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The induce of environmental and social disclosure on stock returns

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Abstract: *The world community has begun to realize the importance of sustainability amidst the many adverse conditions. In Indonesia, all public companies and financial institutions are required to publish sustainability reports which include information regarding their environmental and social responsibilities. This study aimed to elucidate the impact of corporate environmental and social disclosures on stock returns, moderated by profitability. By selecting the moderating variable and using the LQ-45 index for a certain period, the researchers hope that the results will create novelty from previous research and give rise to new information. The Sustainability Report (SR) is evaluated by the quantity of sustainable items reported in the Sustainability Report Disclosure Index (SRDI) in accordance with the Global Reporting Initiative (GRI) Standards, relative to the number of sustainable goods that ought to be disclosed. For environmental, social, and governance variables, compare the quantity of declared environmental, social, and governance elements in the SRDI to the quantity that ought to be disclosed. This study employs the Moderated Regression Analysis (MRA) technique utilising SPSS software. This study's population comprised 45 companies from the LQ-45 Index, incorporated in the IDXESGL index utilising the GRI Index, from February to July 2024, which issued sustainability and annual reports for 2021-2022, marking the inception of the IDXESGL Index. Thirty-five companies met the criteria. This study uses a data processing program, the SPSS version 25. This study employs descriptive statistical tests, coefficient of determination tests, and hypothesis testing for data analysis. The findings of this study demonstrate no impact of environmental and social transparency on stock returns. Profitability as a moderating element does not enhance the impact of social transparency on stock returns. Nonetheless, profitability can enhance the impact of environmental disclosure on stock returns.*

Keywords: *environmental disclosure; profitability; social disclosure; stock return*

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Peran pengungkapan lingkungan dan sosial terhadap *return* saham

Abstrak: *Masyarakat dunia mulai menyadari pentingnya keberlanjutan di tengah banyaknya kondisi buruk. Di Indonesia, seluruh perusahaan publik dan lembaga jasa keuangan wajib menerbitkan laporan keberlanjutan yang memuat informasi mengenai tanggung jawab lingkungan dan sosial mereka. Studi ini bertujuan untuk menjelaskan bagaimana pengungkapan sosial dan lingkungan perusahaan memengaruhi return saham yang dimoderasi oleh profitabilitas. Dengan memilih variabel moderasi dan menggunakan indeks LQ-45 pada periode tertentu, peneliti berharap hasilnya dapat menciptakan kebaruan dari penelitian sebelumnya dan memunculkan informasi baru. Menurut Standar Global Reporting Initiative (GRI), penelitian ini menghitung Sustainability Report (SR) dengan membandingkan jumlah item berkelanjutan yang diungkapkan dalam Sustainability Report Disclosure Index (SRDI) dengan jumlah item berkelanjutan yang seharusnya diungkapkan, untuk variabel lingkungan, sosial, dan tata kelola juga melihat berapa banyak item lingkungan, sosial, dan tata kelola yang diungkapkan dalam Indeks Pengungkapan Laporan Ketahanan (SRDI) dibandingkan dengan berapa banyak item lingkungan, sosial, dan tata kelola yang seharusnya diungkapkan. Penelitian ini menggunakan metode Moderated Regression Analysis (MRA) menggunakan program SPSS. Populasi penelitian adalah perusahaan-perusahaan yang tergabung dalam Indeks LQ-45 yang masuk dalam indeks IDXESGL, menggunakan Indeks GRI. Dari Februari hingga Juli 2024, mereka menerbitkan laporan keberlanjutan dan tahunan 2021-2022, yang merupakan permulaan dimulainya indeks IDXESGL dan sebanyak 35 perusahaan memenuhi kriteria. Penelitian ini menggunakan program olah data, yaitu aplikasi SPSS versi 25. Uji statistik deskriptif, uji koefisien determinasi statistik, dan uji hipotesis digunakan untuk menganalisis data dalam penelitian ini. Hasil penelitian menunjukkan bahwa tidak ada hubungan antara pengungkapan lingkungan dan sosial terhadap return saham. Profitabilitas, sebagai variabel moderasi, tidak dapat memperkuat pengaruh pengungkapan sosial terhadap return saham, tetapi profitabilitas dapat memperkuat pengaruh pengungkapan lingkungan terhadap return saham.*

Kata kunci: *pengungkapan lingkungan; pengungkapan sosial; profitabilitas; return saham*

INTRODUCTION

In recent years, issues related to social problems and environmental damage, or pollution have continued to be hot topics of conversation worldwide. Based on research by Ipsos (2021), inequality in income, gender, education, health, race, and age is a problem that continues to be faced by the world community. Environmental problems are also an important issue that receives the fourth most attention and needs to be addressed as soon as possible (Ipsos, 2022). In 2015, the Sustainable Development Goals 2030 were ratified by the United Nations (UN) General Assembly as objectives for sustainable development (Bappenas, 2017). With Indonesia as an active member (Adryamarhanino & Indriawati, 2023), the enactment of Financial Services Authority Regulation number 51/POJK.03/2017 regarding "Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies." Article 10, paragraph 1 mandates that Financial Services Institutions, Issuers, and Public Companies must prepare sustainability reports (OJK, 2017). This report complies with governmental laws and aids in attracting investors to the organisation. This conclusion is corroborated by the findings of study conducted by PricewaterhouseCoopers (Chalmers et al., 2021), where 80 percent of global investors consider Environment, Social, and Governance (ESG) as an important thing in making investment decisions. In addition, 69 percent of global investors want companies to disclose more sustainability information that is increasingly relevant to their business models (PwC, 2023). A company's profitability increases with the completeness and transparency of its sustainability report, as investors gain greater insight into the company's commitment to Environmental, Social, and Governance concerns. Investors will progressively comprehend the magnitude of the company's issues pertaining to its Environmental, Social, and Governance (ESG) sustainability.

The variable selection in this study is predicated on the circumstances of 2021 to 2022, a pandemic era that has precipitated a significant influx of investors into the capital market, leading to remarkable improvements in market capitalisation, liquidity, performance, and stock trading. Furthermore, there is a heightened public awareness of social and environmental issues during the COVID-19 pandemic, leading to increased concern for environmental cleanliness and health, hence indicating a greater urgency in these circumstances. Before COVID-19 Era, governance disclosures were not used because they have more qualitative and subjective aspects; even minimal information is obtained in sustainability reports, even though they use international standards because they focus more on economic, social, and environmental disclosures. Subsequently, post-2020, governance disclosures are utilised by companies listed on the Indonesia Stock Exchange (BEI) and the IDXESGL index. This index was launched on December 20, 2021, by the KEHATI Foundation and BEI. This index contains stocks with better ESG performance than the industry average. Consequently, we aim to examine the companies listed in the LQ-45 Index, which are also part of the IDXESGL index from February to July 2024, whose sustainability and annual reports are published in 2021-2022, when the IDXESGL index started to be released, and use GRI standards in their sustainability reporting.

According to Holly et al. (2022), Wahyuningrum et al. (2020), and Zakia et al. (2019), agency theory elucidates the existence of a contract between an agent and a business owner in executing business activities, wherein the owner delegates decision-making authority to the agent. This delegation results in information asymmetry, leading to conflicts of interest, as the owner appoints the agent to enhance his welfare, while the agent seeks to maximise his own interests. Ross (1977) and Rizki et al. (2019) explain signalling theory as a form of conveying positive information about a company's condition so that it can be profitable and beneficial for investors that it can influence responses and attract investors' interest in making investment decisions. Increased corporate growth indicates effective resource management, leading to enhanced profitability (Budiana & Budiasih, 2020).

Legitimacy theory is the basis for corporate social responsibility disclosure. Oktavianawati & Sri 2019), Bidari & Djajadikerta (2020), Masoud & Vij (2021), Orazalin (2019), Rahayu & Hastuti (2020), and Lim & Noviarty (2023) said that companies and society have a social contract to ensure that the company embodies the ideals and conventions of society. To ensure economic continuity, the company prioritises the community's needs by supplying desired goods and services as part of its social and environmental responsibilities to cultivate positive relations with the community. Permatasari et al. (2019) emphazises that stakeholder theory influences differences in corporate social disclosure between developed and developing countries due to differences in values, norms, culture and government regulations. They are responsible to stakeholders, so they must be transparent about their responsibilities to gain stakeholder trust.

According to Kurniawan (2019), environmental disclosure is the process of revealing a company's performance that benefits the environment. Meanwhile, social disclosure reveals information about external relationships: the community, community groups, suppliers, and buyers (Qodary & Tambun, 2021). Stock returns show the return on investment or profits from capital investment that investors expect based on a certain level of risk. Furthermore, profitability is an efficiency metric pertaining to a company's capacity to make profits by managing its assets and money. It is one aspect that can influence investors' investment decisions.

In a prior study on environmental and social disclosure, Nabila & Wahyuningtyas (2023) analysed the influence of financial performance and sustainability reporting on stock returns in banking institutions from 2015 to 2020. Their findings indicated that return on assets (ROA), social and environmental performance both positively and significantly affected stock returns. Ikrima & Asrori (2020) investigated Corporate Social Responsibility (CSR) disclosure's impact on stock returns, utilising Return on Assets (ROA) as a moderating variable in non-financial firms throughout the 2015-2018 timeframe, which concluded that environmental disclosure did not affect stock returns. However, disclosure of social media can positively and significantly influence stock returns. Return on Assets (ROA) can strengthen social disclosure on stock returns, but it cannot strengthen environmental disclosure. Qodary & Tambun (2021) researched Environment, Social, and Governance (ESG) and retention ratios on stock returns moderated by company value in mining sector companies for the 2016-2020 period and concluded that environment, social, and governance did not affect stock returns.

This study's environmental and social disclosure are independent variables (X). Stock returns are the dependent variable (Y). Profitability serves as the moderating variable (Z), determined by the profitability ratio, specifically Return on Assets (ROA).

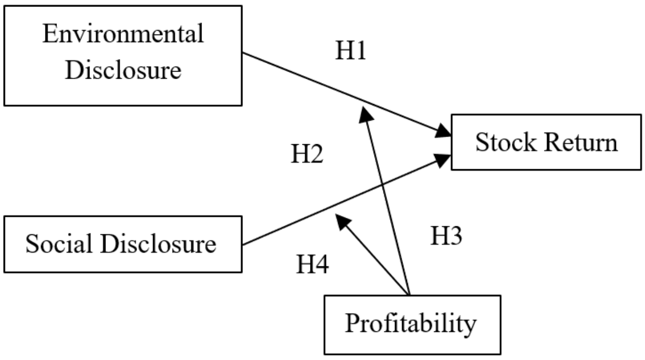

Figure 1 Research model
Source: Literatures study (2023)

One of the current global problems is environmental conditions, which are increasingly worrying, and it is essential to solve them together. Investors are very likely to consider the environmental dimension of a company based on its long-term sustainability interests. This hypothesis is supported by research by Nabila & Wahyuningtyas (2023), which shows that environmental performance dimensions can positively and significantly influence stock returns.
H1: Environmental disclosure can influence stock returns.

Positive information about the actions the company has taken can improve the company's image in society. Social conditions are an issue that must be addressed globally because good social conditions can improve the economy. This hypothesis is supported by research by Nabila & Wahyuningtyas (2023), the social performance dimension can substantially enhance stock returns. Social responsibility constitutes a good narrative that a firm might disseminate to enhance its image among investors.
H2: Social disclosure can influence stock returns.

Wahyuningrum et al. (2020) revealed that a company must be able to convince the public that they are also running better environmental responsibility and not reduce it if the level of profitability is high. Companies with high profitability demonstrate the ability to disclose more environmental responsibility than companies with low profitability. This hypothesis is supported by several research results, namely profitability as a factor that can influence stock returns (Nabila & Wahyuningtyas, 2023; Pradnyaningsih & Suarjaya, 2022; Tamarisa et al., 2021). Apart from that, profitability significantly positively affects environmental dislocation (Putra et al., 2021; Wahyuningsih et al., 2021). There exists a likelihood that profitability may enhance the impact of environmental disclosure on stock returns.
H3: Profitability enhances the correlation between environmental disclosure and stock returns.

A corporation prioritises profits and investors prioritise financial success, often at the expense of other considerations. However, higher profitability allows for increased disclosure of social responsibility because high profitability provides positive information for investors (Aryanto, 2020). This hypothesis is supported by several research results, namely profitability as a factor that can influence stock returns (Nabila & Wahyuningtyas, 2023; Pradnyaningsih & Suarjaya, 2022; Tamarisa et al., 2021). Profitability also positively impacts the disclosure of social responsibility, although insignificant (Dewi & Sedana, 2019; Putri et al., 2022). According to Aryanto (2020), profitability can enhance the correlation between corporate social responsibility and business value. Ikrima & Asrori (2020) reveal that profitability can strengthen the positive impact of social disclosure on stock returns.
H4: Profitability enhances the correlation between social disclosure and stock performance.

METHOD

This research employs quantitative analysis utilising panel secondary data, because it tests data on several variables from various industry types in 2021-2022. Data processing technique using the Moderated Regression Analysis method. Researchers select the data to be used in this study using several criteria that are by the objectives of this study. Where the criteria for selecting research subjects are as follows.

a. Publicly traded companies included in the LQ-45 Index from February to July 2024.
b. Public companies across diverse industries listed on the Indonesia Stock Exchange ESG Leader (IDXESGL) throughout 2021-2022.
c. Release sustainability reports and yearly reports for the years 2021-2022. The reason why choosing 2021-2022, because the years in which the IDXESGL index was first introduced to the Indonesian stock market,
d. Use GRI standards in disclosing their sustainability reports.
e. The company publishes annual reports and continuously provides all the data needed to measure the research variables.

This study's population comprised 45 companies from the LQ-45 Index, from February to July 2024, which was included in the IDXESGL index in 2022, using the GRI Index, which published sustainability and annual reports in 2021-2022. The annual and sustainability reports utilised are published on the company's official website or are accessible through the official website of the Indonesia Stock Exchange (BEI). The study sample comprises 35 companies, determined by the subject selection criteria. The Environmental Disclosure Index (EnDI) assesses environmental disclosure in accordance with the Global Reporting Initiative (GRI) Standards. The GRI standards mandate the disclosure of 31 information items. The Environmental Disclosure Index can be determined using the subsequent formula (Pujiningsih, 2020).

$$EnDI = \frac{\text{Number of company environmental disclosure points}}{\text{Number of GRI standard environmental disclosure points}} \quad (1)$$

The Social Disclosure Index (SoDI), founded on the Global Reporting Initiative (GRI) Standards, assesses the social dimension. Following the GRI requirements, 36 information items need to be disclosed. The Social Dimension level can be calculated using the following formula (Pujiningsih, 2020).

$$SoDI = \frac{\text{Number of company social disclosure points}}{\text{Number of GRI standard social disclosure points}} \quad (2)$$

The profit level obtained as a return on investment or return on investment is known as stock return. In calculating the stock return rate using the following formula (Tirta & Ismiyanti, 2019).

$$\text{Rt} = \frac{\text{Pt - Pv}}{\text{Pv}} \quad (3)$$

Information:
Rt = Stock returns in 2022.
Pt = Share price in 2022.
Pv = Share price in 2021.

Profitability is a metric utilised to assess an organization's capacity to earn profits over a specified timeframe. This study evaluates profitability using the following formula (Ross et al., 2019).

$$\textit{Return on Assets (ROA)} = \frac{\textit{Net Income}}{\textit{Total Assets}} \quad (4)$$

This research uses data processing techniques with the Moderated Regression Analysis method in Multiple Regression Analysis, namely, analyze and ascertain the impact of the independent variable on the dependent variable and the role of moderating variables in enhancing the link between the two. Apart from that, the estimate of each independent variable's effect on the dependent variable can be determined under specific conditions, namely rising and falling conditions (Ubwarin et al., 2021). This research uses a data processing program, the IBM Statistical Package for Statistical Science (SPSS) version 25 application. This research employs descriptive statistical tests, coefficient of determination tests, and hypothesis testing procedures for data analysis.

The method employed for conclusion is contingent upon the extent to which an independent variable influences the dependent variable. This method will illustrate the fluctuations of the independent variable when there are two or more independent variables (Novianti & Hakim, 2019). This analysis uses moderated regression analysis so that it has the following regression equation.

$$Y = \alpha + \beta_1 X1 + \beta_2 X_2 \quad (5)$$
$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 M + \beta_1 X_1 {*} M + \beta_2 X_2 {*} M \quad (6)$$

Which:

Y:	stock return variable.
α:	constant number.
$\beta_1 X_1$:	environmental disclosure variable.
$\beta_2 X_2$:	social disclosure variable.
$\beta_3 M$:	profitability variable.
$\beta_1 X_1{*}M$:	interaction of environmental disclosure with profitability.
$\beta_2 X_2{*}M$:	interaction of social disclosure with profitability

There is other analysis tests used, namely, tests for classical assumptions: normality, multicollinearity, heteroscedasticity, and autocorrelation, determination coefficient tests or adjusted R^2 tests, simultaneous significance tests or F tests, and partial significance tests or P-value and T-statistic tests.

RESULTS AND DISCUSSION

Results

This study was undertaken to fulfil the research purpose of analysing the impact of environmental and social disclosure on stock returns, with profitability serving as a mediator in the link between the dependent and independent variables. This document presents an example computation from the research along with a list of companies.

Table 1. Number of company samples in research

Description	Amount
Number of companies in the LQ-45 Index for the period February-July 2024	45
Number of companies not using the GRI Index	(10)
The number of companies used as research subjects	35
Research period (years)	2
Outlier data	(11)
The amount of company data used in the research	59

Source: Data processing result (2023)

This research used 35 companies from various industrial sectors in the LQ-45 Index, which is also included in the IDXESGL Index, from February to July 2024, that used GRI standards in their reporting. The research period was two years, i.e., 2021 to 2022, which is the starting point of the IDXESGL Index. The following is the sample calculation from this research and the list of companies.

The following are 35 sample companies from various types or industrial sectors, namely primary and non-primary consumers, energy, metals and minerals, industry, banking, chemistry, technology, telecommunications, forestry and paper, construction materials, pharmaceuticals, holding and investment, as well as industrial machines.

Table 2. List of companies used in research

No	Issuer code	Company name
1	ACES	Ace Hardware Indonesia, Tbk.
2	ADRO	Adaro Energy Indonesia, Tbk.
3	AKRA	AKR Corporindo, Tbk.
4	AMRT	Sumber Alfaria Trijaya, Tbk.

No	Issuer code	Company name
5	ANTM	Aneka Tambang, Tbk.
6	ASII	Astra International, Tbk.
7	BBCA	Bank Central Asia, Tbk.
8	BBNI	Bank Negara Indonesia, Tbk.
9	BBRI	Bank Rakyat Indonesia, Tbk.
10	BBTN	Bank Tabungan Negara, Tbk.
11	BMRI	Bank Mandiri, Tbk.
12	BRIS	Bank Syariah Indonesia, Tbk.
13	BRPT	Barito Pacific, Tbk.
14	CPIN	Charoen Pokphand Indonesia, Tbk.
15	EMTK	Elang Mahkota Teknologi, Tbk.
16	EXCL	XL Axiata, Tbk.
17	ICBP	Indofood CBP Sukses Makmur, Tbk.
18	INCO	Vale Indonesia, Tbk.
19	INDF	Indofood Sukses Makmur, Tbk.
20	INKP	Indah Kiat Pulp & Paper, Tbk.
21	INTP	Indocement Tunggal Prakarsa, Tbk.
22	ITMG	Indo Tambangraya Megah, Tbk.
23	KLBF	Kalbe Farma, Tbk.
24	MAPI	Mitra Adiperkasa, Tbk.
25	MDKA	Merdeka Copper Gold, Tbk.
26	MEDC	Medco Energi Internasional, Tbk.
27	PGAS	Pertamina Gas Negara, Tbk.
28	PTBA	Bukit Asam, Tbk.
29	SIDO	Industri Jamu dan Farmasi Sido Muncul, Tbk.
30	SMGR	Semen Indonesia, Tbk.
31	SRTG	Saratoga Investama Sedaya, Tbk.
32	TLKM	Telkom Indonesia, Tbk.
33	TOWR	Sarana Menara Nusantara, Tbk.
34	UNTR	United Tractors, Tbk.
35	UNVR	Unilever Indonesia, Tbk.

Source: Indonesia Stock Exchange (2023)

In Table 3, we can see the outcome of descriptive statistics.

Table 3. Descriptive statistics results

Variable	Min	Max	Average	Std. Deviation
EnDI	0.000	1.000	0.48934	0.261
SoDI	0.083	0.972	0.50800	0.196
Rt	-0.613	0.703	0.02136	0.281
ROA	0.004	0.291	0.06967	0.600

Source: Data processing result (2023)

Environmental disclosure (EnDI) has an average of 48.934 percent, indicating that the average company's environmental disclosure is quite good but can be further improved. Saratoga Investama Sedaya, Tbk. got the lowest score of 0.000 in 2022, where they did not disclose any environmental performance and only said that inventory of emissions data would be a priority in 2023. Indah Kiat Pulp & Paper, Tbk. got the highest score of 1.000 in 2022, where all the required disclosures were carried out, whether related to energy, water, emissions, materials, or waste.

Social disclosure (SoDI) averages 50.8 percent, indicating that the average company's social disclosure is good so that it can be maintained and improved. Barito Pacific, Tbk. obtained the lowest score of 0.083 during the year 2021, disclosing social performance pertaining to occupational health and safety, training and education, and local community engagement, thereby emphasising internal rather than external aspects. Vale Indonesia, Tbk. obtained the highest score of 0.972 in 2022, revealing all its social performance except incidents of non-compliance related to marketing communications.

Stock returns (Rt) show that, on average, companies can only provide profits to their investors through stock returns of 2.136 percent in 2021-2022. Ace Hardware Indonesia, Tbk. acquired the minimum value of -0.613 in 2022. Meanwhile, AKR Corporindo, Tbk. achieved the maximum value of 0.703 during the year 2022. The standard deviation was 0.281, indicating the variability of stock returns (Rt) of the sample companies is considerable where there are companies with a very high value, such as AKR Corporindo, Tbk. with a value of 0.70316 in 2022, due to a stock split and the lowest is Bank Rakyat Indonesia, Tbk. with a value of -0.01439 because at the end of the 2021 quarter a rights issue was carried out.

Profitability (ROA) has an average of 6.967 percent, indicating that the average company can obtain a level of profitability that is considered good because it is more than five percent (Birken & Curry, 2021). So, they could utilize total assets to produce a net profit of 6.967 percent. Barito Pacific, Tbk. obtained the lowest value of 0.004 in 2022. Unilever Indonesia, Tbk. obtained the highest value of 0.291 in 2021. Then the standard deviation value is 0.600, which shows the variability of profitability (ROA) of the sample companies is very large where there are companies with very high values, namely Unilever Indonesia, Tbk. in 2021 with a value of 0.29100 and the lowest is Barito Pacific, Tbk. in 2022 with a value of 0.00350.

The Kolmogorov-Smirnov method assesses the normality of data distribution, indicating normality if the asymptotic significance (2-tailed) exceeds 0.05 (Novianti & Hakim, 2019). According to the test in Table 4, the two-tailed asymptotic significance of 0.200 exceeds 0.05. The research data sample is normally distributed. The outcomes of the normalcy assessment on the research data are as follows.

Table 4. Normality test results

Description	Significance
Asymp. sig. (2-tailed)	0.200

Source: Data processing result (2023)

It was carried out using the colinearity statistics method where the criteria, according to Raharti & Susanti (2020), if the tolerance value exceeds 0.100 and the VIF is below 10.000, there are no indications of multicollinearity in the research data. Table 5 indicates that all variables exhibit tolerance values beyond 0.100 and VIF values below 10.000, hence demonstrating an absence of multicollinearity in the data set. The subsequent results pertain to the multicollinearity assessment of the research data.

Table 5. Multicollinearity test results

Variable	Collinearity statistical	
	Tolerance	VIF
EnDI	0.593	1.686
SoDI	0.588	1.701
ROA	0.985	1.015

Source: Data processing result (2023)

According to Raharti & Susanti (2020), if the significance value exceeds 0.05, the data does not exhibit characteristics of heteroscedasticity. According to Table 6, all variables exhibited a significance value beyond 0.05, indicating that the data in the study did not demonstrate signs of heteroscedasticity. The subsequent results pertain to the heteroscedasticity test conducted on the research data.

Table 6. Heteroscedasticity test results

Variable	Significance
EnDI	0.362
SoDI	0.931
ROA	0.815

Source: Data processing result (2023)

For autocorrelation, statistical analysis can be done using Durbin-Watson (Novianti & Hakim, 2019). According to Raharti & Susanti (2020), the criteria for measuring are as follows.

1. If d is less than dL, then there is positive autocorrelation.
2. If d is more than 4-dL, then there is negative autocorrelation.
3. If d is less than 4-dU and more than dU, then there is no autocorrelation.
4. If d is less than dU and more than dL or d is less than 4-dL and more than 4-dU, then there is no conclusion.

According to Table 7, the Durbin-Watson statistic is 1.777. With N = 59 and k = 3, it is found that dL is 1.4745 and dU is 1.6875. Hence, the equation is formed, 1.777 (d) is less than 2.3125 (4-dU) and is more than 1.6875 (dU) which results in the conclusion that there are no symptoms of autocorrelation. The subsequent results pertain to the autocorrelation test conducted on the research data.

Table 7. Results of the autocorrelation test

Description	Value
Durbin Watson	1.777

Source: Data processing result (2023)

Table 8 shows the contribution of environmental disclosure (EnDI) and social disclosure (SoDI) variables to returns after the moderating variables, namely profitability (ROA), profitability to environmental disclosure (ROA*EnDI), and social disclosure (ROA*SoDI) were only 4.7 percent. Moreover, the remaining 95.3 percent (100 percent to 4.7 percent) of stock returns are elucidated by variables external to the scope of this research.

Table 8. Results of the coefficient of determination test

Model	R-square	Adjusted r-square
Stock return	0.129	0.047

Source: Data processing result (2023)

This assessment technique evaluates the extent of the independent variable's impact on the dependent variable (Raharti & Susanti, 2020). The criterion for decision-making is that if the F-count exceeds the F-table, the independent variable affects the dependent variable. According to Table 9, the F count (1.573) is inferior to the F-table (2.39), and the p-value exceeds 0.05. The results indicate that the independent variable does not influence the dependent variable. Prior studies utilising this test determined that the independent variable exerted a significant influence on the dependent variable due to the presence of various independent factors (Qodary & Tambun, 2021).

Table 9. F-test results

F count	F-table	P-value
1.573	2.39	0.184

Source: Data processing result (2023)

This testing methodology assesses the impact of each independent variable on the dependent variable. According to Raharti & Susanti (2020), the decision-making criterion is that if the p-value is less than 0.05, then the alternative hypothesis (Ha) is accepted, indicating that the independent variable affects the dependent variable. If the p-value exceeds 0.05, the alternative hypothesis (Ha) is not accepted, indicating that the independent variable does not affect the dependent variable. The results of the partial significance test were derived from these criteria, as presented in Table 10.

Table 10 T-statistic test results

Hyphothesis	Description	P-value	Result
H1	Environmental disclosure affects stock returns.	0.173	Not accepted
H2	Social disclosure influences stock returns.	0.179	Not accepted
H3	Profitability enhances the correlation between environmental disclosure and stock returns.	0.026	Accepted

H4	Profitability enhances the correlation between social disclosure and stock performance.	0.325	Not accepted

Source: Data processing result (2023)

Discussion

The hypothesis was rejected, indicating no substantial impact of environmental disclosure on stock returns for companies within the LQ-45 index across several industrial sectors. These results are not by stakeholder, legitimacy, signal, and agency theory because positive signals related to environmental performance as accountability to stakeholders to avoid information asymmetry cannot make investors confident to invest in the company, so they cannot gain legitimacy even though they can build a good image in the company. Many things can cause insignificant results, and the t-count value shows a negative influence, so the environmental disclosure made will only reduce stock returns. It happened because in 2021-2022, when the COVID-19 pandemic is still occurring, but the movement is no longer too limited, stakeholders and investors will focus on economic recovery. This research does not concentrate on a certain industry. It utilises all firms from several sectors within the LQ-45 index from February to July 2024, so the results may need to be more accurate because they look at it in broad terms.

Issuers, such as ANTM, BBTN, BRIS, EXCL, MDKA, and TOWR, are companies that experience a decline in stock returns when they increase their environmental disclosure. The causes are varied for the metal and mineral industry due to the increasing costs of meeting environmental standards; the banking industry can be due to the large number of outstanding loans, a slowdown in credit growth, write-offs, and receivables in the telecommunications industry it is faced with tariff costs that need to be reduced. When economic conditions are challenging and costs are increasing but are not used to restore the company operationally, this information disclosed will not positively influence stock returns and will have the opposite impact. Apart from that, it could also be because the environmental performance carried out by companies is still not given enough attention; where most companies only carry out activities related to reducing energy and emissions, which makes it difficult to measure the impact directly because it is not immediately felt and seen and only industries related to mining or natural products carry out complete environmental responsibilities such as INKP and INCO issuers up to Biodiversity is also taken into consideration. Even ICBP and INDF issuers that produce daily necessities do not disclose the materials used. Only the UNVR issuer has replaced several products with recyclable packaging, such as toothpaste. The findings of this study correspond with research conducted by Ikrima & Asrori (2020) and Qodary &Tambun (2021), where environmental information does not influence stock returns.

The hypothesis was rejected, indicating no substantial impact of social disclosure on stock returns for companies within the LQ-45 index across several industrial sectors. This result is not by stakeholder, legitimacy, signal, and agency theory because social performance as a responsibility to stakeholders through positive signals to avoid information asymmetry has not been able to increase the trust of stakeholders and investors, it has failed to attain credibility while successfully establishing a positive reputation among the community.

This result is not significant because the main focus of this research is the LQ-45 index. Hence, it uses all companies from various industries in the LQ-45 index from February to July 2024, so it does not focus on specific industries, making it possible to draw broad conclusions that are less accurate. However, there are other factors, such as companies paying more attention to their social performance. However, it is difficult for investors to measure the positive things they get from these disclosures because most companies carry out their social responsibilities more internally (related to employment-related job security training) compared to externally, especially for companies in industries other than energy and mining, although it is much better than the pharmaceutical, manufacturing and other industries.

The company's external performance itself focuses more on communities in villages, such as providing vehicle assistance, building classrooms, and holding cultural festivals, which have been carried out by the issuer INCO (as the only company with the highest level of social disclosure), which was focusing on disadvantaged communities is very good. However, they ignored the communities in big cities. It causes investors, usually based in big cities, to remain sceptical about the disclosure of social performance provided by companies because there is no objective evidence that investors can see directly.

Hence, it should be balanced at least through some form of responsibility, such as making public facilities in big cities, where in the post-pandemic period, people, especially in big cities, are increasingly aware of their health. Hence, they need more adequate public space to do more outside activities, so there is a need for city parks and public sports facilities. Therefore, investors still prioritize the economic dimension and financial performance as the main benchmarks that determine their investment decisions, which are still very influential. This research results align with Qodary & Tambun (2021), where social disclosure exerts no substantial influence on stock returns.

The hypothesis is accepted, indicating a substantial impact of profitability in environmental disclosure on stock returns for companies within the LQ-45 index across diverse industrial sectors. Profitability is a factor that determines the company's or management's freedom of flexibility in carrying out its overall performance. The elevated profitability must be reconciled with the company's performance. In the aftermath of the COVID-19 epidemic in 2022, which will be the point where public awareness of health and cleanliness will increase, higher profitability will strengthen the influence of environmental disclosure on stock returns positively due to the increased allocation of funds to carry out further environmental performance so that it can includes more environmental performance that has a direct impact on society such as related to waste and materials from some products.

Issuers ASII, KLBF, and UNTR also show the same thing that in 2022, disclosures related to their environmental performance will increase in line with company profitability and stock returns. In the years after the pandemic conditions begin to end, its influence can be further strengthened when people's awareness of a suitable environment can positively impact them. It is through the theories used that companies make environmental disclosures through their sustainability reports to reduce information asymmetry between management and stakeholders for their accountability.

A greater level of profitability correlates with more favourable indicators of environmental performance have been carried out to help reduce environmental problems that occur due to the company and outside the company to gain legitimacy and a good image in society. Getting a positive response from the public can create trust from stakeholders and investors and improve the condition or performance of the company in the capital market. However, this research's results differ from those of Ikrima & Asrori (2020), where profitability cannot moderate environmental disclosure on stock returns.

The hypothesis was rejected, indicating no substantial impact of profitability in social disclosure on stock returns for companies within the LQ-45 index across several industrial sectors. While profitability influences a company's or management's flexibility in executing overall performance, an elevated level of profitability does not inherently imply an increase in social disclosure. It can happen because, as an institution whose primary focus is making profits, management will prioritise the allocation of profits into the company's operational activities over enhancing its social performance. Consequently, the attained profitability must be reconciled with the company's initiatives to enhance social performance for its social disclosure. The issuers ATNM, BBTN, and TOWR demonstrate that an increase in social disclosure and profitability correlates with a decline in stock returns.

Hence, it differs from the theories used because the company's decision to reduce information asymmetry to stakeholders by providing and increasing positive signals related to social performance for disclosure can be considered less relevant. Stakeholders or investors believe that the level of profitability the company obtains should be invested to ensure business continuity. Adding the proportion of fund allocation to social performance will only reduce the company's profits, and there will be no direct reciprocity for the company. Therefore, a company cannot gain legitimacy if management decisions are not in the stakeholders' interests, even though they have a good image in society. By getting a poor response from stakeholders, it can reduce the trust of stakeholders and investors. However, this research's results differ from those of Ikrima & Asrori (2020), where profitability can moderate social disclosure on stock returns.

This research only uses data from 2021-2022 because the IDXESGL index started in 2021. It solely analyses the impact of environmental, social, and governance variable disclosure on stock performance during those years, neglecting to consider performance up to the present. The research only uses data from companies that use GRI standards. However, other standards can be used, such as Financial Services Authority Regulation (POJK) number 51. The study exclusively utilises the population of firms listed in the LQ-45 index. Conversely, the most substantial population resides within the IHSG index.

CONCLUSION AND SUGGESTIONS

The research results yielded the following conclusions that environmental (EnDI) and social (SoDI) disclosures do not affect stock returns (Rt); profitability (ROA) in moderating environmental disclosure variables (EnDI) on stock returns (Rt) influences strengthening this relationship; and profitability (ROA) in moderating the social disclosure variable (SoDI) on stock returns (Rt) does not influence strengthening this relationship. The government can further develop its policies in detail regarding environmental and social performance that needs to be disclosed and can require that one performance disclosure item be made in each category. The government can also consider providing incentives in the form of reducing sanctions and taxes and providing subsidies and facilitating particular business permissions to encourage enterprises to fulfil their obligations.

Companies are anticipated to thoroughly assess the prevailing societal conditions from all relevant perspectives prior to making decisions concerning their environmental and social performance. Disadvantaged groups only partially achieve a balanced execution of their performance. However, some performances can be obtained and enjoyed by the people around the company or in big cities. Providing city parks and sports facilities is a more neutral and broad option for carrying out its responsibilities to city communities. Investors may contemplate the company's environmental and social disclosures as a factor influencing their investing decisions, can convey what environmental and social responsibilities are desired from the company so that it can be more focused. Investors must be able to look at their investment decisions in the long term, not just prioritize short-term needs or impacts, to create a more stable and sustainable economic ecosystem for a better future for all parties involved.

The results of this research can be used as a reference to form a framework and model for further research. We can use moderating and additional governance variables to find the results of other factors. We can also select populations based on industrial sectors in certain indexes, making it possible to find more specific research results. We can use the latest version of the GRI standard because it is an international standard or the POJK standard as another reference standard.

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