model from SmartPLS 3.0 Outputs

Results	BCI	Env_Cost	Env_Dis	Profit
Load. Fact	1.000	1.000	1.000	1.000
Avg.var.ext.	1.000	1.000	1.000	1.000
Comp. reliab.	1.000	1.000	1.000	1.000
Cross Load.	1.000	1.000	1.000	1.000
R2	-	-	0.355	0.075

Table 3 shows that each variable has a loading factor, average variance extracted, and cross-loading more than 0.70, which means that each variable has a high correlation construct measure, is reliable, and each variable has a different construct measure that is not highly correlated. Besides that, the dependent variable profitability can be explained by the independent variable of 7.5%. Meanwhile, the independent variable can explain the environmental disclosure variable by 35.5%.

Table 4. Results with SmartPLS 3.0 Outputs

Results	Env_Disc	Profit
BCI	0.009 < 0.05	0.458 > 0.05
Env_Cost	0.553 > 0.05	0.234 > 0.05
Env_Disc	-	0.195 > 0.05
BCI → Env_Disc		0.598 > 0.05
Env_Cost → Env_Disc		0.236 > 0.05

Table 4 shows that H_1, H_2, H_3, and H_5 are rejected from the partial tests. However, from the partial test, H_4 was accepted. The indirect test shows that H_6 and H_7 are rejected.

5. Discussion

Effect of Independent Board of Commissioners on Profitability

The results of the study indicate that an independent board of commissioners does not affect the profitability of the company. An independent board of commissioners is responsible for ensuring that the company's information, control system, and audit system are running normally and well. The results of this study indicate that the existence of an independent board of commissioners in a company in Indonesia is still running as it should. The existence of an independent board of commissioners still tends to be merely to comply with applicable regulations. In addition, companies in Indonesia that are predominantly family companies, so family control will be very dominant. The existence of an independent board of commissioners is only part of fulfilling applicable regulations. This is following the results of research conducted by Puspaningsih et al. (2022), Ifada et al. (2021), and Sunarto et al. (2021). This could be due to several factors, one of which is that independent commissioners do not have sufficient authority to influence the decisions of the board of directors, which makes the independent board of commissioners unable to force the board of directors to take essential steps to increase profitability.

Effect of Environmental Costs on Profitability

The results of the study indicate that environmental costs do not affect company profitability. Theoretically, environmental costs reduce the amount of profit received by the company. When viewed from the theory of costs and benefits, financial statements focus more on environmental costs than benefits. This can give the impression that environmental costs are only an expense, when in fact, the investment can provide economic benefits in the future. So it is not in their interest when they get a lot of profit and the high environmental costs. This follows the research results conducted by Putri & Khairani (2024), Azizah & Cahyaningtyas (2022), Dewi & Wiyono (2023), and Wulandari et al. (2023). Furthermore, Wulandari et al. (2023) explained that because companies consider these environmental costs to reduce profits, they spend environmental costs only to gain legitimacy where outsiders can accept their activities.

Effect of Environmental Disclosure on Profitability

The results of the study show that environmental disclosure does not affect company profitability. This shows that environmental disclosure is not able to drive company profitability. According to Ramadani (2019), the GRI Standard helps companies disclose environmental aspects in sustainability reports. Environmental performance and effective and efficient management of company resources can help companies increase profits. Furthermore, Tarigan & Semuel (2015) explain that the environmental disclosure in the sustainability report can increase the company's value and profit because of the stakeholders' support. However, this study shows different things from Wijayanti (2020) and Dewi & Wiyono (2023). This study is in line with research con-ducted by Celvin & Gaol (2015), which states that environmental disclosure does not affect the company's profitability. This could be due to the company's lack of understanding of how important environmental disclosure is, where the company only fulfills the rules applied by the government. In addition, in this sector of the construction industry, each construction project has its own characteristics, making it difficult to measure environmental impacts in a standardized way. In addition, the use of materials, waste management, and impacts on surrounding ecosystems can vary greatly and certainly involve many parties, from material suppliers to subcontractors. Tracking and ensuring green practices throughout the supply chain is a challenge.

Effect of Independent Board of Commissioners on Environmental Disclosure

The results of the study indicate that the independent board of commissioners has no effect on Environmental Disclosure. This shows that the independent board of commissioners has not been able to encourage companies to make environmental disclosures. In this study, the independent board of commissioners is projected by the ratio between the number of independent commissioners and the existing board of commissioners in that year. Based on stakeholder theory, the role of the independent board of commissioners is very related. The purpose of the independent board of commissioners is to make company management comply with applicable rules and regulations and make actual and accountable reporting and full responsibility.

The results of this study are not in line with research conducted by Liana (2019), Sukirman et al. (2021), Hidayah et al. (2023), and Setiadi et al. (2023), which explains that independent commissioners have no effect on environmental disclosure. This shows that the independent board of commissioners has been able to contribute in the form of good governance input in environmental disclosure in the company. The result in line with Solikhah et al. (2021) and Wahyuningrum et al. (2020). This is also in accordance with stakeholder theory where the independent board of commissioners is a representative of shareholders who will oversee the actions of company management related to the company's management.

Effect of Environmental Costs on Environmental Disclosure

The results of the study indicate that environmental costs do not affect environmental disclosure. The results of this study indicate that the amount of costs incurred by the company in en-vironmental disclosure does not affect the level of environmental disclosure made by the company. This indicates that the level of environmental disclosure made by the company does not depend on the cost issues incurred related to the environment.

In the process of development or construction, waste is usually generated. Not only the construction process, but the operation of an office also produces waste and pollutants. According to Siregar et al. (2022), the company believes that these environmental costs will reduce the amount of company profits.

The results of this study are not in line with the results of research conducted by Adyaksana et al. (2022), but in this study are in line with the results of research conducted by Siregar et al. (2022), and Elviani et al. (2022), which show that environmental costs have no effect on environmental disclosure. Companies are still not fully aware that not only profitable in their business, but companies must have benefits for society and the environment. Construction companies often focus on short-term projects, paying less attention to long-term investments in environmental protection. As a result, their environmental costs may be low and their disclosure limited.

Effect of Independent Board of Commissioners on Profitability through Environmental Disclosure

The results of this study indicate that the independent board of commissioners variable has no effect on profitability through environmental disclosure in sustainability reports. The independent board of commissioners is a party that has no conflict of interest by any party. The independent board of commissioners represents the shareholders as the owners of the company to supervise how the management in the company carries out its duties. The independent board of commissioners will ensure that information related to the company, the company's control system, and the audit system in the company works normally and well. Therefore, there is a relationship between the independent board of commissioners and corporate reporting on economic, environmental, and social aspects.

In environmental disclosure, the company can improve its reputation and image, reduce risks and costs, increase access to capital, and increase innovation and efficiency. This is in line with legitimacy theory. However, the results of this study show that the independent board of commissioners variable has no influence on profitability through environmental disclosure in sustainability reports. This is following research conducted by Liana (2019), and Setiadi et al. (2023). This is also not in accordance with stakeholder theory, because the construction industry often focuses on short-term projects. This can cause companies to pay less attention to long-term investments in environmental protection and environmental information disclosure, and companies only focus on revenue, which in this case is proxied by the profitability variable.

Effect of Environmental Costs on Profitability through Environmental Disclosure

The findings of this study indicate that environmental costs do not affect profitability through disclosure as a mediator. This shows that environmental disclosure is unable to mediate the effect of environmental costs on profitability. Environmental costs, by their nature, reduce company profits. According to Sarli & Wira (2022), when calculating environmental costs, the company must also consider its financial condition because the costs incurred will be very large and beyond the company's operational costs. How-ever, the disclosure of environmental costs in the environmental disclosure in this sustainability report will increase accountability and stakeholder trust; besides that, it can support an environmentally friendly business strategy.

This study shows that environmental costs have no effect on profitability through disclosure as mediation. This is in line with research conducted by Putri & Khairani (2024), Azizah & Cahyaningtyas (2022), Dewi & Wiyono (2023), and R. Wulandari et al. (2023). This is also inconsistent with stakeholder theory, as the construction industry will find it difficult to measure the environmental costs of the environmental impacts of construction projects. Companies may find it difficult to collect and present accurate and comprehensive data regarding their environmental impacts. This can be a reason for companies not to disclose detailed environmental cost information.

6. Conclusion and Suggestion

Conclusion

The results showed that the independent board of commissioners, environmental costs, and environmental disclosure have no effect on profitability. The independent board of commissioners affects environmental disclosure, but environmental costs have no effect on environmental disclosure. environmental disclosure cannot mediate the effect of independent board of commissioners and environmental costs on profitability.

Suggestion

The company should focus on achieving profit and start thinking carefully about its social and environmental responsibilities. In addition, the company should report its sustainability report in more detail based on 32 criteria according to GRI standards. Of course, the company must provide a high budget for its social and environmental responsibility, considering that the company's activities harm the environment. Besides that, this study only focuses on independent boards of commissioners, environmental costs, environmental disclosure, and profitability. So that further research can add other variables outside this research model. In addition, this research is limited to construction sector companies listed on the Indonesia Stock Exchange during the 2021-2022 period that issue sustainability reports. So that further research can examine a wider range of company sectors and a longer observation period.

References

Adyaksana, R. I., Pronosokodewo, B. Gennody., & Fachrunisa, Z. H. (2022). Apakah Kinerja Lingkungan Memoderasi Pengaruh Biaya Lingkungan Terhadap Pengungkapan Informasi Lingkungan? *Prive: Jurnal Riset Akuntansi dan Keuangan*, *5*(1), `17-24.

Adyaksana, R. I., & Pronosokodewo, B. G. (2020). Apakah Kinerja Lingkungan dan Biaya Lingkungan Berpengaruh Terhadap Pengungkapan Informasi Lingkungan? *InFestasi*, *16*(2). https://doi.org/10.21107/infestasi.v16i2.8544

Ahmad, S., Siddiqui, K. A., & Aboalsamh, H. M. (2020). *Family SMEs ' survival : the role of owner family and corporate social responsibility*. 27(2), 281–297. https://doi.org/10.1108/JSBED-12-2019-0406

Amin, M. R. Al, Sumarman, R., & Japlani, A. (2024). Analisis Penerapan Biaya Lingkungan terhadap Profitabilitas Perusahaan CV. Langgeng Jasuma Putra Pekanbaru 2021-2023. *Jurnal Akuntansi AKTIVA*, *5*(2), 258–263.

Anisah, N., & Silfia, F. A. (2023). *Pengaruh Pengungkapan Pada Sustainability Report Terhadap Kinerja Keuangan Perusahaan*. *18*(2), 70–86. https://akuntansi.pnp.ac.id/jam

Azizah, N., & Cahyaningtyas, F. (2022). Pengaruh CSR, Kinerja Lingkungan, dan Biaya Lingkungan terhadap Profitabilitas (Studi Empiris Perusahaan Industri Dasar dan Bahan Kimia). *Jurnal Ilmiah Bisnis Dan Ekonomi Asia (EKUITAS)*, *17*(2), 212–225. https://doi.org/10.32812/jibeka.v17i2.1557

Barauskaite, G., & Streimikiene, D. (2021). Corporate social responsibility and financial performance of companies: The puzzle of concepts, definitions and assessment methods. *Corporate Social Responsibility and Environmental Management*, *28*(1), 278–287. https://doi.org/10.1002/csr.2048

Bing, T., & Li, M. (2019). Does CSR signal the firm value? Evidence from China. *Sustainability (Switzerland)*, *11*(15), 1–22. https://doi.org/10.3390/su11154255

Buch, C. M. (2018). Competition , Stability , and Efficiency in Financial Markets. *Discussion Paper*, 0–51.

Celvin, H., & Gaol, R. L. (2015). Pengaruh Pengungkapan Coorporate Social Responsibility (CSR) Terhadap Profitabilitas Perusahaan Pertambangan yang Terdaftar di Bursa Efek Indonesia. *JRAK*, *1*(2), 139–166.

Dewi, A. C., & Wiyono, S. (2023). Analisis Pengaruh Green Accounting, Kinerja Lingkungan, Biaya Lingkungan dan Pengungkapan CSR terhadap Tingkat Profitabilitas Perusahaan (Pada Perusahaan Manufaktur Sektor Industri Barang Konsumsi di Bursa Efek Indonesia Tahun 2018-2021). *Jurnal Ekonomi Trisakti*, *3*(1), 1197–1208. https://doi.org/10.25105/jet.v3i1.16078

El Baz, J., & Ruel, S. (2024). Achieving social performance through digitalization and supply chain resilience in the COVID-19 disruption era: An empirical examination based on a stakeholder dynamic capabilities view. *Technological Forecasting and Social Change*, *201*. https://doi.org/10.1016/j.techfore.2024.123209

Elviani, E., Oemar, F., & Seswandi, A. (2022). Analisis Pengaruh Biaya Lingkungan Terhadap CSR Dengan Kinerja Keuangan Sebagai Variabel Intervening. In *Sains Akuntansi dan Keuangan*. 1 (1). www.idx.co.id

Handayani, N. F., Leniwati, D., Prasetyo, A., Wicaksono, N., & Wahyuni, D. (2023). Corporate Social Responsibility Disclosure, Environmental Performance, and Corporate Profitability: Green Innovation as Intervening Variable. *AFRE Accounting and Financial Review*, *6*(3), 384–393. https://jurnal.unmer.ac.id/index.php/afr

Harinurdin, E. (2023). *The Influence of Financial Ratio and Company Reputation on Company Stock Prices Financial Sector*. 47. https://doi.org/10.3390/proceedings2022083047

Hidayah, R., Yanto, H., Laksana, P. I. D., Wahyuningrum, I. F. S., & Handoyo, E. (2023). Determinants of environmental disclosure with profitability as an intervening variable. *AIP Conference Proceedings*, 030030. https://doi.org/10.1063/5.0125049

Ifada, L. M., Indriastuti, M., Ibrani, E. Y., & Setiawanta, Y. (2021). Environmental Performance and Environmental Disclosure: The Role of Financial Performance. *Journal of Asian Finance, Economics and Business*, *8*(4), 349–362. https://doi.org/10.13106/jafeb.2021.vol8.no4.0349

Irahadi, D. R., Idawati, L., & Simanjuntak, M. R. A. (2020). Analisis Pengungkapan Laporan Keberlanjutan PT Perusahaan Gas Negara (PGN) Tbk Tahun 2016 dan 2017 Berdasarkan Standar Global Reporting Initiative (GRI). *Seminar Nasional Teknik Sipil*, 385–389.

Karwowski, M., & Raulinajtys-Grzybek, M. (2021). The application of corporate social responsibility (CSR) actions for mitigation of environmental, social, corporate governance (ESG) and reputational risk in integrated reports. *Corporate Social Responsibility and Environmental Management*, *28*(4), 1270–1284. https://doi.org/10.1002/csr.2137

Khamisu, M. S., Paluri, R. A., & Sonwaney, V. (2024). Environmental social and governance (ESG) disclosure motives for environmentally sensitive industry: an emerging economy perspective. *Cogent Business and Management*, *11*(1). https://doi.org/10.1080/23311975.2024.2322027

Khan, S. A. R., Razzaq, A., Yu, Z., & Miller, S. (2021). Industry 4.0 and circular economy practices: A new era business strategies for environmental sustainability. *Business Strategy and the Environment*, *30*(8), 4001–4014. https://doi.org/10.1002/bse.2853

Kuźniarska, A., Mania, K., & Jedynak, M. (2023). Organizing Sustainable Development. In *Organizing Sustainable Development*. https://doi.org/10.4324/9781003379409

Lalo, A., & Hammidin, M. I. N. (2021). Pengaruh Biaya Lingkungan dan Kinerja Lingkungan terhadap Profitabilitas pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia. *Jurnal Ilmiah Komputerisasi Akuntansi*, *14*(1), 196–204. http://journal.stekom.ac.id/index.php/kompak□page196

Lee, J. H., & Cho, J. H. (2021). Firm-value effects of carbon emissions and carbon disclosures—evidence from korea. *International Journal of Environmental Research and Public Health*, *18*(22). https://doi.org/10.3390/ijerph182212166

Liana, S. (2019). Pengaruh Profitabilitas, Leverage, Ukuran Perusahaan, dan Dewan Komisaris Independen terhadap Pengungkapan Sustainability Report. *JESYA: Jurnal Ekonomi & Ekonomi Syariah*, *2*(2), 199–208.

LSPR News. (2023, September 14). *Peran Vital Stakeholders*. Https://Www.Lspr.Ac.Id/Peran-Vital-Stakeholders/.

Malik, N., & Kashiramka, S. (2024). Impact of ESG disclosure on firm performance and cost of debt: Empirical evidence from India. *Journal of Cleaner Production*, *448*. https://doi.org/10.1016/j.jclepro.2024.141582

Martinus, J., & Kusumawati, R. (2021). Pengaruh Tata Kelola Perusahaan, Menejemn Laba Riil, dan Kepemilikan Pemerintah terhadap Kualitas Laba pada Perusahaan di Indeks LQ-45. *Jurnalku*, *1*(4).

Maulia, D., & Yanto, H. (2020). The Determinants of Environmental Disclosure in Companies in Indonesia. *JDA Jurnal Dinamika Akuntansi*, *12*(2), 178–188. https://doi.org/10.15294/jda.v12i1.26014

Meiyana, A., & Aisyah, M. N. (2019). Pengaruh Kinerja Lingkungan, Biaya Lingkungan dan Ukuran Perusahaan terhadap Kinerja Keuangan dengan Corporate Social Responsibility sebagai Variabel Mediating. *Jurnal Nominal*, *VIII*(1), 1–18.

Muliasari, R., & Hidayat, A. (2020). Pengaruh Likuiditas, Leverage dan Komisaris Independen terhadap Agresivitas Pajak Perusahaan. *Sultanist: Jurnal Manajemen Dan Keuangan*, *8*(1), 28–36. www.idx.co.id

Nishitani, K., Nguyen, T. B. H., Trinh, T. Q., Wu, Q., & Kokubu, K. (2021). Are corporate environmental activities to meet sustainable development goals (SDGs) simply greenwashing? An empirical study of environmental management control systems in Vietnamese companies from the stakeholder management perspective. *Journal of Environmental Management*, *296*(August). https://doi.org/10.1016/j.jenvman.2021.113364

Pujiati, A., Nihayah, D. M., Rahman, Y. A., Rosalia, A. C. T., Saputra, A. M., & Damayanti, N. (2023). The Causality between CO2 Emissions and Electricity Generations: Evidence from Environmental Quality. *IOP Conference Series: Earth and Environmental Science*, *1248*(1). https://doi.org/10.1088/1755-1315/1248/1/012016

Pujiati, A., Yanto, H., Dwi Handayani, B., Ridzuan, A. R., Borhan, H., & Shaari, M. S. (2023). The detrimental effects of dirty energy, foreign investment, and corruption on environmental quality: New evidence from Indonesia. *Frontiers in Environmental Science*, *10*. https://doi.org/10.3389/fenvs.2022.1074172

Puspaningsih, A., Ayu, D., & Ristya, F. (2022). The Effects of Good Corporate Governance Mechanisms on Profitability of Company Shares. *Review of Integrative Business and Economics Research*, *11*(4), 176.

Putri, N. E., & Khairani, S. (2024). Pengaruh Biaya Lingkungan dan Pengungkapan Lingkungan Terhadap Profitabilitas. *3rd MDP Student Conference (MSC) 2024*, 457–465.

Putri, R., Nyoman, D., Werastuti, S., Risfandy, T., & Dewi, T. R. (2023). The Determinants of Company Value: Green Accounting, CSR, and Profitability. *AFRE Accounting and Financial Review*, *6*(1), 115–126. https://jurnal.unmer.ac.id/index.php/afr

Rahi, A. F., Johansson, J., Blomkvist, M., & Hartwig, F. (2024). Corporate sustainability and financial performance: A hybrid literature review. *Corporate Social Responsibility and Environmental Management*, *31*(2), 801–815. https://doi.org/10.1002/csr.2600

Raja, D. H. L. (2016). Pengaruh Dewan Komisaris, Komisaris Independen, Komite Audit terhadap Profitabilitas pada Perusahaan Sektor Property dan Real Estate yang Terdaftar di Bursa Efek Indonesia (BEI) Tahun 2009-2014. *Jurnal Ilmu Manajemen*, *4*(2), 139–146.

Ramadani, A. K. (2019). *Analisis Pengungkapan Laporan Keberlanjutan PT Perusahaan Gas Negara (PGN) Tbk Tahun 2016 dan 2017 berdasarkan Standar Global Reporting Initiative (GRI)*. Universitas Brawijaya.

Ramlawati, R., Junaid, A., Alattas, S. N., & Muslim, M. (2022). The Effect Of Environmental Performance On Profitability With Environmental Disclosure As Moderating. *Jurnal Akuntansi*, *26*(2), 306–323. https://doi.org/10.24912/ja.v26i2.933

Rashid, N. A., Arzaman, A. F. M., Razali, M. A., Jospat, A., Aziz, N. A. A., & Damaianti, I. (2024). Customer intention towards self-service checkout at Watson. *Multidisciplinary Science Journal*, *6*(7). https://doi.org/10.31893/multiscience.2024129

Riyadh, H. A., Sukoharsono, E. G., & Alfaiza, S. A. (2019). The impact of corporate social responsibility disclosure and board characteristics on corporate performance. *Cogent Business and Management*, *6*(1), 1–18. https://doi.org/10.1080/23311975.2019.1647917

Sadiq, M., Nonthapot, S., Mohamad, S., Chee Keong, O., Ehsanullah, S., & Iqbal, N. (2022). Does green finance matter for sustainable entrepreneurship and environmental corporate social responsibility during COVID-19? *China Finance Review International*, *12*(2), 317–333. https://doi.org/10.1108/CFRI-02-2021-

0038
Safietrie, D. (2017). Pengaruh Dewan Komisaris Independen Terhadap Profitabilitas Bank Syariah Dengan Non Performing Financing (Npf) Sebagai Variabel Intervening. Institut Agama Islam Negeri Salatiga.
Sakinah, L. N., Nabila, P. S., & Aisyah, S. (2022). Analisis Peran Stakeholders dalam Supply Chain Management. *Jurnal Ilmu Komputer, Ekonomi Dan Manajemen*, *2*(1), 1841–1851.
Salunkhe, U., Rajan, B., & Kumar, V. (2023). Understanding firm survival in a global crisis. *International Marketing Review*, *40*(5), 829–868. https://doi.org/10.1108/IMR-05-2021-0175
Sarli, R., & Wira, A. (2022). Analisis Kinerja Keuangan Perusahaan Sektor Pertambangan Berbasis Biaya dan Kinerja Lingkungan. *Jurnal BANSI (Bisnis, Manajemen Dan Akuntansi)*, *2*(2), 86–93.
Septiadi, N. L. E. I. (2016). Pengaruh Kinerja Lingkungan, Biaya Lingkungan dan Luas Pengungkapan Corporate Social Responsibility terhadap Kinerja Keuangan Perusahaan. *Jurnal Akuntansi Profesi*, 21–25.
Setiadi, I., Surya Abbas, D., & Hidayat, I. (2023). Karakteristik Perusahaan, Komisaris Independen dan Pengungkapan Sustainability Reporting. *Competitive Jurnal Akuntansi Dan Keuangan*, *10*(10). www.idx.co.id.
Siregar, F. H., Syahyunan, & Miraza, Z. (2022). Kinerja Lingkungan, Biaya Lingkungan Dan Ukuran Perusahaan Terhadap Kinerja Keuangan Dengan Corporate Social Responsibility Sebagai Variabel Intervening. *INOVATIF Jurnal Ekonomi, Manajemen Akuntansi, Bisnis Digital Dan Kewirausahaan*, *1*(2).
Sivalingam, C., & Ramaswamy, R. (2024). Sustainable stakeholder participation planning on the basis of analysis of competing project interest. *Journal of International Financial Management and Accounting*. https://doi.org/10.1111/jifm.12198
Solikhah, B., Wahyuningrum, I. F. S., Yulianto, A., Sarwono, E., & Widiatami, A. K. (2021). Carbon emission report: A review based on environmental performance, company age and corporate governance. *IOP Conference Series: Earth and Environmental Science*, *623*(1). https://doi.org/10.1088/1755-1315/623/1/012042
Sukirman, Yaisah, U., Hidayah, R., Suryandari, D., & Patrisia, D. (2021). Environmental disclosure on agricultural and mining sector. *IOP Conference Series: Earth and Environmental Science*, *896*(1). https://doi.org/10.1088/1755-1315/896/1/012012
Sunarto, S., Widjaja, B., & Oktaviani, R. M. (2021). The Effect of Corporate Governance on Tax Avoidance: The Role of Profitability as a Mediating Variable. *Journal of Asian Finance, Economics and Business*, *8*(3), 217–227. https://doi.org/10.13106/jafeb.2021.vol8.no3.0217
Suryadi, N., & Yusnelly, A. (2024). Pengaruh Pembiayaan Murabahah dan Mudharabah terhadap Profitabilitas Bank Muamalat Indonesia. *Jurnal Tabarru': Islamic Banking and Finance*, *7*(1). www.ojk.go.id
Tarigan, J., & Semuel, H. (2015). Pengungkapan Sustainability Report dan Kinerja Keuangan. *Jurnal Akuntansi Dan Keuangan*, *16*(2). https://doi.org/10.9744/jak.16.2.88-101
Undang-Undang Republik Indonesia Nomor 40 Tahun 2007 Tentang Perseroan Terbatas (2007).
Wahyuningrum, I. F. S., Oktavilia, S., Setyadharma, A., Suryandari, D., Netta, P., & Rahman, A. (2020). Corporate Governance and Company Characteristics on the Quantity of Environmental Disclosure. *E3S Web of Conferences*, *202*. https://doi.org/10.1051/e3sconf/202020203016
Wicaksono, A. C. (2024). Pengaruh Biaya Lingkungan, Kinerja Lingkungan, dan Kepemilikan Asing Terhadap Kinerja Keuangan Perusahaan. *Ekonomi, Keuangan, Investasi dan Syariah (EKUITAS)*, *5*(4), 627–635.
Wijayanti, M. (2020). Likuiditas, Kinerja Lingkungan, dan Pengungkapan Lingkungan Terhadap Profitabilitas (Studi Empiris pada Perusahaan Manufaktur yang terdaftar di BEI Tahun 2015-2019). *Business and Economics Conference in Utilization of Modern Technology*, 509–523. www.idx.co.id
Wulandari, A. (2020). *Komunikasi Pemangku Kepentingan (Stakeholders Communication)* (C. Nugroho, Ed.). Sedayu Sukses Makmur.
Wulandari, R., Mulyani Sri, Nuridah, S., & Fauzobihi. (2023). Pengaruh Penerapan Biaya Lingkungan dan Kinerja Lingkungan

terhadap Profitabilitas pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia (BEI) Periode 2019-2022. *Innovative: Journal of Social Science Research*, *3*(4), 10016–10023.

Xie, J., Nozawa, W., Yagi, M., Fujii, H., & Managi, S. (2019). Do environmental, social, and governance activities improve corporate financial performance? *Business Strategy and the Environment*, *28*(2), 286–300. https://doi.org/10.1002/bse.2224

Yusuf, M., Sutrisno, Putri, P. A. N., Asir, M., & Cakra Negara, P. A. (2022). Prospek Penggunaan E-Commerce terhadap Profitabilitas dan Kemudahan Pelayanan Konsumen: Literature Review. *Jurnal Darma Agung*, *30*(1), 786–801.

Zain, R. N. W., Hendriyani, C., Nugroho Danang, & Ruslan Budiana. (2021). Implementation of CSR Activities from Stakeholder Theory Perspective in Wika Mengajar. *Jurnal Abiwara: Jurnal Vokasi Administrasi Bisnis*, *3*(1), 102–107. http://ojs.stiami.ac.id