

## The Effect of an Increase in ESG Risk Value on Share Prices

Robertus Ary Novianto<sup>1</sup>, Aida Wijaya<sup>2</sup>

<sup>1,2</sup> Widyatama University, Jln.Cikutra 204A, Bandung, Indonesia

### ARTICLE INFO

Published Online:  
16 December 2024

Corresponding Author:  
Aida Wijaya

### ABSTRACT

Public companies listed on the Indonesia Stock Exchange (IDX) are assessed by an independent party, namely Morningstar Sustainalytics (MS). The assessment submitted to the public is related to the ESG risk score of public companies on the IDX. This study aims to see whether the ESG risk value information also affects investors' assessments of the company, which is proxied by the company's share price. This study was conducted to see if there was a significant difference in average share prices 3 days before and 3 days after information about the increase in ESG risk values provided by the IDX. The study was conducted using the paired sample t-test statistical method on samples both of all companies sample and companies per risk group (low, medium, high, and severe) sample. The results of the study on the overall sample showed no significant difference in stock market prices before and after the information on the increase in ESG risk value. The results of this study are expected to show investor attention regarding the information of ESG, which will provide suggestion for the IDX to support with a more superior information.

**KEYWORDS:** ESG Risk Score, Share Market Prices, Morningstar Sustainalytics

### I. INTRODUCTION

In 2022, researchers from Stamford University conducted a survey regarding young investors' concern for environmental issues carried out by companies. There were 70% of respondents aged 18 to 41 who stated that they were very concerned about the issue and 35% of respondents above that age stated the same thing. Even young investors are willing to sacrifice that the income they will receive may be lower if invested in companies that care about activities that support sustainability. This shows that there is awareness among young investors to invest ethically (Tretina, 2023).

However, it is not easy to find out which companies have implemented environmentally friendly activities, because there are too many factors that can be included in activities related to Environment, Social and Governance. So of course not all companies carry out the same activities related to activities that support improvements in terms of ESG. Some companies may do the same thing but with different emphases, so that in terms of quality and quantity there are differences. Most companies differ in the activities carried out because they should consider the resources they owned.

In addition, since there is no single comprehensive standard that can be referred to by all companies internationally, making it difficult to compare ESG-related activities. This condition can perhaps be equated to the stage before the existence of international financial reporting standards, when

financial reports between companies, industries, let alone between countries, could not be easily compared. At that time, differences in macroeconomic versus microeconomic needs, differences in state regulations, taxation and politics caused many obstacles in the preparation of standards that could be applied internationally. It was only after global trade occurred that the need for international standards was realized and finally could exist and be implemented.

Similar conditions occur with efforts to standardize ESG activities. Currently, international standardization efforts involve various organizations such as the Value Reporting Foundation, CDP, CDSB, IRR, TCFD, SASB, and GRI. In compiling the IFRS Sustainability, it has only produced 2 standards since around 2022 - 2023, those are the IFRS S1 (International Financial Reporting Standards Sustainability) and IFRS S2 (Sinaga, 2023). GRI as a long-time established organization that has had guidelines for implementing ESG activities has also become one of the strong standard axes related to the implementation of sustainability activities in Europe, Africa, and Asia. This resembles the conditions before the formation of IFRS which were influenced by 2 main streams of accounting, which were based on the economic strength of the United States and Europe.

This situation certainly makes it difficult for prospective investors to make investment decisions, especially on a global scale. Especially with the shift in investor intentions

from what was originally only capitalist to more ethical investment as found in the survey conducted by Stamford University above. It is possible that young investors in Indonesia also have a new paradigm like this. Moreover, with the fact that geographically Indonesia is a significant oxygen factory for the world, Indonesia has a lot of natural resources. Also with the very diverse ethnicities, Indonesia is often in the world spotlight in terms of ESG activities.

The global spotlight on Indonesia's ESG value-enhancing activities has prompted the government to respond immediately by issuing various regulations that are expected to embrace all components of society to work together in implementing sustainability activities. Through POJK No. 51/OJK.03/2017 (Financial Services Authority Regulation Number 51/POJK.03/2017 Concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies, 2017) the government is trying to initiate the requirement for implementing sustainability activities starting with banking and public companies. It is hoped that the implementation of these regulations will help increase the company's value in the eyes of the public, both in the eyes of local and international investors.

Regarding ESG activities, the problem refers back to the absence of international standards that cover all ESG activities. POJK No.51/OJK.03/2017 does not specifically mention which standards or guidelines companies must refer to in reporting sustainability activities. Furthermore, Appendix II of POJK No.51/OJK.03/2017 does not mention technical details that can be done to assess ESG or group companies related to ESG activities carried out by the company (Appendix II of Financial Services Authority Regulation Number 51/POJK.03/2017 Concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies, 2017) . If we briefly review the various sustainability activity reports published by public companies in Indonesia, they generally use GRI Standards which are rooted in Europe or SASB which is a product of the United States. The two standards are quite significantly different, where the GRI are more flexible and applicable to any kind of companies, the SASB is very specific to each kind of industries and focus on the financial impact of the reporting. So, if we look at the shift towards ethical investment from young investors, these investors have difficulty in making investment decisions if it is based on the value of ESG activities implemented by the company.

However, it seems that the Indonesia Stock Exchange is making efforts to overcome this lack of information by collaborating with independent organisation rating company. Since the end of 2023, the Morning Sustainalytics (MS) rating company provides an assessment of ESG activities carried out by companies listed on the IDX. The values displayed as information on the IDX page are indeed only

assessments that have been carried out by the assessment organization (IDX, nd-b) . On the Morning Sustainalytics webpage provided by PT Bursa Efek Indonesia, the rating company claims that the results of the assessment calculations are carried out using a certain method that produces a value rating that can be applied to all types of industries. Thus, comparability between companies can be achieved (Sustainalytics, 2023a).

Therefore, it is necessary to review whether the ranking results do help investors in making investment decisions that based on the consideration regarding sustainable activities. According to Eugene Fama (1970), basically in an efficient exchange market there will be no information that escapes the attention of investors and will affect the supply and demand prices in the market (Hendriksen & Breda, 1992) . If this theory applies, then investors who make decisions on the Indonesia Stock Exchange will certainly not ignore the information related to the ESG risk value provided.

This study is an event study which to test the information content that the market will respond to, through differences in stock market prices caused by certain information (Hartono, 2023) . This study seeks evidence whether there is a difference in the market price of company shares traded shortly before and after information regarding the ESG risk value issued by the Morning Sustainalytics rating company , which can indicate whether the information is considered significant enough to be a differentiator in decision making. This can provide a confirmatory value of a report or information which can then be used as study material regarding whether the policy of providing such information needs to be continued or not.

## II. LITERATURE REVIEW

### ESG Assessment

Along with the existence of various organizations that create standards for guidelines in implementing sustainability activities, there are also various organizations that provide services as evaluators of activities that have been carried out and provide assessments of the implementation of ESG activities in a company. As previously stated, the assessment of ESG activities is indeed not easy to standardize, even for companies that apply the same standards. However, there are several organizations that use their own methods to evaluate and provide assessments of what the company does, both quantitative and qualitative assessments.

A more qualitative assessment, for example, with the existence of assurance that can be carried out by a Public Accounting Firm (CPA Firm). In Indonesia, the Indonesian Institute of Public Accountants (IIPA) has provided guidelines related to assurance that can be carried out by CPA Firm, which is stated in the Assurance Engagement Standard (SPA) 3000 (SPA 3000, 2022) . Apart from CPA Firm operating under the supervision of IIPA, there are also consultants who can provide statements that provide certain

assurance on how well the sustainability activities carried out by the company, such as the AccountAbility organization. The organization issued AA1000 to be used as a guideline in the process of conducting evaluations until providing a statement on the results of that evaluation (AA1000 Assurance Standardv3, 2020).

A more quantitative assessment that is quite commonly used by companies in Indonesia is the assessment carried out by the CDP organization. This international organization has a structured and fairly detailed assessment method related to company activities that have an impact on the environment. More specifically, the assessments applied are grouped into activities that have an impact on 3 categories, those are the environment, deforestation and water security (CDP, 2024d).

Basically, CDP has adjusted its assessment measurement tool to the standards referred to by Indonesian Accounting Institute (IAI), which is the IFRS S2 - Climate Related Disclosure and TCFD (CDP, 2024a). That means it can also be used as a support in the ESG assessment carried out by public companies on the IDX. However, the assessment is solely the company's answer to a list of questions submitted to CDP by the company, and it is not meant to measure how far the sustainability activities or how green the activities carried out by the company are (CDP, 2024c). In addition, there is a problem that is quite disturbing if the information is used by investors in making investment decisions, that is that the resulting score is an industry-specific questionnaire answer (CDP, 2024b), therefore, it will be difficult to compare between companies with different types of industries.

### **Sustainalytics ESG Risk Rating**

Morningstar Sustainalytics is a rating company that measures factors that can cause potential risks in a company's business activities. There are two basic pillars that MS uses as a basis for calculating ESG risk, those are material exposure to ESG risk for the company and how the company's management manages the risk. Exposure can be things that have the potential to cause bad things to the company or things that are sensitive and things that can make a company vulnerable to various bad conditions. The second basis is an assessment of how the company's management manages the risk exposure to mitigate it (Munchhausen et al., 2023)

The focus of ESG risk measurement is termed by MS as MEIs (Material ESG Issues) which consists of 22 factors. Each factor measures a company's value for ESG activities quantitatively with an approach that is described from the exposure dimension at the sub-industry level and is sharpened at the company level with the calculation of beta indicators. The quantitative method is complemented by expert reviews that can make adjustments to the quantitative value if necessary (Munchhausen et al., 2023).

A total of 22 ESG-related factors that are used as considerations as potential material risks to a company are listed as follows (Sustainalytics, 2023b):

1. Corporate governance
2. Stakeholder Governance
3. Access to basic services
4. Business ethics
5. Community relations
6. Data privacy and cyber security
7. Emissions, effluents and waste
8. Carbon – self-operation
9. Carbon – products and services
10. Environmental and social (E&S) impacts of products and services
11. Human rights
12. Human rights – supply chain
13. Human Resources
14. Land use and biodiversity
15. Land use and biodiversity – supply chain
16. Occupational Health and Safety
17. ESG integration – finance
18. Product governance
19. Resilience
20. Use of raw materials
21. Water usage – own operation
22. Water usage – supply chain

It appears that for points related to carbon, water use, and human resources, the assessment is carried out not only on the company's operational activities but also on what the supply chain does. If we borrow the term in carbon emission calculations, it means that the assessment is carried out on scope 1 and scope 2. Where scope 1 refers to activities that are actually carried out by the company that have an impact on the environment, scope 2 is activities carried out in the supply chain - or on goods and services purchased by the company - that have an impact on the environment (Company-Mc Kinsey, 2024).

A basic and fairly comprehensive measurement approach includes consideration of geographical factors, financial strength, and company history. With this comprehensive and fundamental approach, risk level measurement can be applied to all types of companies. Thus, comparisons between companies can be made even though they are not in the same industry. This is an advantage that helps investors in decision making, especially related to ethical decisions.

### **Share Price**

Shares is one of the most popular financial market instruments. Issuing shares is one of the company's choices when deciding on corporate funding. On the other hand, shares is an investment instrument that is widely chosen by investors because shares can provide attractive levels of return. The advantage of investing in shares is the opportunity to get dividends, in addition to capital gains if

the selling price is above the purchase price. On the other hand, there is a risk to the investment, that is the possibility of capital loss or even liquidation (IDX, 2024) .

In trading activities, share prices fluctuate, where the formation of share prices is the result of supply and demand for company shares. Investor expectations that form these supply and demand prices are influenced by company-specific factors, such as the company's performance or industry related condition, as well as general economic factors, such as interest rates, inflation, exchange rates, politics, social and others (IDX, 2024) . Therefore, share prices in the market are the price resulting from the consensus of market players. Based on information and data, market players make a buy and a sell transaction at the agreed price that becomes the market price (Kwee, 2023) . Thus, the availability of information related to ESG risk values should be one of the factors considered in buying or selling shares of a company.

#### Previous Research

Sudhana (2023) conducted a study by looking at whether there was an impact of ESG assessments on the share prices of palm oil companies that go public on the IDX during the period 2020 to 2023. From the study, it was found that there was no significant difference in the average stock price in 2020 compared to 2021; likewise, the comparison of the average share price in 2021 was not significantly different from 2022, but when comparing the average price between the 2020 and the 2022, there was a significant difference. Then it was concluded that the ESG value in a particular year indirectly impacted the average share price in the following year (Sudhana, 2023).

There is also a study conducted by Serafeim & Yoon (2021) which examined the market price reaction to ESG-related news and also whether the issue can be predicted by the ESG performance value of each company. The study was conducted based on the idea that more and more investors were integrating ESG information as a basis for investment decision making. Serafeim classified ESG-related news as positive and negative news from thousands of companies every day. The results of the study showed that share market prices only react to ESG issues that were materially financial in nature for several companies which used the SASB standard, it also found out that positive news produced a higher reaction. However, it was also explained that information related to social capital issues was relatively absent. This was because SASB tends to focus on ESG information that significantly affected the company's financial condition (Serafeim & Yoon, 2021).

Suhardjo et al. studied the impact of ESG assessments or scores from two different rating organizations on two palm oil public companies on the IDX. The study showed that the rating organizations Sustainalytics and SPOTT showed different scoring results, leading to the opinion that the generalized assessment was unable to capture how the

challenges and opportunities faced by a specific industry relate to its sustainability activities. The study also stated that there were criteria and calculation methods that were not clearly explained by Sustainalytics, causing the assessment to be incomparable with that carried out by SPOTT. (Suhardjo et al., 2024).

In this study, the window period studied was relatively short, namely 3 days before and 3 days after the information on the increase in ESG risk value informed by MS. A relatively short window is expected to minimize other conditions that are not caused by the announcement from the MS. This is as stated by Hartono (2023) who stated that the research by Ryngaert and Netter (1990) found that there was research showing that a short window period was better able to capture the significant effects of events. Although there is the opposite consequence where a window that is too short can cause the possibility of not being able to capture the event entirely. The length of the window varies depending on the event that is assumed to be the cause of the change in investor decisions, starting from 3 days to 250 days if using daily data (Hartono, 2023).

#### Hypothesis

Based on the description above, the hypothesis formulated for this research is as follows:

Ho: There is no difference in share prices before and after information on the increase in ESG Risk Value.

Ha: There is a difference in share prices before and after the information on the increase in ESG Risk Value

### III. RESEARCH METHOD

This study uses a statistical method of different-tests to find differences before and after there is information on the increase in ESG risk value on share market prices. The two-measurement difference-test is applied in research where the same measuring instrument is used twice on the same sample at different times (Sufren & Natanael, 2013) . In this case, the initial measuring instrument is the share price before the information on the increase in ESG risk value and the next measurement is the share price after the information on the increase in ESG risk value.

Two-measurement research is generally used to test whether the treatment of the sample (in this case the information on the increase in ESG risk value) gives significantly different results or not. This two-measurement difference-test begins with conducting a test to see whether the data is normally distributed or not, then choosing the right statistical method for different tests, in this study using the paired sample t-test (Sufren & Natanael, 2013)

#### Data Types and Sources

The data used in this study are secondary data, that is the data obtained indirectly in the form of reports that have been compiled in published archives at IDX website. The data sources in this study are the ESG Sustainalytics risk value and the closing price of shares published on the official

website of the Indonesia Stock Exchange, the [www.idx.co.id](http://www.idx.co.id).

**Population and Research Sample**

The population in this study were companies listed on the Indonesia Stock Exchange during the research data collection period, those were 901 companies (IDX, 2023) consisting of various types of industries. The dominance of companies whose shares are listed on the IDX comes from the Consumer Cyclical sector, followed by the Consumer Non-Cyclicals, Financials and Basic Materials sectors. Structurally, public companies on the IDX are grouped into 12 sectors, which are further divided into 4 levels of classification, namely Sector, Sub-Sector, Industry, Sub-Industry (IDX, nd-a).

The samples taken were 39 listed companies that had undergone ESG assessment by the Morning Sustainalytics institution and experienced an increase in ESG risk value according to information recorded on the IDX at the time the data was taken, which was in the period of May 15, 2024 to June 30, 2024. An example of the page displayed in Figure 1, which showed the increase or the decrease in the risk value of the company. To obtain the company's share price, the data taken was the average closing share price in the IDX for 3 days before and 3 days after the information was available on the last update date of the ESG risk value on the Morningstar Sustainalytics webpage.

There are 39 sample companies that meet criteria 1 to 4.

**IV. RESULTS AND DISCUSSION  
STATISTICAL TEST RESULTS**

Before determining the appropriate test method, an initial test is conducted to see whether the data is normally distributed. The results of the data normality test using the One-Sample Kolmogorov-Smirnov Test, the significance results (2-tailed) for share market prices before the information of the increase in ESG risk were  $0.090 > 0.05$  and for share market prices after the information of the increase in ESG risk were  $0.094 > 0.05$ , which means that both groups of data are normally distributed. Thus, the next test is to use the Paired Sample T-Test, which is a test of the difference between two measurements that is classified as parametric statistics for normally distributed data (Sufren & Natanael, 2013).

The *Paired Sample T-Test* on samples that meet the selection criteria shows the data processing results that shows the mean and standard deviation. Share market price data after information of the increase in ESG risk value ( $M = 2975.8974$ ;  $SD = 3081.36366$ ) has a greater average than the price before information of the increase in risk value ( $M = 2952.7949$ ;  $SD = 3073.92148$ ). Descriptively, it can be said that the share market price after information on the increase in ESG risk is on average greater than the share market price after information on the increase in ESG risk.

As for the result of Paired Samples Correlations test, the correlation between the data before and after the information of the increase in risk shows a figure of 0.999 with a significance level of  $0.000 < 0.05$ , which means that there is a close relationship between share market prices before and after the information of the increase in the company's ESG risk level.

Paired Samples Test shows a significance (2-tailed) of  $0.192 > 0.05$ , which means there is no significant difference in data measurements before and after the information on the increase in ESG risk value. The mean or average difference between the price before and after the information was  $-23.10256$  with a negative sign, meaning that the average price before the information on the increase in ESG risk was smaller than the price after the information on the increase in ESG risk. This result is not consistent with the expectation that the increase of risk would decrease the value of the company, which should be shown as lower share prices.

It can be concluded through the paired samples t-test that there is no significant difference in the prices between the share market price 3 days before and 3 days after the information of the increase in ESG risk value, where  $t(38) = -1.328$ ;  $p > 0.05$ . The price data after the information ( $M = 2975.8974$ ;  $SD = 3081.36366$ ) has a smaller average than the price before the information ( $M = 2952.7949$ ;  $SD = 3073.92148$ ). This means that the information on the

No	Kode	Nama Perusahaan	Nilai ESG	Keterangan
1	ENSA	PT Enjaya Swasembada Tbk	12,67	↓
2	JSMR	PT Jasa Marga Tbk	12,92	↑
3	BSDE	PT Bumi Serpong Damai Tbk	14,83	↓
4	EMTK	PT Elang Mahkota Teknologi Tbk	14,9	↓
5	SCMA	PT Surya Citra Media Tbk	15,35	↓

**Figure 1 – ESG value increase/decrease information  
Source: IDX, 2024**

Thus, the criteria fulfilled in selecting research samples are as follows:

1. Companies listed on the Indonesia Stock Exchange
2. The Company has undergone an ESG risk assessment by Morningstar Sustainability.
3. The company was identified as experiencing an increase in ESG risk value in the period from May 15, 2024 to June 30, 2024 on the Indonesia Stock Exchange (IDX, nd-b) page.
4. The company has closing share price data on the Indonesia Stock Exchange (IDX, nd-c) page on 3 days before dan 3 days after the last update date listed on the ESG risk score page from Morningstar Sustainalytics webpage (Sustainalytics, nd)

increase in ESG risk value has not been proven to reduce the company's share market price.

In addition to conducting a difference test on the entire sample, the same test was also conducted for each company risk group, namely the company group at the Low, Medium, High, and Severe risk levels. The results of the paired sample t-test from each group of companies are described in Table 5 and Table 6 for the low risks group, Table 7 and Table 8 for the medium risk group, Table 9 and Table 10 for the high-risk group and Table 11 and Table 12 for the severe risk group.

For the group of companies included in the low risks category, the results of the statistical tests are shown as follows:

Paired Samples Statistics showed the average value of share prices before information is 2028.5000 and the value of share prices after information is 2050.1667.

Paired Samples Test shows a significance of  $0.560 > 0.05$ , which means that the results of the difference test are not significant between before and after the information, where the average difference in prices before the information is lower than after the information with a mean value of -21.66667.

For the group of companies included in the medium risk group, they are as shown as follows:

Paired Samples Statistics shows that the price before the information was lower, which was at the value of 2781.3158 compared to the price after the information, at the value of 2803.6316.

From the Paired Sample Test, it can be seen that the significance value is  $0.468 > 0.05$ , which means that there is no significant difference between the data before and after information related to ESG risk, where the price before the information is lower than the price after the information with an average of -22.31579.

The results of the difference test in the high-risk group are as follows:

Paired sample statistics shown that the average price before information was 4416.2222 in the high ESG risk group of companies and the average price after information was 4457.7778.

In the high-risk company group, Paired Samples Test showed a significance level of  $0.281 > 0.05$  was obtained, meaning there was no significant difference before and after the information, with an average difference of -41.55556, where the price before was lower than the price after the information was provided.

For companies included in severe risks classification, the results of the price difference test are shown as follows:

Paired Samples Statistics showed that the average price in the group of companies with a severe risk level is 2079.4000 before information and 2074.0000 after information.

It can be seen from the result of Paired Samples Test that the significance result of  $0.662 > 0.05$  means that there is no

significant difference before and after the information, the mean difference is 5.40000 which means that the average price value after the information is smaller than the average price before the information.

## DISCUSSION

Activities related to ESG actually started when there was an activity called Corporate Social Responsibility (CSR). There is a difference between CSR activities and sustainability activities or ESG which have recently been in the spotlight. Conceptually, sustainability activities are activities that do not stop at just one moment but rather activities that must be sustainable with long-term impacts. Through activities that are inherent and holistic in the company's daily activities, sustainability activities that are considered significant will be able to improve ESG conditions in each company. Conversely, when there is a condition where the company's ESG risk is not good, the expectation is that the company's value will decrease, which should be reflected in the company's share market price.

This study only tries to find price changes in a relatively short period, which were 3 days before and 3 days after the ESG value information update published by MS. This period was chosen on the basis that the period range was expected to capture changes from newly published information. Because this information was relatively new, investors certainly need time to process the information in order to make the buying and selling decisions. The different MS information update dates for each company can also reduce the possibility that share prices are influenced by one or more other events that significantly affect the general market price.

Based on the results obtained statistically, it could not be proven that information of increasing ESG risk values could reduce the company's share market price in a relatively short period. This showed that the information was ignored by short-term investors. These results may also indicate that investors who make transactions on the IDX may not have paid attention to the ethical side of investing, so that there was no significant difference in the company's share market price before and after information of increasing company's ESG risk value.

When similar tests were applied to groups of companies, there was also no significant difference. There was even a share price behavior that was not in accordance with expectations since there was an increase in price after information about the increase in the ESG risk level in 3 risk-groups, except for the group of companies at the severe level. This could be an indication that in the severe ESG risk group, investors become more sensitive to information about the increase in the ESG risk level. However, further investigation showed unconvincing result. In this group, where there were 5 companies, the average price of 2 companies actually increased 3 days after the information

and for the other 3 companies there was a decrease in price during that time period. This indicates that it was very likely that the share price decrease was only a coincidence and not triggered by the information about the increase in ESG risk value.

In addition, the results of this study may also indicate that the information may be ignored by investors because they think that the increase in ESG risk will not have a direct financial impact in the short term. This is because ESG activities are activities that have a long-term or endless impact, so that the increase (or decrease) in the ESG risk level at a certain point of time does not necessarily indicate that the company is bad in its activities going forward. Unless there is other ESG information that is directly related to finance, for example a lawsuit that will have a direct impact on the company's financial losses, then there is a possibility that the information will affect the share market price.

The ESG value information from MS published by the IDX is still relatively new, so it may be that investors have not yet absorbed or understood the new information. Therefore, further research can be conducted over a longer period of time to find out if there is a difference in share prices caused by information of the increase or decrease in the ESG risk value. Currently, the available time period is still relatively short, because information related to the ESG risk level available from MS on the IDX webpage only started at the end of 2023.

MS's transparency in disclosing the calculation methodology is sufficient for an outline of how it works, but it does not show the details of the items measured from each ESG factor calculated. Also, the information provided by MS is quite difficult to understand because of the many factors that are considered. Therefore, it takes a relatively long time to be able to understand the calculation methodology developed by MS for the ESG value in each company. In addition, there are qualitative factors that can be applied by MS when assessing certain companies. Thus, investors seem to be given results without being able to know in more detail what build up the ESG score on these companies. This condition may indicate that the information disclosed considered insufficient to support short-term investor decision making.

Transparency from MS in detailing what factors are involved in calculating ESG risk values needs to be added. The factors underlying sustainability activities are very broad and diverse, both in terms of the type of activity and the depth of the activities that can be carried out by a company. Therefore, if MS provides a description of the factors that are considered in ESG values and the scores given for each factor, it will certainly support investors in understanding the meaning of the company's ESG risk value and will be more influential in considering investor decision-making, especially among the ethical investors.

In relation to the assessment of the MS, the IDX needs to consider that in the future investors who pay more attention to the ethical side of investment will likely increase. So that the demand for transparency in scoring related to ESG risks will also increase significantly. Therefore, the IDX needs to add more specific information related to materials that can be easily understood by investors on the IDX webpage, and not merely providing links to the MS organization as it is now. The information displayed by the organization may have different goal of interests compare to the IDX customers/investors needs

## V. CONCLUSION AND SUGGESTIONS

According to the results of statistical testing, especially for investors who made short-term decision-making periods, in this case in the 3-day time span before and after the information related to the increase in ESG risk value, there was no significant change in the company's share market price. When companies were sorted according to low, medium, high, and severe ESG risk classification, there was also no significant difference. There was even an average increase in price after information of the increase in risk level, except in the severe group classification. However, the result in the severe group classification was not conclusive enough to conclude that the share reaction was caused by the information of increasing ESG risk value.

IDX should provide a concise yet understandable information regarding the detailing of how the MS calculate the risk score in its webpage. This would increase the quality of the ESG information which in the future would be considered as much. To only provide the link to MS organization as currently done would only lead to confusion as to what information should be gathered in supporting the investment decision.

As time pass by, the span of period for research could be available for a longer period of time. Future research could widen the window period of research whilst still keep the consideration regarding the possibility of other significant information which could influence the share prices.

## REFERENCES

1. AA1000 Assurance Standardv3, (2020). <https://www.accountability.org/standards/aa1000-assurance-standard>.
2. CDP. (2024a). *CDP's alignment with disclosure frameworks and standards*. <https://www.cdp.net/en/2024-disclosure/disclosure-frameworks-and-standards>.
3. CDP. (2024b). *CDP 2024 Questionnaire*. <https://myportal.cdp.net/guidance?locale=en>.
4. CDP. (2024c). *CDP Scores Explained*. <https://www.cdp.net/en/scores/cdp-scores-explained#1ca764ff02285944c8ff7924e0942dbe>.
5. CDP. (2024d). *What We Do*.

- <https://www.cdp.net/en/info/about-us/what-we-do>.
6. Company-Mc Kinsey. (2024). *What are Scope 1, 2, and 3 Emissions?*  
<https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-are-scope-1-2-and-3-emissions>
  7. Hartono, J. (2023). *Event Study - Testing Capital Market Reaction Due to an Event* (First). BPFYogyakarta.
  8. Hendriksen, ES, & Breda, MF van. (1992). *Accounting Theory* (5th ed.). Irwin.
  9. SPA 3000, (2022).  
[https://drive.google.com/file/d/1mD8ohFh0TH69Brx7Q\\_qpkDQHeMDYpVBF/preview](https://drive.google.com/file/d/1mD8ohFh0TH69Brx7Q_qpkDQHeMDYpVBF/preview).
  10. IDX. (nd-a). *IDX Industrial Classification of Companies Listed on the Indonesia Stock Exchange*. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://gopublic.idx.co.id/media/1401/daftar-sektor\_web-go-public\_id.pdf.
  11. IDX. (nd-b). *ESG Value*.  
<https://www.idx.co.id/id/perusahaan-tercatat/nilai-esg>
  12. IDX. (nd-c). *Stock Summary*.  
<https://www.idx.co.id/id/data-pasar/ringkasan-perdagangan/ringkasan-saham>.
  13. IDX. (2023). *Press Release Details Number of Listed Companies on IDX Surpasses 900*.  
<https://www.idx.co.id/id/berita/siaran-pers/2060>.
  14. IDX. (2024). *Share*.  
<https://www.idx.co.id/id/produk/saham>.
  15. Kwee, H. (2023, June 19). *Understanding the Difference Between Stock Price and Stock Value*. *Kontan*.  
<https://insight.kontan.co.id/news/memahami-perbedaan-antara-nilai-saham-dan-harga-saham>.
  16. Munchhausen, S. von, Volk, C., Pop, O., Vosburg, K., Barr, C., & Garr, H. (2023). *The ESG Risk Ratings, Methodology Abstract version 3.1*. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://connect.sustainalytics.com/hubfs/INV/ESG Risk Ratings/ESG Risk Ratings Methodology Abstract.pdf.
  17. Appendix II of Financial Services Authority Regulation Number 51/POJK.03/2017 Concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies, 20 (2017). chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ojk.go.id/id/channel/banking/regulation/ojk-regulation/Documents/Pages/POJK-Implementation-of-Sustainable-Finance-for-Financial-Services-Institutions,-Issuers,-and-Public-Companies/SAL Attachment II POJK 51 – k.
  18. Financial Services Authority Regulation Number 51/POJK.03/2017 Concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies, 1 (2017). chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ojk.go.id/id/kanal/perbankan/regulasi/peraturan-ojk/Documents/Pages/POJK-Penerapan-Kuangan-Berkelanjutan-bagi-Lembaga-Jasa-Kuangan,-Emiten,-dan-Perusahaan-Publik/SAL POJK 51 - sustainable finance.
  19. Serafeim, G., & Yoon, A. (2021). *Which Corporate ESG News does the Market React to?* *SSRN Electronic Journal*.  
<https://doi.org/10.2139/ssrn.3832698>.
  20. Sinaga, R.U. (2023). *Introduction to IFRS Sustainability Disclosure Standards*. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://web.iaiglobal.or.id/assets/files/file\_publicasi/Introduction to IFRS Sustainability Disclosure Standards-Rosita Uli Sinaga.pdf.
  21. Sudhana, P. (2023). *The Impact of Environmental, Social and Governance (ESG) Assessment on Differences in Share Prices of Palm Oil Companies on the Indonesia Stock Exchange*. *KALBISOCIO Journal of Business and Communication*, 10 (1), 71–77. <https://doi.org/10.53008/kalbisocio.v10i1.1999>.
  22. Sufren, & Natanael, Y. (2013). *Proficient in Using SPSS Autodidactically*, Jakarta: Elex Media Komputindo.
  23. Suhardjo, I., Akroyd, C., & Suparman, M. (2024). *Unpacking Environmental, Social, and Governance Score disparities: A Study of Indonesian Palm Oil Companies*. *Journal of Risk and Financial Management*, 17 (7).  
<https://doi.org/https://doi.org/10.3390/jrfm17070296>.
  24. Sustainalytics. (nd). *Company ESG Risk Ratings*.  
<https://www.sustainalytics.com/esg-rating>.
  25. Sustainalytics. (2023a). *ESG Risk Ratings - Empower Your Investment Decisions*.  
[https://connect.sustainalytics.com/brochure-esg-risk-rating?\\_ga=2.104506057.892383155.1609876784-fec83158-00c6-ea11-a812-000d3abaa63a&\\_gl=1\\*137bwtc\\*\\_gcl\\_au\\*MTg1NTE2Mzc0OOS4xNzIxNzA0NjYy\\*\\_ga\\*MTQ5ODI4NjQxNS4xNzIxNzA0NjYy\\*\\_ga\\_C8VBPP9KWH\\*MTcyODU0ODExMS42LjEuMT](https://connect.sustainalytics.com/brochure-esg-risk-rating?_ga=2.104506057.892383155.1609876784-fec83158-00c6-ea11-a812-000d3abaa63a&_gl=1*137bwtc*_gcl_au*MTg1NTE2Mzc0OOS4xNzIxNzA0NjYy*_ga*MTQ5ODI4NjQxNS4xNzIxNzA0NjYy*_ga_C8VBPP9KWH*MTcyODU0ODExMS42LjEuMT).
  26. Sustainalytics. (2023b). *Materials ESG Issues Resources*. <https://www.sustainalytics.com/material-esg-issues-resource-center>.
  27. Tretina, K. (2023, June). *What Is Ethical Investing?*  
<https://www.forbes.com/advisor/investing/what-is-ethical-investing>.