JURNAL UPI

Jurnal Riset Akuntansi

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Journal homepage: https://ejournal.upi.edu/index.php/JRAK/

Enviromental Disclosure and Investor Respond: Study of Indonesian Company

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ABSTRACT

Environmental concerns have encouraged companies to increase transparency in managing environmental issues through sustainability reports. Such disclosures aim to build trust, attract investors, and ultimately influence investor response. This study analyzes the effect of environmental disclosure on investor response. The population includes all companies listed on the IDX in 2021–2022, with purposive sampling applied to firms publishing sustainability reports and actively traded. Based on these criteria, 508 companies were selected. This quantitative research employs Eviews software, using the GRI Standard Index to measure environmental disclosure. Investor response is proxied by stock returns around the publication of sustainability reports, with IHSG returns and market trends included as control variables. Findings reveal that environmental disclosure positively affects investor response. IHSG returns also show a positive effect, while market trends negatively influence investor response. Future studies may extend the observation period and analyze longer return windows around disclosure dates.

INFO ARTIKEL

Article History:
Submitted/Received 6 June 2025
First Revised 10 June 2025
Accepted 27 June 2025
First Available online 1 August 2025
Publication Date 7 August 2025

Keyword:
Environmental Disclosure; GRI Standard; Investor Response; Market Trend; and Sustainability Report

1. INTRODUCTION

Environmental issues have become significant since the emergence of climate change worldwide (Alessi et al., 2021). The entire world has simultaneously adopted environmentally friendly concepts in various activities to reduce the impact of environmental damage, which has reached worrisome levels. Environmental damage primarily caused by the industrial sector and the scarcity of natural resources necessitates the development of green industries (Arumona et al., 2021). The industrial sector is expected to efficiently use energy and minimize waste from operational activities. The active role of the industrial sector in implementing green industries can be seen in the disclosure of environmental management practices by individual companies. Company disclosure itself has become a particular concern for some economic actors, leading most companies in developed countries to publish such disclosures in reports that include environmental management related to their operational activities (Maabreh et al., 2024; Usman et al., 2020). These reports serve as clear evidence of a company's commitment to environmental stewardship (Andini et al., n.d.; Pujiningsih, 2020; Setyawan et al., 2023).

Indonesia, once a contributor to global environmental degradation evident in climate change, excessive resource use, and significant operational waste, has now turned its attention to corporate environmental management. Since 2014, Indonesia has been implementing environmentally friendly concepts towards a green economy. Green industry policies embedded in various legislations serve as guidelines for companies to adopt sustainable and eco-friendly practices in their operations since 2020. Companies in Indonesia have a responsibility to comply with established policies and integrate sustainable principles to reduce risks, conserve resources, and enhance long-term sustainability. This corporate responsibility is evident in sustainability reports that include environmental management practices undertaken by the companies. Sustainability reporting in Indonesia remains voluntary, but the Indonesian Financial Services Authority has affirmed that it will gradually become mandatory (Apriliani et al., 2024). Several institutions, including the Global Reporting Initiative (GRI), offer models as guidelines, recommending mandatory environmental aspects to be disclosed in companies' annual reports (Fitriasari, 2023) encompassing 37 recommended items.

Environmental information disclosure by companies has also garnered widespread attention (Du, 2015; J. Zhang & Yang, 2023; Z. Zhang et al., 2022). Corporate transparency through environmental management disclosure can enhance investor sentiment. Investors focusing on environmental and sustainability issues tend to invest in companies actively managing their environmental impacts. Disclosure of environmental performance management in sustainability reports can build trust and attract investors to invest (Meng & Zhang, 2022), thereby leading to changes in company market capitalization. These changes will impact the company's stock prices, ultimately affecting the returns received by investors.

Research on the impact of environmental disclosure on stock returns has been conducted, yielding varying results. Studies by Aprilia & Sarumpaet (2023) and Nanda & Hayati (2021) found that disclosure in sustainability reports, particularly environmental performance, significantly

DOI: https://doi.org/10.17509/jrak.v13i2.88537
p- ISSN 2338-1507 e- ISSN 2541-061X

influences stock returns positively. Similarly, (Ikrima & Asrori, 2020) concluded that higher CSR disclosure increases stock prices and leads to higher returns. Conversely, Meng & Zhang (2022) and Cahaya Chairanee et al. (2022) reported significant negative effects of environmental disclosure on investor response. Alsahlawi et al. (2021) also found that environmental disclosure leads to a decrease in stock returns. In contrast, Nawawi et al. (2020) explained that sustainability report disclosure has no impact on stock performance, as some investors do not yet consider sustainability reports in their investment decision-making. Studies by Stekelenburg et al. (2015) and Weda & Sudana (2021) concluded that sustainability report disclosure has no effect on stock returns, attributed to companies not fully disclosing information on their sustainability efforts.

Despite the existing research gap in previous studies, this research makes several contributions. First, it uses the GRI (Global Reporting Initiative) Standards, whereas previous studies have rarely used GRI for measuring sustainability disclosure. Most previous studies preferred the PROPER index, either being listed in the PROPER index or setting their range based on PROPER rankings. GRI was chosen because it is globally recognized as a guideline for preparing sustainability reports, while PROPER is initiated by the Ministry of Environment and Forestry of Indonesia and is limited to companies within Indonesia. PROPER does not widely disseminate its calculation methods or ranking criteria. Moreover, PROPER does not primarily focus on sustainability reporting but evaluates overall environmental management by companies. Companies also need to register to enter the PROPER index, so this ranking does not reflect the achievements of all companies in Indonesia, and companies in the PROPER index are not required to publish sustainability reports.

Secondly, the study includes all sectors listed on the Indonesia Stock Exchange because previous research typically focused on specific indices like LQ45 companies, manufacturing companies, or mining companies, thus unable to comprehensively measure environmental disclosure across all sectors. Thirdly, the stock prices used are those at the end of April and the end of the year, thus not capturing investor responses immediately following the issuance or approval of sustainability reports. This study will use stock prices at the time of sustainability report issuance/approval to observe the immediate effects. Fourthly, the study examines the average H+5 return after the issuance/approval of SR. Previous studies have looked at effects over six months or just one day, potentially missing the effects of sustainability report issuance due to either too long or too short a timeline. Fifthly, this research will incorporate all aspects of environmental management disclosure as per the GRI index. Sixthly, it adds the IHSG return and market trend as controls because changes in the capital market are influenced by various factors beyond sustainability report issuance. Therefore, investor response represented by stock returns is expected to be observed at the time of sustainability report issuance.

Based on the importance of environmental management disclosure outlined in sustainability reports, existing research gaps concerning aspects such as stock price data collection, the use of the GRI index for environmental management measurement, and the scope of sectors studied are considered. These considerations, along with the addition of controls like IHSG return and

DOI: http://dx.doi.org/10.17509/xxxx.xxx
p- ISSN 2338-1507 e- ISSN 2541-061X

market trend, aim to ensure the study's results can be broadly applicable. Thus, this research will focus on environmental disclosure and its impact on investor response.

Based on the explanation of the importance of disclosing environmental management in sustainability reports, the existing research gap, and several considerations from the perspective of stock price data collection, environmental management measurement using the GRI index, and the company sector within the research scope, so that the research results can be widely used, including the addition of controls such as the IHSG return and market trend. The IHSG return is taken as a control to separate the influence of market fluctuations from company-specific information (Desliniati et al., 2022). The market trend represents the broad macroeconomic conditions, including economic growth, interest rates, inflation, and government policies (Yulianti & Komara, 2019). The market trend is chosen as a control so that the information on the issuance of sustainability reports is not overshadowed by issues related to macroeconomic conditions.

Literature Review

Reports published by companies serve as a means to communicate both financial and non-financial information to stakeholders (Kuswanto, 2019). These reports have evolved from focusing solely on economic measurements to also including non-economic aspects such as environmental and social concerns (Bhatia & Tuli, 2018). One form of non-economic reporting is the sustainability report, which includes disclosures on a company's economic, environmental, social, and governance performance (Alsahlawi et al., 2021; Farhana & Adelina, 2019). Sustainability reports play an important role in shaping investor responses, as they reflect the company's performance and can influence investor trust in the company's prospects (Febriani et al., 2022).

One component of sustainability reporting is environmental disclosure, which refers to the information companies provide to account for the environmental impact of their operations (Marvella & Breliastiti, 2023; Syahri, 2023). This disclosure can directly affect a company's existence, reputation, and long-term viability (Syahri, 2023), as well as help maintain good relationships with stakeholders. Environmental disclosure includes both qualitative and quantitative information about how the company manages its environmental impacts. Environmental disclosure can be measured using indicators provided by the Global Reporting Initiative (GRI). These indicators are considered to have higher validity and accuracy compared to other standards (Bhatia & Tuli, 2018; Kuswanto, 2019). GRI is an independent international organization committed to promoting sustainable practices (Aprilia & Sarumpaet, 2023). Information disclosed through these reports is targeted primarily at external parties, especially investors. Based on the efficient market hypothesis, such information can influence market behavior and investor decision-making. An efficient market reflects all available information in stock prices (Khujaifah et al., 2023), including past events, current developments, and future expectations or opinions that may drive stock price changes. In an efficient market, newly

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p- ISSN 2338-1507 e- ISSN 2541-061X

published information is immediately reflected in stock prices, meaning today's stock price changes are influenced by today's information and not by past prices (Budihargono et al., 2017).

Investor response refers to how investors react to company disclosures, including environmental information. This response can affect investment decisions, risk assessments, and opportunities related to environmental issues. Financial reports, annual reports, and sustainability reports are tools used by companies to inform investors about their condition. Investor response is typically observed through stock price movements. A sustainability report containing environmental disclosures can trigger three possible stock price reactions: an increase, a decrease, or no change at all. Stock return refers to the gain investors receive from their investments (Prasasti & Desliniati, 2022). Investors aim to earn profits, so any news, issues, or developments may influence their decisions, resulting in either a positive or negative reaction. A positive reaction typically leads to an increase in stock price, while a negative reaction causes a decline.

Stock price movements often form trends, commonly referred to as market trends. These trends are generally classified as either bullish or bearish. According to (Cahyadi et al., 2018), a bullish trend is when the stock market shows an upward movement in prices, indicating confidence and optimism. On the other hand, a bearish trend reflects falling stock prices and market pessimism. Fabozzi & Francis (1979) categorized market conditions based on market returns over specific periods. When the IDX Composite (IHSG) shows a positive return, it signals a bullish market; when it shows a negative return, it indicates a bearish market. Cahyadi et al. (2018) also stated that in bullish markets, investors tend to be more confident and focus on capital gains, often ignoring negative information. In contrast, during bearish conditions, investor confidence is low, and even positive information may not lead to strong reactions, as investors become more cautious.

Each year, more companies are listed on the Indonesia Stock Exchange. To reflect this, a stock index such as the IHSG is used to represent the overall movement of the Indonesian capital market. The IHSG is a calculated index showing stock price trends over time. It is formed from the returns of all listed stocks (Desliniati & Hilaliyah, 2021). The index is calculated using a weighted average method based on market capitalization. The larger a company's market cap, the greater its influence on IHSG movements when its stock price changes (Febriani et al., 2022).

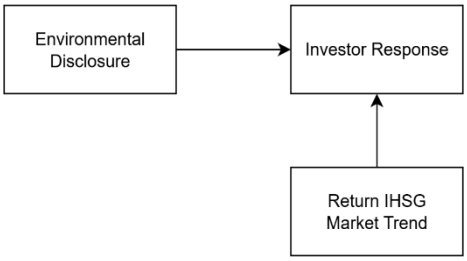

Figure 1. Research Framework

DOI: http://dx.doi.org/10.17509/xxxx.xxx
p- ISSN 2338-1507 e- ISSN 2541-061X

The Relationship Between Environmental Disclosure and Response Investor

Environmental and climate issues are becoming more important, not only in Indonesia but globally. Air and water pollution, biodiversity loss, and extreme climate changes are serious problems affecting the environment. As a result, businesses are under pressure to operate responsibly and sustainably. Without proper environmental management, company activities can harm the environment (Setyaningsih & Asyik, 2016). However, preparing sustainability reports requires significant costs, so some companies still choose not to publish them, ignoring the consequences of not disclosing environmental impacts. Proper environmental disclosure can improve public perception. Companies that provide transparent and responsible environmental information are seen as socially responsible entities. Environmentally conscious investors are more likely to invest in companies that consider their environmental impact. This positive perception can increase investor demand for the company's stock, thereby improving stock returns, as supported by Aprilia & Sarumpaet (2023) and Nanda & Hayati (2021).

H1: There is a positive relationship between environmental disclosure and investor response.

2. METHODOLOGY

This study was conducted to analyze investor responses to corporate environmental management disclosures. The population of this study includes all companies listed on the Indonesia Stock Exchange for the years 2021-2022. The sampling method used in this study is purposive sampling, with criteria that the company must issue a sustainability report and be an actively traded stock in 2021-2022. As a result, out of 824 companies, 508 companies were selected as the sample for this study. This is a quantitative study that uses secondary data. The data required for this research includes sustainability reports, stock prices, and the IHSG index. Stock price data and the IHSG index are sourced from finance.yahoo.com. Sustainability reports are sourced from the respective company's websites. Sometimes, corporate sustainability reports are combined with annual reports into an integrated report.

Investor response refers to actions taken by investors based on received information, which can even influence their investment decisions. In this context, investor response is observed through stock returns. Stock returns are changes in the movement of a company's stock prices (Desliniati et al., 2022; Handayani & Kesuma, 2021; Herbenita, 2025). The stock returns used in this study are the changes in stock prices at the time of the company's sustainability report issuance. The calculation of stock price changes involves several steps. First, calculate the returns from H+1 to H+5. Second, average the returns from H+1 to H+5.

$$Stock\ Return = ln\left(\frac{Stock\ return_t}{Stock\ return_{t-1}}\right)$$

$$Investor\ Response = \frac{\sum_{n=1}^{5} Stock\ Return_{i,t+n}}{5}$$

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p- ISSN 2338-1507 e- ISSN 2541-061X

Environmental management disclosure explains how transparent a company is with its operational activities, particularly the use of resources and its impact on the environment. The GRI Standard Index is used to measure the overall environmental management disclosure of a company. The assessment of environmental management disclosure is based on the GRI Standard Index, which includes 8 categories: materials, energy, water & effluents, biodiversity, emissions, waste, and supplier environmental assessment. This environmental disclosure is measured using a dummy variable, where a value of 1 is given if the company discloses according to the GRI Standard index, and a value of 0 if the company does not disclose according to the GRI Standard index (Apip et al., 2020). The maximum score for environmental management disclosure is 31 disclosures. Each company's score for each year will be summed and then divided by 31, so the environmental management disclosure is presented in decimal form (Husein & Desliniati, 2024).

$$Environmental\ Disclosure = \frac{\sum_{n=1}^{31} Disclosure_{i,t,n}}{31}$$

IHSG refers to the composite stock price index of all companies listed on the Indonesia Stock Exchange (Desliniati et al., 2022; Handayani, 2025; Rahel, 2025). The IHSG return is the change in the IHSG. The IHSG return used in this study is the change in IHSG price at the time of the company's sustainability report issuance. The calculation of the IHSG price change uses the average return from H+1 to H+5.

$$Return\ IHSG = \frac{\sum_{n=1}^{5} ln\left(\frac{IHSG_t}{IHSG_{t-1}}\right)}{5}$$

Market trend represents the changes in the capital market trend related to issues, news, or rational opinions from third parties. When the IHSG return over a certain period, representing the market return, is positive, it indicates a bullish market trend. Conversely, when the IHSG return over a certain period is negative, it indicates a bearish market trend. The market trend is measured using the average IHSG return 15 days before the date of the company's sustainability report issuance. First, calculate the returns from H-1 to H-15. Second, average the returns from H-1 to H-15.

$$Return\ IHSG = ln\left(\frac{IHSG_t}{IHSG_{t-1}}\right)$$

$$Market\ Trend = \frac{\sum_{n=-1}^{-15} Return\ IHSG_{t+n}}{15}$$

The data in this study uses panel data, so an estimation model selection test will be conducted before performing the classical assumption tests and model feasibility tests. The estimation model selection tests include the Chow test, Hausman test, and LM test. The classical assumption tests consist of multicollinearity test, heteroscedasticity test, and autocorrelation test. The model feasibility tests include the F-test and the coefficient of determination. The data analysis

DOI: http://dx.doi.org/10.17509/xxxx.xxx
p- ISSN 2338-1507 e- ISSN 2541-061X

technique used is multiple linear regression analysis. Multiple linear regression analysis will be used to test the hypotheses. The research data will be analyzed using Eviews software.

3. RESULTS AND DISCUSSION

The results of the data analysis begin with a description of the research data, especially the environmental disclosure data. This data description is divided based on the elements of the GRI criteria. The disclosures made by companies are grouped according to the number of items reported in their sustainability reports.

Companies Disclosing Based on the GRI Index 301

Disclosure	2021		2022	
	N	%	N	%
3	12	2%	23	5%
2	30	6%	25	5%
1	37	7%	40	8%
0	429	84%	420	83%

Companies Disclosing Based on the GRI Index 302

Disclosure	2021		2022	
	N	%	N	%
5	23	5%	36	7%
4	19	4%	29	6%
3	42	8%	46	9%
2	65	13%	60	12%
1	45	9%	44	9%
0	314	62%	293	58%

Companies Disclosing Based on the GRI Index 303

Disclosure	2021		2022	
	N	%	N	%
5	26	5%	49	10%
4	16	3%	19	4%
3	17	3%	22	4%
2	21	4%	24	5%
1	50	10%	47	9%
0	378	74%	347	68%

Companies Disclosing Based on the GRI Index 304

Disclosure	2021		2022	
	N	%	N	%
4	19	4%	29	6%
3	9	2%	12	2%
2	18	4%	14	3%
1	19	4%	26	5%
0	443	87%	427	84%

DOI: https://doi.org/10.17509/jrak.v13i2.88537
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Companies Disclosing Based on the GRI Index 305

Disclosure	2021		2022	
	N	%	N	%
7	20	4%	37	11%
6	7	1%	5	1%
5	12	2%	22	6%
4	26	5%	26	8%
3	23	5%	33	10%
2	27	5%	23	7%
1	29	6%	23	7%
0	364	72%	339	100%

Companies Disclosing Based on the GRI Index 306

Disclosure	2021		2022	
	N	%	N	%
5	29	6%	54	11%
4	11	2%	16	3%
3	28	6%	24	5%
2	31	6%	30	6%
1	49	10%	43	8%
0	360	71%	341	67%

Companies Disclosing Based on the GRI Index 308

Disclosure	2021		2022	
	N	%	N	%
2	4	1%	15	3%
1	19	4%	18	4%
0	485	95%	475	94%

Based on the table companies disclosing based on the GRI Index 301,302, 303, 304, 305, 306, and 308 above, it is evident that corporate disclosure related to environmental management remains low. The number of companies with zero disclosure is still very high, exceeding 50% for each GRI Index related to the environment. This high percentage indicates that many companies do not disclose their environmental management practices in their Sustainability Reports. Although environmental disclosure is still relatively low, it has gradually started to increase in 2022, as seen from the decrease in the number of companies with zero disclosure for each GRI Index.

The table also reveals that the GRI Index with the highest full disclosure is GRI Index 303 concerning Water and Effluents. However, as many as 75% of companies still do not fully disclose their water and effluent management practices. This percentage decreased to 68% in 2022. This indicates that companies are starting to pay attention to the use and management of water and effluents in their business activities and are beginning to be transparent in their management.

DOI: http://dx.doi.org/10.17509/xxxx.xxx
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The GRI environmental disclosure index with the highest zero disclosure rate is Index 308 concerning Supplier Environmental Assessment, with 485 companies. This indicates that the majority of companies do not consider environmental management in their supplier selection. However, in 2022, this number decreased to 475 companies. The disclosure of environmental management in the 2021 and 2022 Sustainability Reports based on the GRI Index is still very low. This can be seen from the following graph, which shows that many companies still do not disclose their environmental management practices.

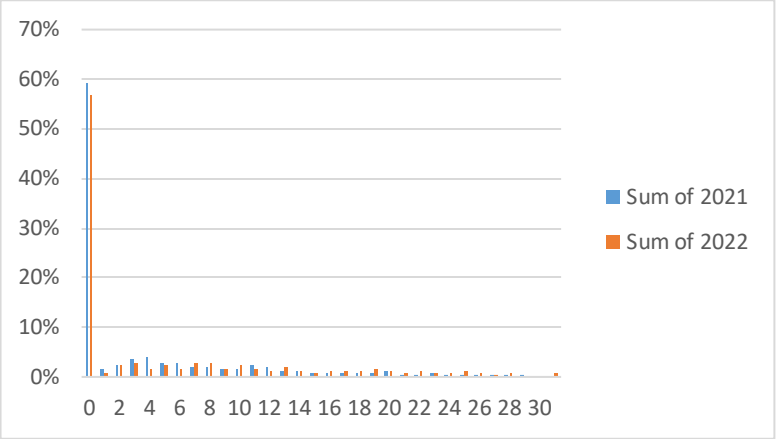

Figure 2. Percentage of Corporate Environmental Disclosure

Research data recorded that 59% of companies did not fully disclose their environmental management in 2021. However, this slightly decreased to 57% in 2022. In 2021, there were still no companies that fully disclosed their environmental management, with a total of 31 disclosures. In 2022, this increased, with 5 companies fully disclosing their environmental management. This indicates that the level of corporate transparency regarding environmental management in Sustainability Reports remains low.

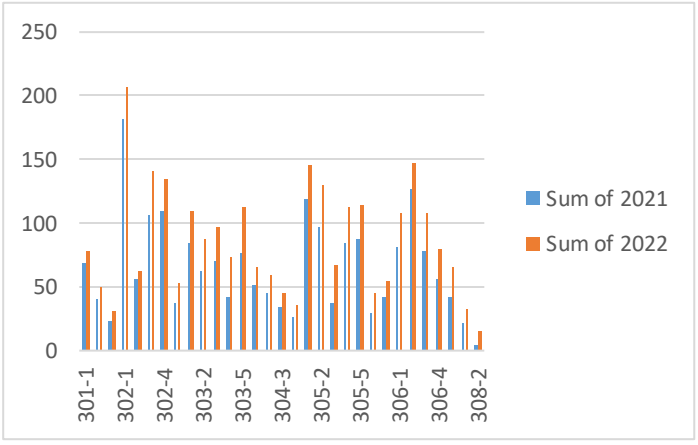

Figure 3. Number of Companies Based on Disclosure for Each GRI Index

The graph above illustrates the number of companies disclosing their environmental management based on the GRI Index related to the environment. Generally, the highest disclosure is based on Index 302 related to energy, and the lowest disclosure is based on Index

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308 related to Supplier Environmental Assessment. The highest disclosure item in Index 302 is item 302-1, which pertains to energy consumption within the organization. A total of 182 companies disclosed item 302-1 in their sustainability reports in 2021, and this number increased to 207 companies in 2022. Meanwhile, the index with the lowest disclosure is Index 308, specifically item 308-2, which pertains to the disclosure of negative environmental impacts in the supply chain and actions taken. Only 5 companies disclosed item 308-2 in 2021, and this number increased to 16 companies in 2022.

Descriptive Statistical Data

Descriptive Statistics	Environmental Disclosure	Return IHSG	Market Trend	Investor Response
Mean	0,14929	-0,00025	-0,00068	-0,00084
Median	0,00000	-0,00022	-0,00097	0,00000
Maximum	1,00000	0,00948	0,00566	0,07411
Minimum	0,00000	-0,01827	-0,00650	-0,07197

On average, companies disclose only about 14.93% of the 31 GRI indicators used for environmental disclosure, as published in their sustainability reports to investors. The majority of companies have not fully disclosed their environmental management according to the GRI environmental disclosure indicators. This is evident from the median value of 0.00%, indicating that more than half of the sampled companies have not published sustainability reports or integrated annual reports. Although most companies are not transparent about their environmental management, some companies do fully disclose their environmental management. This is evidenced by the maximum value of 100%, proving that these companies are completely transparent with investors. Conversely, some companies do not disclose their environmental management to investors at all.

Overall, the market trend formed 15 days before the publication of sustainability reports or integrated annual reports shows a negative trend, as indicated by the average market trend of -0.068%. The market was in a bearish condition, suggesting that the majority of the market was bearish during the 15 days before the publication of sustainability reports or integrated annual reports. The market condition even reached a decline of up to 0.65% during bearish periods and an increase of up to 0.57%.

The average IHSG return from H+1 to H+5 after the publication of sustainability reports or integrated annual reports was -0.025%, and the majority of companies experienced a decline in the IHSG, as indicated by the median value of -0.022%. This is likely due to the fact that many companies have not yet published sustainability reports or integrated annual reports. The IHSG return from one to five days after the publication increased by up to 0.95% and decreased by up to 1.83%.

The average investor response from one to five days after the publication of reports containing corporate sustainability showed a decrease of 0.08%, and the majority of companies did not experience a change in stock price. This is indicated by the fact that many companies have published sustainability reports, but most have not fully disclosed the impact of their operational

DOI: http://dx.doi.org/10.17509/xxxx.xxx
p- ISSN 2338-1507 e- ISSN 2541-061X

activities. Investor response from one to five days after the publication increased by up to 7.4% and decreased by up to 7.2%. These changes in stock prices indicate that investors response when companies publish or disclose reports regarding corporate sustainability.

Results of Estimation Model Selection Test

Estimation Model Selection Test	Probability
Chow Test	0,0001
Hausman Test	0,1759
LM Test	0,0879

Results of Classical Assumption Tests and Model Feasibility Tests

Variable	Multicollinearity (VIF)	Heteroskedastisitas (prob)	Autocorrelation (DW)	F Test (prob)	Adj R Square
Investor Response	-	0,093	2,14	0,000	0,035
Environmental Disclosure	1,0027				
Return IHSG	1,4897				
Market trend	1,4909				

From table results of estimation model selection test above, it can be concluded that this research data is better suited for using the common effect method than using fixed effect method and random effect method. From table results of classical assumption tests and model feasibility tests above, it can be concluded that this research data is not constrained by classical assumption issues and meets the criteria for research model feasibility.

Multiple Linear Regression Analysis

Variable	Coefficient	Prob.
Constant	-0,001	0,000
Environmental Disclosure	0,003***	0,001
Return IHSG	0,917***	0,000
Market Trend	-0,387**	0,039

An additional analysis was carried out using regression, where each individual GRI criterion was tested against investor responses. First, the analysis was conducted by separating environmental disclosures based on the specific GRI indices, namely: materials, energy, water and effluents, biodiversity, emissions, waste, and supplier environmental assessment. Second, a sectoral moderation variable was added to examine how each sector interacts with environmental disclosure according to the GRI indices. Third, regressions were run for each GRI index across each company sector.

Multiple Linear Regression Analysis 2

Variable	Coefficient	Prob.
Constant	-0,0011	0,0697
GRI 301	-0,0014***	0,0028
GRI 302	-0,0019	0,5495

DOI: https://doi.org/10.17509/jrak.v13i2.88537
p- ISSN 2338-1507 e- ISSN 2541-061X

Variable	Coefficient	Prob.
GRI 303	0,0039***	0,0000
GRI 304	0,0011	0,3537
GRI 305	0,0032	0,2249
GRI 306	-0,0022	0,1376
GRI 308	-0,0018	0,1027
Return IHSG	0,8660***	0,0000
Market Trend	-0,8936	0,3437

Table multiple linear regression analysis 2 presents the results of breaking down environmental disclosure into individual GRI indices. Of the eight indices, only GRI 301 and GRI 303 were found to significantly affect stock returns. GRI 301, which represents material disclosure, had a negative impact, while GRI 303, related to water and effluent, had a positive effect. This may be because high material usage is perceived as unsustainable or resource-intensive, which investors see as a risk to long-term business viability. Conversely, GRI 303's positive impact suggests that investors value transparency in water and wastewater management, as it signals environmental awareness and effective risk management, thereby enhancing corporate image and investor interest.

Sectoral Moderation Regression

Moderation Regression	C	ED	Mod	RI	MT
Basic materials	-0,0012**	0,0032***	-0,0049**	0,8578***	-0,9201
Consumer cyclical	-0,0012**	0,0024***	-0,0015	0,8544***	-0,9120
Consumer non cyclical	-0,0012**	0,0019	0,0017	0,8515***	-0,9005
Energy	-0,0012**	0,0023***	-0,0001	0,8553***	-0,9219
Financials	-0,0012**	0,0022***	0,0012	0,8567***	-0,9326
Healthcare	-0,0012**	0,0026***	-0,0066***	0,8510***	-0,8862
Industrials	-0,0012**	0,0020***	0,0080***	0,8480***	-0,8753
Infrastructures	-0,0012**	0,0023***	0,0000	0,8553***	-0,9217
Property & real estate	-0,0012**	0,0015***	0,0072**	0,8563***	-0,8867
Technology	-0,0011**	0,0024***	-0,0270	0,8413***	-0,8247
Transportations & logistic	-0,0012**	0,0023***	-0,0031	0,8554***	-0,9219

C = constant; ED = environmental disclosure; Mod = interaction between sector and environmental disclosure; RI = return IHSG; MT = market trend within 15 days prior to sustainability report release.

Based on table sectoral moderation regression, environmental disclosure generally has a positive impact on stock returns, except in the consumer non-cyclical sector. The positive effect ranges from 0.0015 to 0.0032, meaning that for every one-point increase in environmental disclosure, stock returns increase by approximately 0.15% to 0.32%. In the moderation column, the basic materials and healthcare sectors weaken the positive impact of environmental disclosure on returns, while the industrials and property & real estate sectors strengthen it.

Regression of GRI Index

DOI: http://dx.doi.org/10.17509/xxxx.xxx
p- ISSN 2338-1507 e- ISSN 2541-061X

Variable	GR1 301	GRI 302	GRI 303	GRI 304	GRI 305	GRI 306	GRI 308
Constant	-0.001*	-0.001	-0.001*	-0.001**	-0.001***	-0.001**	-0.001**
Basic materials	-0.005***	-0.002**	-0.001	-0.001***	-0.002**	-0.001	-0.003***
Consumer cyclical	0.002***	-0.002***	-0.0001	0.014**	0.001	0.001	0.004***
Consumer non cyclical	0.004***	0.003***	0.005***	0.002	0.002*	0.001	0.002
Energy	-0.003***	0.002**	0.002**	0.004***	0.002***	0.001***	0.001
Financials	0.001	0.001	-0.001***	0.011***	0.003	-0.001***	-0.029***
Healthcare	-0.017	-0.003*	-0.003*	-0.010***	-0.002	-0.003***	0.007**
Industrials	0.005**	0.004***	0.008***	0.025**	0.006***	0.008***	-
Infrastructures	-0.011***	0.001***	0.004***	0.017***	-0.001	0.003***	0.027***
Property & real estate	0.008**	0.006**	0.007**	0.011	0.007**	0.006***	0.015***
Technology	-0.005	-0.009	-0.046	-0.008	0.020***	-0.041***	0.035***
Transportations & logistic	0.0002	0.003	-0.005	-0.010***	0.009	0.003	0.002***
RI	0.859***	0.830***	0.811***	0.878***	0.859***	0.808***	0.847***
MT	-0.933	-0.729	-0.489	-1.016	-0.891	-0.494	-0.950

Summary of GRI Index Regressions by Company Sector

Sector	Index GRI						
	301	302	303	304	305	306	308
Basic materials	-	-		-	-		-
Consumer cyclical	+	-		+			+
Consumer non cyclical	+	+	+		+		
Energy	-	+	+	+	+	+	
Financials			-	+		-	-
Healthcare		-	-	-		-	+
Industrials	+	+	+	+	+	+	
Infrastructures	-	+	+	+		+	+
Property & real estate	+	+	+		+	+	+
Technology					+	-	+
Transportations & Logistic				-			+

The summary table of the GRI Index presents the effects of environmental disclosures by sector, as reflected through the regression results of the GRI 301 Index up to the GRI 308 Index. In the industrials sector, almost all GRI indices show a positive effect on stock returns, except GRI 308, which shows no result due to the absence of companies disclosing the required items under this index. In contrast, the property & real estate sector shows no effect from GRI 304, while all other indices have a positive impact. The basic materials sector shows predominantly negative effects from GRI disclosures, possibly due to its strong association with resource extraction and environmental degradation, leading investors to perceive it as high-risk.

Discussion Results

From table multiple linear regression analysis above, it can be concluded that environmental disclosure has a significant positive impact on investor response. The findings are further

DOI: https://doi.org/10.17509/jrak.v13i2.88537
p- ISSN 2338-1507 e- ISSN 2541-061X

supported by extended regression analysis that explored the link between each GRI index and sector-specific responses. Nearly all sectors demonstrated positive effects, reinforcing the conclusion that greater environmental disclosure tends to enhance stock performance. However, basic materials and healthcare sectors weaken this positive effect. These sectors are likely more sensitive to environmental issues — for instance, basic materials are often linked with high environmental impact, and disclosure alone may not be enough to convince investors of environmental responsibility. This research finding aligns with the Efficient Market Hypothesis of weak-form efficiency, which suggests that when there is a company-related event, investors respond in the days following the publication of that information, as per the timeline used in this study, from H+1 to H+5 after the issuance of sustainability reports or integrated annual reports. More comprehensive environmental disclosure can provide a favorable perception for investors. Companies that provide good information on sustainability practices and environmental responsibility can be seen as socially responsible entities.

Environmental disclosure focuses on information about the environment published as a form of corporate accountability for operational activities (Marvella & Breliastiti, 2023; Syahri, 2023). This disclosure directly relates to the company's existence, reputation, and sustainability (Syahri, 2023), thereby maintaining good relationships with stakeholders. Increasing environmental management disclosure in 2022 covers all items in the GRI environmental category. This indicates that companies consider disclosing the environmental impact of their operational activities important for public knowledge, regardless of the costs associated with preparing corporate sustainability reports. Publishing environmental management as a response to the importance of this disclosure in the eyes of investors enhances positive public perception, which can continue to drive demand for company stocks, thereby directly improving stock returns. Information published by companies through sustainability reports is crucial in determining investor response because investors increasingly expect good company performance and enhance trust in the company's prospects (Febriani et al., 2022).

Meanwhile, the industrials and property & real estate sectors strengthen the relationship between environmental disclosure and stock return. This implies that environmental transparency in these sectors is perceived as strategically valuable by investors. In the industrials sector, issues such as waste management, energy efficiency, and emissions directly affect costs and regulatory compliance. In the property sector, environmental disclosure is often tied to building permits and appeal to environmentally conscious consumers. Therefore, companies in these sectors that are transparent about environmental matters are generally viewed more positively by the market, boosting stock performance.

The results from sectoral moderation regressions are consistent with the individual sectoral regressions for each GRI index. In the industrials sector, almost all GRI indices show a positive impact, except GRI 308, which lacked sufficient disclosure data. This indicates that industrial firms may have integrated environmental reporting into their core business strategies. In contrast, the property sector shows no impact from GRI 304, likely due to its limited relevance — biodiversity is rarely central to real estate activities. Meanwhile, the basic materials sector consistently shows

DOI: http://dx.doi.org/10.17509/xxxx.xxx
p- ISSN 2338-1507 e- ISSN 2541-061X

negative effects, reinforcing investor concern over the sector's environmental risks. The technology and transportation & logistics sectors show the least impact, possibly due to low environmental intensity in their operations or underdeveloped environmental reporting practices in these sectors.

Return IHSG significantly affects investor reactions; when the IHSG return increases upon the publication of a company's sustainability report, investor response also increases, and vice versa. IHSG, as an index reflecting stock prices of companies, provides information about the movement of the Indonesian stock market (Desliniati et al., 2022). Market capitalization, as the value of a company, is a crucial factor in determining the IHSG. Companies with higher market capitalization will have a greater impact on IHSG changes when there are changes in their stock prices (Febriani et al., 2022). When companies publish reports disclosing their environmental management and the impact of operational activities, the IHSG moves in response to these disclosures. Investors are increasingly paying attention to environmental impacts, so they respond to these disclosures by increasing stock prices because from the investors' perspective, companies that disclose environmental management have also considered environmental impacts. When the majority of companies with market capitalization increase, it automatically causes an increase in the IHSG as well.

The market trend significantly affects investor reactions. Stock prices create a trend over the course of price changes, commonly known as market trends. These market trends are divided into bullish and bearish. According to Cahyadi et al. (2018) in bullish market conditions, investors are optimistic about company developments, causing stock prices to rise. However, prolonged bullish conditions may lead to corrections due to overvaluation. This concern prompts investors to sell their stocks quickly, resulting in a decline in stock prices. In addition to price corrections, negative news about company conditions such as declining sales or internal management issues also elicit negative responses from investors. Such news can create uncertainty, leading investors to reduce risk by selling their stocks.

Conversely, during prolonged bearish market conditions, undervaluation may occur, prompting investors to buy company stocks and leading to an increase in stock prices. This constitutes a positive response to the company. Alongside undervaluation, positive news about the company such as increased sales or improved performance generates positive investor responses.

4. CONCLUSION

Based on the research findings, it can be concluded that higher environmental disclosure leads to higher investor response. This is due to investors paying more attention to environmental

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p- ISSN 2338-1507 e- ISSN 2541-061X

conservation, prompting them to focus on company disclosures. Companies with high disclosure levels are perceived as effectively managing the environment as a result of their operational activities, whereas those with low disclosure levels are seen as not effectively managing the environment and thus do not publish their environmental management. Companies are encouraged to compile and publish sustainability reports, especially disclosing their environmental management according to the GRI index. Company transparency regarding the impact of operational activities and their management is crucial for investors in making investment decisions. In addition to environmental management reports, the completeness of this management should also be considered. Detailed information on environmental disclosure will have a positive effect on companies.

Investors pay close attention to the details of company environmental management, especially the completeness of information in both integrated annual reports and sustainability reports. This is because many companies have published sustainability reports without adequately disclosing their environmental management. Future research is encouraged to extend the study period and use return timelines on the day of publication of reports containing corporate sustainability, especially environmental disclosures, to substantiate the Efficient Market Hypothesis in its semi-strong form.

This study has several limitations in its implementation. First, the relatively short research period means that the findings may not fully represent the issuance of sustainability reports, particularly environmental disclosures. Second, not all companies were included as samples, so the results cannot be generalized to all firms listed on the Indonesia Stock Exchange. Third, the use of panel data limited the sample size. Companies that did not publish or disclose information during the research period were excluded from the sample. However, companies that disclosed environmental information even once were still included in the sample, as this allows for an assessment of the impact of such disclosures both when they are reported and when they are not.

5. REFERENCE

Alessi, L., Ossola, E., & Panzica, R. (2021). What greenium matters in the stock market? The role of greenhouse gas emissions and environmental disclosures. *Journal of Financial Stability*, *54*, 100869.

Alsahlawi, A. M., Chebbi, K., & Ammer, M. A. (2021). The impact of environmental sustainability disclosure on stock return of Saudi listed firms: The moderating role of financial constraints. *International Journal of Financial Studies*, *9*(1), 4.

Andini, D., Wicaksono, B., & Rachman, A. (n.d.). Green Accounting, Material Flow Cost Accounting, Gender Diversity On Corporate Sustainability. *Jurnal Riset Akuntansi Dan Keuangan*, *13*(1), 1441–1456.

Apip, M., Sukomo, & Faridah, E. (2020). jurnal ED 2020. *Jurnal Wawasan Dan Riset Akuntansi*,

DOI: http://dx.doi.org/10.17509/xxxx.xxx
p- ISSN 2338-1507 e- ISSN 2541-061X

7(2), 62–77.

Aprilia, T. T., & Sarumpaet, S. (2023). Pengaruh Pengungkapan Sustainability Report Terhadap Harga Saham Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Periode 2020-2022. *Jurnal Rimba: Riset Ilmu Manajemen Bisnis Dan Akuntansi*, *1*(4), 356–376.

Apriliani, L., Kadir, K., & Hifni, S. (2024). Sustainability Accounting: Nilai Perusahaan Dan Carbon Emission Disclosure. *Gorontalo Accounting Journal*, *7*(1), 91–102.

ARUMONA, J., LAMBE, I., & OGUNMAKINDE, I. (2021). *Effect of environmental disclosure on financial performance of quoted oil and gas companies in Nigeria*.

Bhatia, A., & Tuli, S. (2018). Sustainability reporting: an empirical evaluation of emerging and developed economies. *Journal of Global Responsibility*, *9*(2), 207–234.

Budihargono, K., Semuel, H., & Basana, S. (2017). Analisa efisiensi pasar modal bentuk lemah melalui evaluasi pergerakan harga saham di Bursa Efek Indonesia. *Petra Business and Management Review*, *3*(2).

Cahaya Chairanee, A., Lindrianasari, L., Sudrajat, S., & Kusumawardani, N. (2022). Pengaruh Environmental Performance Terhadap Respon Investor Dengan Sustainability Report Disclosure Sebagai Variabel Intervening. *Jurnal Sosial Teknologi*, *2*(7), 581–890. https://doi.org/10.59188/jurnalsostech.v2i7.374

Cahyadi, C. A., Martono, C., & Prabowo, F. X. A. J. W. (2018). Pengaruh informasi positif dan negatif pada kondisi pasar bullish dan bearish terhadap return saham (Studi empiris pada perusahaan yang terdaftar di Bursa Efek Indonesia). *Jurnal Ilmiah Mahasiswa Manajemen*, *6*(2), 85–98.

Desliniati, N., & Hilaliyah, S. A. (2021). Perspektif Nilai Perusahaan: Kebijakan Dividen dan Quality of Earning. *E-Jurnal Manajemen Universitas Udayana*, *10*(11).

Desliniati, N., Prasasti, F. E., & Manda, R. (2022). Pengaruh right issue terhadap return saham pada periode covid-19. *JURNAL MANAJEMEN*, *14*(1), 213–220.

Du, X. (2015). Does Confucianism reduce minority shareholder expropriation? Evidence from China. *Journal of Business Ethics*, *132*, 661–716.

Fabozzi, F. J., & Francis, J. C. (1979). Mutual fund systematic risk for bull and bear markets: an empirical examination. *The Journal of Finance*, *34*(5), 1243–1250.

Farhana, S., & Adelina, Y. E. (2019). Relevansi Nilai Laporan Keberlanjutan di Indonesia. *Jurnal Akuntansi Multiparadigma*, *10*(3), 615–628.

Febriani, N., Hayat, A., Sadikin, A., & Juwita, R. (2022). SUSTAINABLE GROWTH RATE DALAM MEMPENGARUHI RETURN SAHAM DENGAN COVID-19 DAN SUSTAINABILITY REPORT SEBAGAI VARIABEL MODERASI. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, *6*(3), 352–367.

Fitriasari, R. (2023). The impact of sustainability corporate governance on corporate

environmental disclosure. *International Journal of Accounting & Finance in Asia Pasific (IJAFAP)*, *6*(1), 70–81.

Handayani, R. D. (2025). Hubungan Pemberian Opini Audit oleh Auditor dan Laba Usaha Terhadap Return Saham di Bursa Efek Indonesia. *Keizai*, *6*(1), 16–34.

Handayani, R. D., & Kesuma, W. (2021). Capital Market Investors Reaction To Announcement of the Economic Policy Package Jokowi – Jusuf Kalla. *Angewandte Chemie International Edition, 6(11), 951–952.*, *3*(1), 10–27.

Herbenita, H. (2025). Analisis Dampak Event Pengoplosan BBM terhadap Return Saham PT Pertamina Geothermal Energy (PGEO). *Keizai*, *6*(1), 80–92.

Husein, La Ode Maulana & Desliniati, N. (2024). Analisis Corporate Reputation terhadap Environmental Disclosure. *Keizai*, *5*(2), 123–141.

Ikrima, A. S., & Asrori, A. (2020). Pengaruh pengungkapan corporate social responsibility terhadap return saham dengan return on asset sebagai variabel moderating. *Gorontalo Accounting Journal*, *3*(1), 1–15.

Khujaifah, A., Oktamade, D., Sagala, D. M., & Rahmadani, L. (2023). PENGUJIAN EFISIENSI PASAR BENTUK LEMAH PADA PERIODE BULLISH DAN BEARISH INDEKS LQ45 DI BURSA EFEK INDONESIA. *Research in Accounting Journal (RAJ)*, *3*(1), 58–65.

Kuswanto, R. (2019). Penerapan Standar GRI dalam Laporan Keberlanjutan di Indonesia: Sebuah Evaluasi. *Jurnal Bina Akuntansi*, *6*(2), 1–21.

Maabreh, H. M. A., Sharairi, J. A., Saatchi, S. G., Al-Momani, A., Sarram, M., Haija, A. A. A., Anagreh, S., Al-Hawary, S. I. S., Al-Habashneh, O. A., & Alrfai, M. M. (2024). Impact of sustainability disclosure on investment decision-making: evidence from emerging economies. In *Business Analytical Capabilities and Artificial Intelligence-Enabled Analytics: Applications and Challenges in the Digital Era, Volume 1* (pp. 47–61). Springer.

Marvella, E., & Breliastiti, R. (2023). FAKTOR-FAKTOR YANG MEMPENGARUHI PERUSAHAAN SEKTOR PERTANIAN DALAM MELAKUKAN PENGUNGKAPAN LINGKUNGAN. *ESENSI: Jurnal Manajemen Bisnis*, *26*(1), 34–47.

Meng, J., & Zhang, Z. (2022). Corporate environmental information disclosure and investor response: Evidence from China's capital market. *Energy Economics*, *108*, 105886.

Nanda, O. N. A., & Hayati, N. (2021). Pengaruh Pengungkapan Sustainability Report terhadap Harga Saham Perusahaan LQ45. *Jurnal Manajemen Dan Akuntansi*, *22*(1).

Nawawi, A., Agustia, D., Lusnadi, G., & Fauzi, H. (2020). DISCLOSURE OF SUSTAINABILITY REPORT MEDIATING GOOD CORPORATE GOVERNANCE MECHANISM ON STOCK PERFORMANCE. *Journal of Security and Sustainability Issues*, 151–170. https://doi.org/10.9770/jssi.2020.9.J(12)

Prasasti, F. E., & Desliniati, N. (2022). Pengaruh right issue terhadap stock return. *Kinerja: Jurnal Ekonomi Dan Manajemen*, *19*(4), 836–844.

DOI: http://dx.doi.org/10.17509/xxxx.xxx
p- ISSN 2338-1507 e- ISSN 2541-061X

Pujiningsih, V. D. (2020). Pengaruh sustainability report terhadap nilai perusahaan dengan good corporate governance sebagai variabel pemoderasi. *Jurnal Riset Akuntansi Dan Keuangan*, *8*(3), 579–594.

Rahel, H. K. (2025). Kapan Investor Bereaksi? Studi Empiris Dampak Kasus Korupsi Korporat Terhadap Return Saham. *Keizai*, *6*(1), 166–175.

Setyaningsih, R. D., & Asyik, N. F. (2016). Pengaruh kinerja lingkungan terhadap kinerja keuangan dengan corporate social responsibility sebagai pemoderasi. *Jurnal Ilmu Dan Riset Akuntansi (JIRA)*, *5*(4).

Setyawan, W., Tanzil, N. D., & Rosdini, D. (2023). Isomorfisme Institusional Pada Pengungkapan SDGs Didalam Sustainability Reporting. *Jurnal Riset Akuntansi Dan Keuangan*, *11*(2), 299–314.

Stekelenburg, A., Georgakopoulos, G., Sotiropoulou, V., Vasileiou, K., & Vlachos, I. (2015). The relation between sustainability performance and stock market returns: An empirical analysis of the Dow Jones Sustainability Index Europe. *International Journal of Economics and Finance*, *7*(7).

Syahri, E. R. (2023). Kinerja Keuangan dan Lingkungan: Dampak Terhadap Pengungkapan Lingkungan di Indonesia. *Journal of Economic, Management, Accounting and Technology*, *6*(1), 23–33.

Usman, B., Bernardes, O. T. F., & Kananlua, P. S. (2020). On the nexus between CSR practices, ESG performance, and asymmetric information. *Gadjah Mada International Journal of Business*, *22*(2), 151–177.

Weda, N., & Sudana, I. P. (2021). Sustainability Reporting dan Return Saham di Perusahaan Terindeks LQ45. *E-Jurnal Akuntansi*, *31*(6), 1356.

Yulianti, E., & Komara, E. F. (2019). Pengujian Efisiensi Pasar Bentuk Lemah Pada Pasar Modal Indonesia Periode 2014-2017. *GEMA : Jurnal Gentiaras Manajemen Dan Akuntansi*, *11*(2), 178–190. https://doi.org/10.47768/gema.v11i2.169

Zhang, J., & Yang, Y. (2023). Can environmental disclosure improve price efficiency? The perspective of price delay. *Finance Research Letters*, *52*, 103556.

Zhang, Z., Su, Z., Wang, K., & Zhang, Y. (2022). Corporate environmental information disclosure and stock price crash risk: Evidence from Chinese listed heavily polluting companies. *Energy Economics*, *112*, 106116.

DOI: https://doi.org/10.17509/jrak.v13i2.88537
p- ISSN 2338-1507 e- ISSN 2541-061X