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Firm Size, Profitability, and ESG Disclosure in Indonesia: Geographical Location As Moderating Variable

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Abstract:

Environmental, Social, and Governance (ESG) is a framework used to evaluate company performance on environment, social, and governance aspects. ESG disclosure is a means of communication used by companies to strengthen corporate legitimacy. This study aims to examine the effect of company size and profitability on ESG disclosure as moderated by geographical location, while also adding company age and leverage as control variables. This research employs a quantitative approach with purposive sampling technique. Data analysis uses moderating regression analysis (MRA). The results show that company size has no effect on ESG disclosure, while profitability has a significantly negative effect. Meanwhile, geographical location fails to moderate the effect of company size on ESG disclosure and geographical location significantly and negatively moderates the effect of profitability on ESG disclosure. The research contribution is that the ESG company level in each region indicates that external pressure and existing regulations have not been able to create significant differences between regions and this research also provides information to management, investors and stakeholders that geographical location is a company challenge and together to be able to pay attention to policies and decisions that can be made.

Keywords: *ESG Disclosure, Firm Size, Geographical Location, Profitability*

1. Introduction

Environmental, Social, and Governance (ESG) is a framework used to evaluate corporate performance in three main aspects: environmental, social, and governance. ESG emerged in response to growing concerns about the impact of companies on good governance, society, and the environment. Implementing ESG within a company involves a series of strategic actions and practices designed to improve a company's performance in these three aspects. Inawati & Rahmawati (2023) stated climate change and social disruption are causing companies to be disrupted around the world. Regulators and policymakers are responsible for consistently encouraging the industry to develop and implement better strategies. Studies show that increasing ESG awareness and compliance on the impact of companies' operational

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activities is crucial for business sustainability. Neo-institutional theory is one of many theories that state that corporate responsibility goes beyond profit-seeking, that companies should also act to safeguard the environment and invest in social capital. Neo-institutional theory states that the survival of companies depends on their legitimisation by society and conformity to the expectations of that society. (Meyer & Rowan, 1977; Dimaggio & Powell, 1983; Hasse & Krücken, 2009).

In recent years, investors' perspective on ESG has evolved rapidly. More and more investors are starting to integrate ESG factors into their investment decision-making process. Many investors believe that companies that manage ESG aspects well have the potential for better performance in the long run. A good ESG assessment correlates with the company's healthy financial condition so that it will have an impact on company performance and company value. Like the research conducted by (Aboud & Diab, 2018; D'Amato & Falivena, 2019; Abdi *et al*., 2022; Cherkasova & Nenuzhenko, 2022). These include reducing operational and legal risks, enhancing reputation, and creating new business opportunities associated with sustainable innovation. Nonetheless, Morrison (2021) provides the view that the construct known as ESG is just the latest iteration of a long line of similar concepts, such as corporate social responsibility, responsible investment, expanded stakeholder management, and the triple bottom line, which have waxed and waned in popularity over the years.

In the case of ESG, company size and profitability are factors that are thought to be influential. Company size is an aspect that needs to be considered in ESG implementation. With many and growing stakeholders, it is important for large companies to gain support from their stakeholders. Company size has a relationship with ESG (Lu & Abeysekera, 2014; Drempetic *et al*., 2020; Gregory, 2022). Stakeholders are increasingly concerned with sustainable practices and business ethics. In response to these demands, investors may choose to invest their funds in companies that follow good ESG practices. Large companies also involve more of society in their operations, so they need legitimacy from different parts of society to survive. This suggests that a good institutional environment should be created to encourage large companies to play the role of industry demonstration and normative effect to increase the level of ESG disclosure. Such evidence can also be used as a reference in other emerging markets (Zhang & Sharon, 2023). Another conflicting study is the findings of (Akgun *et al*., 2021).

Profitability of a company is the company's ability to generate profits from its business activities. This is one way to see the financial performance of a company. Findings regarding profitability on disclosure are also mixed, there are still inconsistent research results such as in Hackston & Milne (1996); Lu & Abeysekera (2014); Vivianita *et al*. (2022); Khoury *et al*. (2023) which proves the influence of profitability with disclosure. Meanwhile, research by Reverte (2009); Chih *et al*. (2010); Dewi (2019); Yuen *et al*. (2022); (Rahmadani *et al*. (2023) did not find any influence. When the company has high profitability, the company considers that there is no need to report financial information. However, when the company has low profitability, the company expects investors to keep investing in the company by reporting its performance through social activities (O'Donovan & Gibson, 2000).

The purpose of this study is to fill the gap of untested research on the effect of geographic location as a moderating variable to explain the effect of firm size and profitability on ESG disclosure. This study adds the variable of geographical location as a moderating variable with the same industry-different locations (Li & Wang, 2022). One particular area in the literature focusing on the geographical component suggests that location is one of the key components that determine how a company's operations change. Research results by Liu & Wu (2015) document that firms' CSR behaviour is positively influenced by the CSR levels of competing firms and find that in addition to industry relationships, CSR spillover effects also exist based on geographic proximity.

2. Theoretical Background

Legitimacy Theory

According to Dowling & Pfeffer (1975) legitimacy can be considered an advantage or potential source for companies to survive. The concept of a social contract between the company and society is the basis of this theory. According to legitimacy theory, entities or organisations, including companies, must continue to ensure that their operations are legal and in accordance with the values, limits, and norms of society (Ghozali, 2020). The social contract is used as a medium to explain many of society's expectations about the way an organisation should conduct its business responsively to its environment. According to legitimacy theory, if management considers that this will meet community standards, a company will report its activities voluntarily (Deegan, 2000).

Drempetic *et al.* (2020)) found a significant positive correlation between firm size, resources available to provide ESG data, and the availability of corporate ESG data on corporate sustainability performance, which can be explained by organisational legitimacy. The results of this study raise the question of whether the way ESG scores measure corporate sustainability provides an advantage to large companies with more resources, but does not provide the information investors need to make decisions based on their beliefs. However, on research by Gregory (2022) states that the effect of company size on environmental, social, and governance (ESG) ratings studied by controlling for rating agencies and industry sectors, found a uniform positive relationship between company size and ESG in rating agencies, but the strength varied between rating agencies, raising questions about the explanation of organisational legitimacy.

Firm Size

Firm size is one of the most influential characteristics in organisational studies. It reflects how large a company is in terms of infrastructure and employment (Uche *et al*., 2019). Market capitalisation, firm size and revenue are also proxied as firm size (Balogh *et al*., 2022; Aghnitama *et al*., 2021). Companies with high revenues will be under more scrutiny, so they are under pressure to maintain the company's image to maintain the trust of stakeholders.

Profitability

Profitability is the ability of a company to generate profits within a certain period of time, which can be measured by various financial instruments (Johan & Toti, 2022). With high profits, a business will attract more investors (Dang et al., 2019). Increased profitability will receive appreciation from stakeholders which in turn increases the ESG score which increases the company's competitive advantage (Safitri et al., 2023).

Geographical Location

Each region or country may have different environmental regulations and policies. A company's geographical location can affect the extent to which it must comply with strict or flexible environmental regulations. Large companies that operate in multiple regions may need to follow a variety of different environmental rules and regulations, which can affect their ESG strategy. Geographic location can also present unique environmental challenges. For example, companies operating in areas prone to natural disasters such as earthquakes or floods may have to take special measures in terms of recovery and mitigation of environmental impacts. This may affect the environmental aspects of ESG performance.

In addition, geographic presence can affect access to markets that may demand more sustainable products and services. According to Lee & Suh (2022), market-based variables are publicly available that allow investors to evaluate, monitor, and compare company performance and its relation to ESG behaviour over time, whether within industries, across sectors, and/or geographic locations. Emerging companies in Asia and North America illustrate a positive link between accounting-based corporate performance and ESG activities, whereas Western European companies cannot boast the same results. However, this conclusion only applies to international companies in emerging Asia as Chinese and Indian products are in high demand worldwide (Cherkasova & Nenuzhenko, 2022).

The Effect of Firm Size on ESG Disclosure

According to legitimacy theory, companies must maintain legitimacy in the eyes of stakeholders to continue to gain support. Legitimacy refers to the perception that the company operates in accordance with the norms, values, and expectations of society. When companies are perceived as illegitimate, this can result in reputational risk and a negative influence on relationships with stakeholders. Large companies usually have more financial and operational resources. Large companies may have sufficient resources to invest in costly ESG initiatives, such as increased sustainability, reduced carbon emissions, or broader social programmes.

Large-scale companies have more shareholders, including some companies that have a good reputation and invest in corporate social activities. These shareholders are more likely to use disclosure information to share the results of corporate social activities with their peers (Lu & Abeysekera, 2014). However, poor environmental performance will also have an impact on corporate reputation (Sari *et al*., 2023). Companies only pay attention to their own financial benefits and ignore the surrounding environment (Alfan et al., 2024). Park & Jang (2021), show that institutional investors attach more importance to environmental and governance factors. As a result, they are in a better position financially to put resources towards CSR initiatives and other discretionary projects to better manage their relationships with stakeholders. Their relationships with stakeholders, furthermore, build their legitimacy and credibility (D'Amato & Falivena, 2019). Large companies tend to be more interested in maintaining a good reputation through good CSR practices (Khan *et al*., 2016). A large company size can create a strong reputation and image within the industry and market. Such companies may have a greater incentive to maintain this positive reputation by ensuring compliance with good ESG practices.

Drempetic *et al.* (2020) used structural equation modelling to study the impact of firm size on sustainability assessment, and found that large firms are more mature in investing in and fulfilling social responsibility than emerging firms, as they have more abundant resources and competitive advantages. also believe that large companies have looser resources to invest in the construction of sustainability management systems and have more formal reporting structures than small companies by adopting sustainability management tools (Drempetic *et al*., 2020). For example, large companies usually have very well-crafted self-monitoring systems and can view and analyse information other than financial information (Li & Wang, 2022). However, due to limited resources, small businesses tend to use more informal communication as a resource for data disclosure in ESG activities (Drempetic *et al*., 2020). According to Waddock & Graves (1997), larger companies are associated with ESG which has been found to have a significant impact on their ESG participation. Supported by Zhang & Sharon (2023) which states that ESG disclosure increases with the size of the company. Gregory (2022) found that firm size has a positive effect on ESG ratings and Drempetic *et al.* (2020) found a significant positive correlation between firm size and ESG Score. This is due to the fact that large companies usually have greater financial resources than smaller companies. (D'Amato & Falivena, 2019). As a result, they are better equipped to engage in sustainable practices (Abdi *et al*., 2022).

Based on the explanation above, company size has more resources, both in financial and operational terms. The large scale of the company can provide access to sufficient resources to invest in costly ESG initiatives, such as reducing carbon emissions, improving sustainability, or broader social programmes, making it easier for companies to invest in ESG activities. Therefore, the first hypothesis proposed is as follows:
H1. Company size affects ESG disclosure.

The Effect of Profitability on ESG Disclosure

In legitimacy theory, ESG disclosure is a means of communication used by companies to strengthen the legitimacy of the company in the eyes of stakeholders. ESG disclosure is a form of transparency in corporate activities that helps stakeholders understand how the company operates from an ESG perspective, thereby reducing uncertainty and increasing trust. The company will build and maintain its social relationships by implementing CSR to fulfil its responsibility to the environment and gain legitimacy to survive (Zahroh & Hersugondo, 2021).

Consistent with some experts that ESG activities are driven by the needs of various stakeholders and are rewarded with legitimacy (D'Amato & Falivena, 2019). state that legitimacy theory is able to explain the relationship between profitability and corporate social activities. In line with previous research, a relationship was found between company profitability and the level of ESG scores. This indicates that good corporate profitability provides the flexibility to channel part of its profits to participate in social and environmental projects (Arayssi *et al*., 2020). In the banking sector spectrum, both in developed and developing countries, profitability is found to be an important element in the dissemination of ESG information by companies (Khoury *et al*., 2023).

Based on the explanation above, profitable companies tend to have greater intensive to implement better ESG disclosure. High profitability provides opportunities in terms of resources to implement sustainable initiatives, invest in green technology, and improve corporate governance, so that it is more able to attract ESG-focused investors and consequently the company will try to disclose ESG in fulfilling investor expectations. Then the second hypothesis is as follows:
H2. Profitability affects ESG disclosure.

The Effect of Geographic Location in Moderating the Relationship of Firm Size to ESG Disclosure

Larger companies, in terms of assets, revenue or market capitalisation, tend to have more resources to implement good ESG practices. Companies may be better able to make investments in technologies that support energy efficiency, manage environmental risks, and have strong sustainability programmes. Drempetic *et al* (2020) show that company size has a positive impact on ESG and Environmental sustainability ratings. If a company implements ESG integration or best-in-class approaches in portfolio management, this may lead to favouring large-cap stocks. The effect of firm size on environmental, social, and governance ratings was also investigated by Gregory (2022) by controlling for rating agencies and industry sector. A uniform positive relationship was found between firm size and ESG across rating agencies, but the strength varied across rating agencies, raising questions about organisational legitimacy explanations.

Large companies operating in different regions may be competing in different business environments. A company's reputation in terms of ESG performance may be an important competitive factor in some regions, and companies may be more inclined to strengthen their ESG practices to win the competition. Empirical results in the study of Abdi *et al.* (2022) proved that firm size significantly moderates the relationship between sustainability (ESG) disclosure with firm value and financial performance. However, the direction of moderation differs across panels, depending on the type of sustainability business. ESG performance of firms in the European region has an ESG score that can improve firm performance (Quintiliani, 2022). For the Italian region, ESG disclosure can also improve firm performance (Pulino et al., 2022). Meanwhile, Tao (2023), found that in Shanghai only manufacturing companies have a high level of ESG score.

In other words, a firm's geographical location can be an important context that influences how it manages ESG issues. This may also alter the effect of firm size on ESG performance, as large firms operating in different regions may need to develop different ESG strategies to address the challenges and opportunities present in each location. Therefore, the third hypothesis of this study is:

H3. Geographical location can strengthen the effect of firm size on ESG disclosure.

The Effect of Geographic Location in Moderating the Relationship between Profitability and ESG Disclosure

Geographic location may moderate the impact of profitability on ESG disclosure by influencing contextual factors. For example, in countries or regions with strict ESG regulations, profitability may have a greater impact on ESG disclosures because companies have to comply more with ESG requirements. Conversely, in regions with lower ESG standards, the impact on profitability may be less significant. Profitability may have a positive influence on ESG disclosure. That is, more profitable companies are likely to make more ESG disclosures. When controlled for geographic location, this impact may be more significant in some regions or countries than in others. Regions with stricter ESG regulations or higher stakeholder expectations may experience a stronger positive impact of profitability on ESG disclosure.

Cherkasova & Nenuzhenko (2022) found that the region of a firm's headquarters affects the link between financial performance and ESG activities. The most successful companies in ESG development are international companies and those headquartered in developing or developed countries in Asia or North America. Meanwhile, Latin American companies, both local and multinational, experience significant challenges in implementing ESG initiatives. Yustin & Suhendah (2023) showed that ESG disclosure is significantly influenced by profitability.

By examining the effect of profitability on ESG disclosure by considering geographical location, companies can strengthen their commitment to sustainable business practices and

provide better accountability and transparency to stakeholders in each region, so the fourth hypothesis proposed is:
H4. Geographic location can strengthen the effect of profitability on ESG disclosure.

3. Methodology

This research uses quantitative methods. The research population includes all companies in Indonesia listed on the Indonesia Stock Exchange for the 2017-2021 period with a sampling technique in the form of purposive sampling. The dependent variable is ESG disclosure measured based on GRI standards *(Drempetic et al., 2020; Inawati & Rahmawati, 2023; Khoury et al., 2023).*). In this study, two independent variables are used, namely company size (market capitalisation) *(Aghnitama et al., 2021; Farooq et al., 2022)* and profitability (ROA) *(Hackston & Milne, 1996)* and the moderating variable of geographic location using a dummy, where 1 when the company is located on the island of Java and 0 if in other regions *(Achmad & Hadi, 2015; D. W. Sari & Medina, 2020).* The control variables are company age (the period of time since the company was listed on the stock exchange) and leverage (the ratio of total debt and total assets) *(Alareeni & Hamdan, 2021; Khoury et al., 2023).* The data analysis technique is moderated regression analysis (MRA) with the following equation:

(1) $ESG_{it} = \alpha + \beta_1 SIZE_{it} + \beta_2 AGE_{it} + \beta_3 LEV_{it} + \varepsilon_{it}$

(2) $ESG_{it} = \alpha + \beta_1 ROA_{it} + \beta_2 AGE_{it} + \beta_3 LEV_{it} + \varepsilon_{it}$

(3) $ESG_{it} = \alpha + \beta_1 SIZE_{it} + \beta_2 GEO_{it} + \beta_3 SIZE_{it}{*}GEO_{it} + \beta_4 AGE_{it} + \beta_5 LEV_{it} + \varepsilon_{it}$

(4) $ESG_{it} = \alpha + \beta_1 ROA_{it} + \beta_2 GEO_{it} + \beta_3 ROA_{it}{*}GEO_{it} + \beta_4 AGE_{it} + \beta_5 LEV_{it} + \varepsilon_{it}$

4. Empirical Findings/Result

Descriptive Statistics

Table 1 below shows the results of descriptive statistics for each variable tested in this study.

Table 1
Descriptive Statistics

Variabel	Obs	Mean	Std. Dev.	Min	Max
ESG	260	0.98	2.546	0.042	37.39
SIZE	260	10.115	1.438	0	11.95
ROA	260	0.045	0.091	-0.578	0.527
GEO	260	0.942	0.234	0	1
AGE	260	18.973	10.71	0	44
LEV	260	1.2	2.167	-6.553	24.849

According to the descriptive statistical results shown in table 1 above, the ESG variable based on the score has an average value of 0.98, a standard deviation of 2.546, a minimum value of 0.042, and a maximum value of 37.39. The SIZE variable proxied by market capitalisation shows an average value of 10.115 with a standard deviation of 1.438, a minimum value of 0 and a maximum value of 11.95 owned by PT Bank Central Asia Tbk in 2021. The ROA variable averages 0.045, with a standard deviation of 0.091. The minimum value of -0.578 was recorded by PT Garuda Indonesia Tbk in 2021, and the maximum value of 0.527 was recorded by PT Multi Bintang Indonesia Tbk in 2017. The GEO variable has an average of 0.942 with a standard deviation of 0.234, the smallest value is 0 and the largest is 1. This shows that most of the companies are located on the island of Java including PT PAN Brothers Tbk, PT Japfa Comfeed Indonesia Tbk and PT Bumi Resources Tbk. Meanwhile, the AGE control variable has an average of 18.973 years with a standard deviation of 10.71 years, while the minimum value of 0 years indicates that the company was registered at the beginning of the observation period, namely PT BSI and PT Phapros and the maximum value of 44 years at PT Solusi Bangun Indonesia Tbk and the LEV (leverage) control variable has an average of 1.2 with a standard deviation of 2.167, a minimum value of -6.553 and a maximum value of 24.849.

Pearson Correlation

The following presents the results of the Pearson correlation in Table 2.

Table 2
Pearson Correlation

Variables	(1) ESG	(2) SIZE	(3) ROA	(4) GEO	(5) AGE	(6) LEV
(1) ESG	1.000					
(2) SIZE	-0.013	1.000				
(3) ROA	-0.110	0.166*	1.000			
(4) GEO	0.023	-0.005	-0.099	1.000		
(5) AGE	0.050	0.139	0.270*	0.077	1.000	
(6) LEV	0.707*	-0.019	0.025	-0.007	-0.016	1.000

*** p<0.01, ** p<0.05, * p<0.10

Based on the Pearson correlation table above, it can be explained the relationship between variables that SIZE correlates to ESG disclosure with a correlation value of -0.013. This indicates that the large size of the company tends to be followed by a decrease in ESG score, although very small. ROA correlates to ESG disclosure with a correlation value of -0.110. The correlation value of -0.110 indicates when profitability is high, ESG scores tend to decrease slightly although not significantly. GEO correlates to ESG disclosure with a correlation value of 0.023. This means that companies located in Java have a slightly higher ESG score than companies located outside Java but it is not significant. AGE correlates to ESG disclosure with a correlation value of 0.050, so there is no difference in ESG scores between new and long-established companies. LEV correlates to ESG disclosure at the 1% significance level with a correlation value of 0.707. This indicates that a company's ESG score increases with the level of leverage. The Pearson correlation results, overall, show a weak relationship between variables, except for leverage which consistently correlates quite strongly with ESG disclosure.

Table 3
Regression Results Equation 1 and 3

	(1)	(2)	(3)	(4)
	ESG	ESG	ESG	ESG
Intercept	0.997**	0.173	-1.417	1.720
	(2.019)	(0.078)	(-0.600)	(0.112)
SIZE	-0.060	-0.043	-0.043	-0.361
	(-1.109)	(-0.867)	(-0.867)	(-0.233)
AGE		0.011	0.011	0.011
		(0.099)	(0.099)	(0.102)
LEV		1.124**	1.124**	1.124**
		(2.302)	(2.302)	(2.296)
GEO			1.590**	-1.557
			(2.118)	(-0.100)

c.SIZE#c.GEO				0.319
				(0.206)
Adj.R2	0.15	0.53	0.53	0.53
N	260	260	260	260
F-stat	2.281	2.716	2.716	2.648

*** p<0.01, ** p<0.05, * p<0.10

Table 4
Regression Results Equation 2 and 4

	(1)	(2)	(3)	(4)
	ESG	ESG	ESG	ESG
Intercept	0.775**	2.938	1.359	1.284
	(2.043)	(1.106)	(0.521)	(0.502)
ROA	-6.399	-8.492**	-8.492**	2.671
	(-1.009)	(-2.063)	(-2.063)	(0.683)
AGE		-0.123	-0.123	-0.130
		(-0.970)	(-0.970)	(-1.011)
LEV		1.144**	1.144**	1.148**
		(2.514)	(2.514)	(2.534)
GEO			1.579**	1.791**
			(2.096)	(2.387)
c.ROA#c.GEO				-11.739*
				(-1.721)
Adj.R2	0.17	0.56	0.56	0.56
N	260	260	260	260
F-stat	2.161	2.385	2.385	2.541

*** p<0.01, ** p<0.05, * p<0.10

5. Discussion

The Effect of Firm Size on ESG Disclosure

The coefficient p>0.1 in table 3 above shows that SIZE has no significant influence on ESG disclosure in all equations. When AGE and LEV variables are included, the SIZE variable does not change, meaning that the control variable has no influence on ESG disclosure. The results of this study are supported by Ika *et al.* (2021) show that company size has no effect on environmental disclosure. It is suspected that large companies in developing countries such as Indonesia tend to focus on philanthropic or charitable activities as a form of corporate social responsibility. There is a tendency for companies to give "donations", but this is not appropriate in educating the community which will make the community dependent on the company (Nayenggita *et al*., 2019). Companies should directly integrate ESG coverage in operational activities, this can be one of the company's strategies in achieving long-term goals. It also requires a joint commitment from the company to prioritise ESG activities in various company business decisions, so that despite the size of the company as measured by a large market capitalisation, it does not necessarily mean that the company will actively participate in the implementation of ESG in Indonesia. This result is in line with Akgun *et al.* (2021)) who proved that the significance of ESG score as a predictor of returns is not affected by company size as measured by market capitalisation. However, the size of the company does not determine the quality of environmental disclosure (Monteiro & Guzmán, 2010; Oktariyani & Meutia, 2016).

The Effect of Profitability on ESG Disclosure

In equation 2, ROA has an insignificant negative effect on ESG disclosure; however, when control variables are added, ROA has a significant negative effect on ESG with a p value <0.05. said that high corporate profitability has the financial ability to make costly social responsibility disclosures. This is supported by legitimacy theory, where when companies carry out ESG activities, it will reflect a contribution to the environment, social and governance through improved ESG performance and transparency so that the company gets recognition from society for its existence. A company with a good level of profitability indicates the company's ability to earn profits, which in turn can be invested in ESG programmes on an ongoing basis. However, in the face of global economic challenges and expansion plans, many companies are making massive savings, resulting in a reduction in ESG investment, which in turn leads to low corporate ESG disclosure. Rosengard (2022) statement that the global economic uncertainty will create challenges to the implementation of ESG in various companies in the world. As a result, there are major problems in implementing ESG aspects for companies. These results are also corroborated by Junita & Yulianto (2018); Setiawan *et al.* (2019) that companies that make a lot of profits are not necessarily more active in disclosing the sustainability of their business, because some of them may be motivated to increase profits only.

The Effect of Geographic Location in Moderating the Relationship between Firm Size and ESG Disclosure

The regression results in table 3 show that the GEO variable is not able to moderate the relationship between the SIZE variable and ESG disclosure with a p>0.1 value, so hypothesis 3 is not supported. This means that the effect resulting from the interaction of SIZE and GEO variables on ESG disclosure in Indonesia is positive and insignificant. IDX supports the implementation of ESG widely among issuers (Septiana & Puspawati, 2022). However, large companies in Indonesia tend to have business groups spread across various regions, so that in dealing with various conditions caused by regulatory changes, global pressures or the application of industry standards, including the obligation to implement ESG will apply equally to all companies regardless of the geographical location where the company is located. Riduwan & Andajani (2022) say that it is important for the public to know about economic-socio-ecological responsibility so that the parties involved can assess the risks and prospects of the company based on social and environmental factors. As cited on the ibm.com page stated by Soberanis (2022) that in some situations, ESG reporting frameworks are only relevant in certain geographical areas because reporting is mandated by law and may be more specific to local circumstances. The nature of sustainable finance is overseen by the government through the Financial Services Authority (OJK), which requires issuers to report publicly on their economic, financial, social and environmental performance (Ningwati *et al*., 2022). For this reason, the company's obligation to disclose ESG activities will be relatively the same in each region, whether located in Java or outside Java. Septiana & Puspawati (2022) conveyed that since 2019, issuers based on their sectors are gradually obliged to report sustainability reports, and will apply as a whole in 2025.

The Effect of Geographic Location in Moderating the Relationship between Profitability and ESG Disclosure

The results in Table 4 show that the moderating variable GEO has a negative and significant effect between ROA and ESG disclosure. This means that geographic location weakens the relationship between ROA and ESG disclosure, where the interaction of ROA and GEO has a p value <0.1. The underlying reason for this result is that the lack of international supply chains to companies located in different locations and far from the centre of government causes limited global pressure, which has implications for transparency and low ESG performance despite the company's high financial profitability. Mohammad & Wasiuzzaman (2021) stated that stakeholder pressure for CSR adoption, government involvement in CSR activities, and the introduction of corporate governance standards can improve CSR disclosure and performance. Putra & Rumantir (2022) stated that even though the company's profits have increased, it is possible that it still has not implemented information transparency practices. Some cases that have occurred mentioned that mining companies in Indonesia still do not comply with global environmental standards in the case of environmental pollution. In addition, palm oil companies are suspected of clearing land by destroying forests illegally. P. Sari *et al.* (2023) explained that when the company has an adequate and appropriate environmental management system, water and air pollution control, and hazardous waste management, the company will have good environmental performance. From this case, it shows that companies located in the region can generate high profitability, it's just that suboptimal external pressure causes the disclosure of ESG activities to tend to be lower. Liu *et al.* (2022) stated that in an external perspective, stakeholder factors such as government, investors, rating agencies, institutional pressures at the national/regional level and the level of economic development and religious beliefs have an impact on corporate ESG disclosure. The results of Grisales & Caracuel (2019) study show that a higher level of geographic international diversification weakens the relationship between environmental and governance scores and financial performance. In contrast, the level of geographic international diversification does not moderate the relationship between social scores and financial performance.

The Effect Control variables on ESG Disclosure

Based on the regression results in tables 3 and 4, it can be explained that the effect of the control variable AGE has no significant effect on ESG in all regression models as indicated by the AGE coefficient value which is not statistically significant (p>0.1). Meanwhile, the LEV variable has a significant positive effect on ESG at the 5% significance level in all regression models with a positive coefficient with a value of p <0.05. The significant positive effect of LEV on ESG is consistent in all models both before and after the inclusion of the main independent variables (SIZE and ROA), the moderating variable GEO, and their interaction. Overall, LEV is a consistent and significant predictor of the level of corporate ESG disclosure, while AGE (company age) has no significant effect.

6. Conclusions

The results of data testing and regression analysis conducted on companies listed on the IDX from 2017-2021 show that company size does not affect ESG disclosure. In contrast, profitability shows a significant negative effect. Furthermore, geographic location cannot moderate the impact of company size on ESG disclosure empirically. However, the relationship between ROA and GEO shows a significant impact.

The limitation of this study is that there is no separation based on the sector of the companies studied, each sector certainly has different characteristics that have an impact on the validity of the research results. Future research can separate the companies to be tested according to their sectors, so that the research results can better reflect the condition of the industry and be free from bias and add other independent variables that are thought to have a relationship with ESG disclosure. Another limitation is that the sample used is still limited due to the lack of company ESG score data that is consistently available each year. Inadequate time series data from ESG scores have an impact on research results that are difficult to interpret and generalise. Future research can use complete and comprehensive ESG time series data that is consistently available published by credible ESG rating agencies such as MSCI ESG Ratings, Bloomberg ESG Disclosures Scores and others.

The next research limitation is the measurement of moderating variables using a dummy scale, which can reduce the sensitivity of the model in detecting the moderating effect of company size and profitability variables on ESG disclosure. Further research, geographical location used as a moderating variable should use a measurement in the form of a regional progress index by providing a score or ranking.

References:

Abdi, Y., Li, X., & C. Turull, X. (2022). Exploring the Impact of Sustainability (ESG) Disclosure on Firm Value and Financial Performance (FP) in Airline Industry : the Moderating Role of Size and Age. *Environment, Development and Sustainability*, *24*(4), 5052–5079. https://doi.org/10.1007/s10668-021-01649-w

Aboud, A., & Diab, A. (2018). The Impact of Social, Environmental and Corporate Governance Disclosures on Firm Value: Evidence from Egypt. *Journal of Accounting in Emerging Economies*, *4*(8). https://doi.org/10.1108/JAEE-08-2017-0079

Achmad, B., & Hadi, K. (2015). Faktor-faktor Risiko yang Mempengaruhi Pilihan Kebijakan Underwriting pada Asuransi Mikro (Studi pada Lembaga Keuangan Mikro yang Menjadi Nasabah BRIngin Life Syariah). *Jurnal Syarikah*, *1*(2), 71–82.

Aghnitama, R. D., Aufa, A. R., & Hersugondo, H. (2021). Pengaruh Ukuran Perusahaan terhadap Profitabilitas Perusahaan pada Indeks Investor33 di BEI. *Jurnal Akuntansi Dan Manajemen (JAM)*, *18*(02), 1–11.

Akgun, O. T., Mudge, T. J., & Townsend, B. (2021). How Company Size Bias in ESG Scores Impacts the Small Cap Investor. *The Journal of Impact and ESG Investing Summer*.

Alareeni, B. A., & Hamdan, A. (2021). ESG Impact on Performance of US S&P 500-Listed Firms. *Corporate Governance*, *July*. https://doi.org/10.1108/CG-06-2020-0258

Alfan, A. T., Harahap, N., & Harahap, M. I. (2024). Socioeconomic Development Sustainability Analysis: A Review of Corporate CSR and ESG in Indonesia. *International Journal of Economics Development Research*, *5*(1), 312–335. https://doi.org/https://doi.org/10.37385/ijedr.v5i1.3980

Arayssi, M., Jizi, M., & Tabaja, H. H. (2020). The Impact of Board Composition on the Level of ESG Disclosures in GCC Countries. *Sustainability Accounting, Management and Policy Journal*, *11*(1), 137–161. https://doi.org/10.1108/SAMPJ-05-2018-0136

Balogh, I., Srivastava, M., & Tyll, L. (2022). Towards Comprehensive Corporate Sustainability Reporting : An Empirical Study of Factors Influencing ESG Disclosures of Large Czech companies. *Society and Business Review*, *17*(4), 541–573. https://doi.org/10.1108/SBR-07-2021-0114

Cherkasova, V., & Nenuzhenko, I. (2022). Investment in ESG Projects and Corporate

Performance of Multinational Companies. *Journal of Economic Integration*, *37*(1), 54–92.

Chih, H., Chih, H., & Chen, T. (2010). On the Determinants of Corporate Social Responsibility : International Evidence on the Financial Industry. *Journal of Business Ethics*, 115–135. https://doi.org/10.1007/s10551-009-0186-x

D'Amato, A., & Falivena, C. (2020). Corporate Social Responsibility and Firm Value: Do Firm Size and Age Matter? Empirical Evidence from European Listed Companies. *Corporate Social Responsibility and Environmental Management*, *27*(2), 909–924. https://doi.org/10.1002/csr.1855

Dang, H. N., Vu, V. T. T., Ngo, X. T., & Hoang, H. T. V. (2019). Study the Impact of Growth, Firm Size, Capital Structure, and Profitability on Enterprise Value: Evidence of Enterprises in Vietnam. *The Journal of Corporate Accounting & Finance*, 146–162. https://doi.org/10.1002/jcaf.22371

Deegan, C. (2000). *Financial Accounting Theory*. McGraw Hill Book Company.

Dewi, S. (2019). Pengaruh Ukuran Perusahaan dan Profitabilitas Terhadap Pengungkapan Sustainability Report serta Dampaknya Kepada Nilai Perusahaan. *Jurnal Studia Akuntansi Dan Bisnis*, *7*(3), 173–186.

Dimaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, *48*(2), 147–160.

Dowling, J., & Pfeffer, J. (1975). Organitational Legitimacy: Social Values and Organizational Behavior. *The Pacific Sociological Review*, *18*(1), 122–136.

Drempetic, S., Klein, C., & Zwergel, B. (2020). The Influence of Firm Size on the ESG Score : Corporate Sustainability Ratings Under Review. *Journal of Business Ethics*, *167*(2), 333–360. https://doi.org/10.1007/s10551-019-04164-1

Farooq, U., Tabash, M. I., Anagreh, S., & Khudoykulov, K. (2022). How do Market Capitalization and Intellectual Capital Determine Industrial Investment ? *Borsa Istanbul Review*, *22*(4), 828–837. https://doi.org/10.1016/j.bir.2022.05.002

Gallo, P. J., & Christensen, L. J. (2011). Firm Size Matters: An Empirical Investigation of Organizational Size and Ownership on Related Behaviors. *Business & Society*, *50*(2). https://doi.org/10.1177/0007650311398784

Ghozali, I. (2020). *25 Grand theory: 25 teori Besar Ilmu Manajemen, Akuntansi dan Bisnis*. Yoga Pratama.

Gregory, R. P. (2022). The influence of firm size on ESG score controlling for ratings agency and industrial sector. *Journal of Sustainable Finance & Investment*, 1–14. https://doi.org/10.1080/20430795.2022.2069079

Grisales, E. D., & Caracuel, J. A. (2019). Environmental, Social and Governance (ESG) Scores and Financial Performance of Multilatinas: Moderating Effects of Geographic International Diversification and Financial Slack. *Journal of Business Ethics*. https://doi.org/10.1007/s10551-019-04177-w

Hackston, D., & Milne, M. J. (1996). Some Determinants of Social and Environmental Disclosures in New Zealand Companies. *Accounting, Auditing & Accountability Journal*, *9*(1), 77–108.

Hasse, R., & Krücken, G. (2009). *Neo-institutionalistische Theorie*. *January*. https://doi.org/10.1007/978-3-531-91600-2

Ika, S. R., Rahayu, R., Elrifi, M. Y., & Widagdo, A. K. (2021). Environmental Reporting, Ownership Structure and Corporate Characteristics of Indonesian Listed Companies. *IOP Publishing*, *April*. https://doi.org/10.1088/1755-1315/724/1/012095

Inawati, W. A., & Rahmawati, R. (2023). Dampak Environmental, Social, dan Governance

(ESG) terhadap Kinerja Keuangan. *Jurnal Akademi Akuntansi*, *6*(2), 225–241. https://doi.org/10.22219/jaa.v6i2.26674

Johan, J., & Toti, G. K. (2022). Pengungkapan Environmental, Social, & Governance (ESG) Terhadap Profitabilitas serta Nilai Perusahaan dalam Indeks Sri-Kehati 2015-2020. *Media Riset Bisnis & Manajemen*, *22*(1), 35–48.

Junita, N. L., & Yulianto, A. (2018). The Determinants Affecting Environmental Disclosure in the High Profile Companies in Indonesia. *Accounting Analysis Journa*, *7*(3). https://doi.org/10.15294/aaj.v7i3.18410

Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate Sustainability : First Evidence on Materiality. *The Accounting Review*, *91*(6), 1697–1724. https://doi.org/10.2308/accr-51383

Khoury, R. E., N.Nasrallah, & B.Alareeni. (2023). The Determinants of ESG in the Banking Sector of MENA Region : a Trend or Necessity ? *Competitiveness Review: An International Business Journal*, *33*(1), 7–29. https://doi.org/10.1108/CR-09-2021-0118

Lee, M. T., & Suh, I. (2022). Understanding the Effects of Environment, Social, and Governance Conduct on Financial Performance: Arguments for a Process and Integrated Modelling Approach. *Sustainable Technology and Entrepreneurship*, *1*. https://doi.org/10.1016/j.stae.2022.100004

Li, C., & Wang, X. (2022). Local Peer Effects of Corporate Social Responsibility. *Journal of Corporate Finance*, *73*, 102187. https://doi.org/10.1016/j.jcorpfin.2022.102187

Liu, S., & Wu, D. (2015). Competing by Conducting Good Deeds : The Peer Effect of Corporate Social Responsibility. *Finance Research Letters*, *000*, 1–8. https://doi.org/10.1016/j.frl.2015.10.013

Liu, Z., Zheng, R., Qiu, Z., & Jiang, X. (2022). Stakeholders and ESG Disclosure Strategies Adoption : the Role of Goals Compatibility and Resources Dependence. *Elementa: Science of the Anthropocene*, *10*(1), 1–12.

Lu, Y., & Abeysekera, I. (2014). Stakeholders ' Power, Corporate Characteristics, and Social and Environmental Disclosure: Evidence from China. *Journal of Cleaner Production*, *64*, 426–436. https://doi.org/10.1016/j.jclepro.2013.10.005

Meyer, J. W., & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, *83*(2), 340–363.

Mohammad, W. M. W., & Wasiuzzaman, S. (2021). Environmental, Social and Governance (ESG) Disclosure, Competitive Advantage and Performance of Firms in Malaysia. *Cleaner Environmental Systems*, *2*. https://doi.org/10.1016/j.cesys.2021.100015

Monteiro, S. M. da S., & Guzmán, B. A. (2010). Determinants of Environmental Disclosure in the Annual Reports of Large Companies Operating in Portugal. *Corporate Social Responsibility and Environmental Management*, *17*, 185–204.

Morrison, R. (2021). *Environmental , Social , and Governance Theory: Defusing a Major Threat to Shareholder Rights*. Competitive Enterprise Institute.

Nayenggita, G. B., Raharjo, S. T., & Resnawaty, R. (2019). Praktik Corporate Social Responsibility (CSR) di Indonesia. *Jurnal Pekerjaan Sosial*, *2*(1), 61–66.

Ningwati, G., Septiyanti, R., & Desriani, N. (2022). Pengaruh Environment, Social and Governance Disclosure terhadap Kinerja Perusahaan. *Goodwood Akuntansi Dan Auditing Reviu (GAAR)*, *1*(1), 67–78.

O'Donovan, G., & Gibson, K. (2000). Environmental Dislosure in The Corporate Annual Report: A Longitudinal Australian Study. *Paper For Presentation in The 6th Interdisciplinary*.

Oktariyani, A., & Meutia, I. (2016). Pengaruh Kinerja Keuangan, Leverage, Ukuran Perusahaan dan Sertifikasi Lingkungan terhadap Kualitas Pengungkapan Lingkungan

(Studi Empiris pada Industri Pertambangan yang Terdaftar di BEI). *Akuntabilitas: Jurnal Penelitian Dan Pengembangan Akuntansi*, *10*(2).

Park, S. R., & Jang, J. Y. (2021). The Impact of ESG Management on Investment Decision: Institutional Investors ' Perceptions of Country-Specific ESG Criteria. *International Journal of Financial Studies*, *9*(48).

Pulino, S. C., Ciaburri, M., Magnanelli, B. S., & Nasta, L. (2022). Does ESG Disclosure Influence Firm Performance ? *Sustainability*, *14*(7595), 1–18.

Putra, R. J., & Rumantir, N. (2022). Pengaruh Public Ownership dan Profitabilitas Terhadap Transparansi Informasi Dengan Internet Financial Reporting Sebagai Variabel Moderasi. *Jurnal Akuntansi Manajerial*, *7*(1), 1–17.

Quintiliani, A. (2022). ESG and Firm Value. *Accounting and Finance Research*, *11*(4), 37–47. https://doi.org/10.5430/afr.v11n4p37

Rahmadani, F., Adrianto, F., & Alfarisi, M. F. (2023). Is It Corporate Governance, Industry, and Profitability Matter on ESG Performance ? Evidence from Indonesian Companies. *Journal of Social Research*.

Reverte, C. (2009). Determinants of Corporate Social Responsibility Disclosure Ratings by Spanish Listed Firms. *Journal of Business Ethics*, 351–366. https://doi.org/10.1007/s10551-008-9968-9

Riduwan, A., & Andajani, A. (2022). Pemenuhan Tanggungjawab Ekonomik-Sosio-Ekologi: Benarkah Memicu Keberlanjutan Kinerja Keuangan? *Ekuitas: Jurnal Ekonomi Dan Keuangan*, *6*(2), 157–180. https://doi.org/10.24034/j25485024.y2022.v6.i2.5274

Rosengard, J. K. (2022). *Ketidakpastian Ekonomi Pengaruhi Penerapan ESG? Ini Kata BRI*. Cnbcindonesia.Com. https://www.cnbcindonesia.com/market/20221024153756-17-382120/ketidakpastian-ekonomi-pengaruhi-penerapan-esg-ini-kata-bri

Safitri, V. R., Rizkianto, E., & Prabowo, H. (2023). The Effect of ESG Score on Working Capital Requirement : Analysis of Indonesian Listing Companies for the Period 2015-2020. *Jurnal Manajemen Dan Usahawan Indonesia*, *46*(1), 20–33.

Sari, D. W., & Medina, E. N. (2020). Determinan Efisiensi Teknik Industri Minyak Sawit di Indonesia. *Jurnal Ekonomi Indonesia*, *9*(2), 99–118.

Sari, P., Agustia, D., Isnalita, I., & Lasmana, M. S. (2023). Mediasi Aksesibilitas Modal Utang pada Pengaruh Kinerja Lingkungan terhadap Financial Distress. *Ekuitas: Jurnal Ekonomi Dan Keuangan*, *7*(4), 479–500. https://doi.org/10.24034/j25485024.y2023.v7.i4.5439

Septiana, W. R., & Puspawati, D. (2022). Analisis Good Corporate Governance terhadap Pengungkapan ESG di Indonesia Tahun 2016-2020. *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan*, *4*(10), 4274–4283.

Setiawan, K., Mukhzarudfa, M., & Hizazi, A. (2019). *Pengaruh Profitabilitas, Solvabilitas, dan Ukuran Perusahaan terhadap Pengungkapan Sustainability Report pada Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia dan Bursa Efek Malaysia Periode 2013-2017*. 30–40.

Soberanis, L. (2022). *Kerangka Kerja ESG*. Ibm.Com. https://www.ibm.com/id-id/topics/esg-frameworks

Tao, J. (2023). Study on the Impact of ESG Performance on Firm Performance. *SHS Web of Conferences 165*, *01016*, 1–4.

Uche, E. P., Ndubuisi, A. N., & Chinyere, O. J. (2019). Effect of Firm Characteristics on Environmental Performance of Quoted Industrial Goods Firms in Nigeria. *International Journal of Research in Business , Economics and Management*, *3*(6).

Vivianita, A., Roestanto, A., Juhanes, J., & Evi, E. (2022). Determinant ESG Disclosure with Profitability as Moderating Variable. *InFestasi*, *18*(2), 155–164.

Waddock, S. A., & Graves, S. B. (1997). The Corporate Social Performance- Financial Performance Link. *Strategic Management Journal*, *18*(4). https://doi.org/10.1002/(SICI)1097-0266(199704)18

Yuen, M. K., Ngo, T., Le, T. D. ., & Ho, T. H. (2022). The Environment, Social and Governance (ESG) Activities and Profitability Under COVID-19: Evidence from the Global Banking Sector. *Journal of Economics and Development*, *24*(4), 345–364. https://doi.org/10.1108/JED-08-2022-0136

Yustin, M., & Suhendah, R. (2023). The Effect of Profitability, Risk, and Company Age on ESG Disclosure. *International Journal of Application on Economics and Business (IJAEB)*, *1*(1), 151–161.

Zahroh, B. M., & Hersugondo, H. (2021). The Effect Of ESG Performance on The Financial Performance of Manufacturing Companies Listed in the Indonesian. *AFEBI Management and Business Review (AMBR)*, 129–139.

Zhang, Y., & Sharon, C. P. Y. (2023). The Influence of Firm Size and Institutional Environment on ESG Disclosure - Evidence from Listed Companies in China. *International Journal of Academic Research Economics and Management Sciences*, *12*(2), 109–132. https://doi.org/10.6007/IJAREMS/v12-i2/16284