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## **THE IMPACT OF ESG ON FIRM VALUE: EMPIRICAL STUDY ON INDONESIA AND SINGAPORE COMPANIES**

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### **Abstract**

Environmental, Social, and Governance (ESG) is a concept focusing on the sustainability of development, investment, and business activities based on three criteria; environment, social, and governance. The increasing demand for attention to ESG in sustainability issues raises the question of whether companies that have concerns about the environment, social, and governance can increase the value of their firms. The aim of this study is to obtain empirical evidence of how ESG performance influences firm value, especially in Indonesia and Singapore. This study builds on previous research by analyzing each ESG pillar and considering behavioral differences between industries and countries to provide more comprehensive empirical evidence. This study's population is companies listed on the Indonesia and Singapore Stock Exchanges from 2015 to 2022. The sample obtained in this study used the purposive sampling method which produced 82 company samples. Hypothesis testing was carried out by implementing multiple regression analysis showing that ESG performance can increase the firm's value. Furthermore, the impact of ESG performance on firm value does not differ between industries. Still, it differs between countries where the influence of ESG performance on firm value is higher in Indonesia compared to Singapore.

**Keywords:** ESG, Industry, Firm Value

### **Abstrak**

*Environmental, Social, and Governance (ESG) adalah konsep yang mengutamakan kegiatan pembangunan, investasi, dan bisnis yang berkelanjutan berdasarkan tiga kriteria terkait lingkungan, sosial, dan tata kelola. Semakin tingginya tuntutan perhatian terhadap ESG dalam isu keberlanjutan memicu pertanyaan, apakah perusahaan yang memiliki kepedulian terhadap lingkungan, sosial dan tata kelola dapat meningkatkan nilai perusahaan mereka. Penelitian ini bertujuan untuk memperoleh bukti empiris bagaimana kinerja ESG akan mempengaruhi nilai perusahaan terutama di negara Indonesia dan Singapore. Penelitian ini mengembangkan penelitian terdahulu dengan menganalisis per masing-masing pilar ESG dan mempertimbangkan perbedaan perilaku antar industri dan negara agar dapat menghasilkan bukti empiris dengan lebih komprehensif. Populasi terpilih pada studi ini adalah perusahaan terdaftar di Bursa Efek Indonesia dan Singapore tahun 2015 hingga tahun 2022. Sampel yang diperoleh dalam studi ini yaitu menggunakan metode purposive sampling dan telah menghasilkan 82 sampel perusahaan. Pengujian hipotesis dilakukan dengan mengaplikasikan analisis regresi berganda yang membuktikan bahwa kinerja ESG dapat meningkatkan nilai perusahaan. Selanjutnya, dampak kinerja ESG terhadap nilai perusahaan tidak berbeda antar industri, namun berbeda antar negara, dimana dampak kinerja ESG dalam mempengaruhi nilai perusahaan lebih tinggi di Indonesia dibandingkan dengan Singapore.*

**Kata Kunci:** ESG, Industri, Nilai Perusahaan

## INTRODUCTION

Recently, the concept of Environmental, Social, and Governance (ESG) has become an important focus for companies around the world, including in the ASEAN region (Hoang et al., 2023). ESG is a framework used to measure a company's sustainability and ethical impact, covering environmental, social, also corporate governance aspects. Besides increasing awareness of the importance of sustainability and social responsibility, investors and other stakeholders are starting to pay attention to the company's ESG performance as one of the determinants in investment decision-making (Hardiningsih et al., 2024).

Previous studies showed that good ESG implementation can provide a positive impact on a firm's value. For example, research by Friede et al. (2015) conducting a meta-analysis of more than 2,000 studies identified that most studies showed a positive relationship between ESG performance and corporate financial performance. Companies that focus on the environment, society, and governance have proven to gain more value in the point of view of stakeholders. Other research by Deng & Cheng (2019), Ruan & Liu (2021) also Liu et al. (2023) found that companies continuously implementing good ESG practices have better long-term financial performance than those who do not.

Amel-Zadeh & Serafeim (2018) study in the Asian region showed institutional investors were increasingly paying attention to ESG aspects in their investment decision-making. Research by Hoang et al. (2023) in Vietnam also showed good ESG performance companies tend to have a higher corporate value, especially in industrial sectors which have a significant environmental impact.

However, there were differences in research results in Indonesia, where there was a negative correlation between ESG performance and firm value (Safriani & Utomo, 2020; Khairunnisa & Widiastuty, 2023; Saputra & Suranta, 2024). This negative effect can be attributed to ESG initiatives often requiring material initial investment in sustainable practices, which negatively influences profitability and short-term assets, hence affecting book value. Secondly, both investor perceptions and preferences can also influence the correlation between ESG and firm value. Investor tend to prioritize short-term financial gains over long-term sustainability measures, possibly seeing ESG investing as a diversion of resources from direct financial gains, leading to lower firm value ratios.

The aim of this research is to re-evaluate the impact of ESG on the Firm value. Previous studies only examined the effect of ESG on the corporate value in each country, namely in Indonesia (Safriani & Utomo, 2020; Khairunnisa & Widiastuty, 2023; Saputra & Suranta, 2024) and Singapore (Hardiningsih & Yulianawati, 2011). Unlike previous research, this study has a novelty by expanding the sample to companies in Indonesia and Singapore. The election of these two countries is aimed at getting an idea of whether there are differences in behavior between developed and developing countries in the context of ASEAN countries. This study also expands on previous research by analyzing each ESG pillar and how it impacts firm value. Thus, it will be identified which pillars have managed to get the direct attention of investors.

This study also analyzed how ESG performance affects firm value by considering differences in characteristics between industries. Each industry has

different challenges and opportunities related to ESG. For example, the energy industry may focus more on environmental issues such as carbon emissions, while the tech industry may place more emphasis on data governance and privacy (Friede et al., 2015). By researching across industries, we can understand which ESG factors are most impactful in a given context and across industries.

Research between countries is also important because each country has different regulations, cultures, and societal expectations related to ESG practices. For example, countries with strict environmental regulations may see companies focusing more on environmental issues (Khan et al., 2015). Cross-country research helps to understand how these factors affect a firm value across different geographic contexts (Eccles et al., 2014). This study's results were expected to make a significant contribution to the literature on financial accounting and sustainability, as well as a reference for policymakers and business practitioners in improving ESG practices in the region.

## **LITERATURE REVIEW**

### **Stakeholder Theory**

Stakeholder Theory was first proposed by Freeman & Reed (1983). This theory is different from the traditional paradigm that focuses on shareholders as the only group that companies must pay attention to. On the contrary, this theory states that companies have responsibility for various groups or individuals who have interests in the company's operations, known as stakeholders. These stakeholders consist of employees, customers, suppliers, local communities, governments, the environment, as well as the wider community. According to this theory, companies must balance all stakeholders' interests to create long-term value as well as sustainability for the company.

ESG (Environmental, Social, and Governance) performance is a direct reflection of how a company manages relationships and their impact on stakeholders. Each of the ESG components has significant relevance to different stakeholder groups (Elkington, 1997):

1. **Environmental:** A company's actions in protecting and defending the environment have an impact on local communities, governments, and the wider community. Companies that implement responsible environmental practices, such as emission reduction, the use of renewable energy, and effective waste management, are likely to gain support from stakeholders and avoid conflicts or sanctions from governments and communities.
2. **Social:** This includes how the company treats employees, suppliers, customers, and the community. Companies that ensure safe working conditions, support human rights, and contribute to social well-being tend to build strong and positive relationships with these stakeholders. This good relationship can increase loyalty, increase productivity, and strengthen the company's image in the eyes of the public.
3. **Governance:** Good governance includes transparency, accountability, business ethics, and compliance with the law. Strong governance helps prevent conflicts

of interest, corruption, and other unethical practices. This increases investor confidence, reduces reputational risk, and develops greater value not only for shareholders but also for other stakeholders.

### **ESG Performance and Firm Value**

Stakeholder Theory argues that by paying attention to and meeting the interests of stakeholders, companies can create greater long-term value. Good ESG performance can serve as a mechanism to ensure that the interests of all stakeholders are taken care of (Del Gesso & Lodhi, 2024). Companies that are active in environmental and social issues are often viewed more positively by society and the market. A good reputation can attract top customers, investors, and talent, all of which contribute to increasing the firm value. Furthermore, by focusing on ESG, companies can identify and manage non-financial risks, for instance environmental, social, and governance risks, which can mitigate potential financial and operational losses in the future (Park & Jang, 2021).

Companies that are committed to ESG practices also tend to have better relationships with regulators, which can reduce regulatory risk and gain support from local communities. This can create more stable and favorable operating conditions. Companies that pay attention to employee welfare and make a positive social contribution also often have a more loyal and productive workforce. This can reduce turnover and improve operational efficiency, ultimately contributing to an increase in the firm value (Xu et al., 2021).

Based on the context of ESG performance, a Stakeholder Theory offers a perspective that the firm value can be improved by giving attention to the interests as well as the well-being of all stakeholders. By implementing good ESG practices, companies not only improve relationships with stakeholders but also reduce risk and create long-term value, ultimately increasing the firm value from the perspective of investors and the market (Buallay, 2019; Ramadhan & Widiastuty, 2023; Amalia & Kusuma, 2023). Thus, the hypothesis of this study is:

***H<sub>1</sub>: ESG performance has a positive effect on firm value***

### **ESG Performance and Firm Value across Industries**

When discussing the impact of ESG performance on firm value, it is essential to consider the differences between industries, especially between financial and non-financial industries. Based on Regulatory Theory, the financial industry is more regulated by the government because of the importance of economic and financial stability at the national and international levels. Non-financial companies are also regulated, but the regulatory focus is more on environmental, labor, and safety compliance (Stigler, 1971). Therefore, each industry has unique characteristics which can influence the relationship between ESG and firm values. The financial industry, including banks, insurance companies, also other financial institutions, is closely related to good governance and risk management. Strong governance is a critical factor in this industry as trust and stability are the key pillars that determine

their success. Failures in governance can lead to huge losses, reduce investor and customer confidence, and negatively impact the firm value. In the financial industry, governance (G) often has the strongest effect on a firm value, as it is associated with trust and stability. However, environmental (E) and social (S) aspects are also increasingly relevant, especially with the increase of focus on sustainable investment as well as corporate social responsibility (Amel-Zadeh & Serafeim, 2018).

Meanwhile, non-financial industries include various sectors such as manufacturing, energy, technology, and retail. In these sectors, environmental and social aspects tend to be more prominent than governance. For example, companies in the energy and manufacturing industries are heavily influenced by environmental issues such as carbon emissions, natural resource use, and operational impacts on ecosystems. In the retail industry, social practices such as working conditions and supply chain responsibilities are more of a major concern (Khasanah et al., 2023)

Because of these differences, the ESG performance' effect on firm value in non-financial industries is often more focused on the way companies manage their environmental and social impacts. Companies that manage to minimize negative environmental impacts and contribute positively to society tend to be more valued by stakeholders, including consumers, governments, and local communities. In non-financial industries, environmental and social aspects tend to have a greater effect on the value of the firm, because they are directly associated with the company's operations and impact. Good ESG performance can improve a company's reputation, attract sustainability-conscious consumers, and reduce regulatory risk. Hence, the hypothesis of this study is:

***H<sub>2</sub>: There are differences in the impact of ESG performance on the firm value between industries.***

### **ESG Performance and Firm Value between Countries**

Based on Institutional Theory, organizations are affected by the pressures of social institutions and regulations in each country, which leads to differences in ESG implementation in different countries (Dimaggio & Powell, 1983). Regulations regarding ESG disclosure requirements vary by country. The government as well as regulatory bodies have an important part in determining obligatory compliance with ESG Regulations among their market fields. The development and incorporation of national standard tools within national policy frameworks are some of the procedures regulatory bodies use to embed the implementation of ESG disclosure practices between business enterprises.

Research by Singhania & Saini (2023) showed that there were differences in ESG performance between developed and developing countries. The differences were caused by developed countries having more resources, knowledge, and capacity to implement the sustainable framework than developing countries, which can hinder progress in this case the sustainable framework in developing countries. Developing countries may have limited access to technology, resources, and expertise to implement sustainable frameworks. In addition, their infrastructure

may not be robust enough, further complicating the adoption of sustainability initiatives. Moreover, developing countries often struggle with limited funding to support these initiatives, and lack the political will to implement the sustainable framework, as political leaders may prioritize economic growth over environmental concerns.

Based on the explanation above, it is suspected that the ESG (Environmental, Social, and Governance) performance's effect on firm value can differ significantly between countries, including Indonesia and Singapore, due to differences in regulations, public awareness, market structure, and business culture.

In Indonesia, regulations related to ESG are still in the development stage and are not as strict as in developed countries such as Singapore. Although there are several initiatives from the government, such as the implementation of green standards in business and industry, as well as efforts to advance corporate governance, their implementation is often inconsistent. For example, the Financial Services Authority (OJK) has published OJK Regulation No. 51/POJK.03/2017 regarding the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies. However, awareness and implementation still tend to be lower than in developed countries. Singapore has stricter and more comprehensive regulations related to ESG. The Government of Singapore, through the Monetary Authority of Singapore (MAS), has encouraged the adoption of ESG practices with clear regulations and incentives for companies that implement sustainability principles. Singapore is also known as a financial hub that promotes sustainable investment. Initiatives such as the Singapore Green Plan 2030 affirm the country's commitment to environmental sustainability (www.state.gov, 2024).

In Indonesia, due to less stringent regulations and relatively lower awareness, the effect of ESG on corporate value may not be as large as in Singapore. In Singapore, stricter regulations and strong government support for ESG initiatives make ESG factors more important in corporate assessments (www.clydeco.com, 2023). Investors in Singapore tend to value companies that are committed to sustainability, so ESG performance may have a greater effect on the firm value. Hence, the hypothesis of this study is:

***H<sub>3</sub>: There are differences in the impact of ESG performance on firm value between countries.***

## **RESEARCH METHODOLOGY**

### **Population and Sample**

This research was conducted using data on financial statements and sustainable reports of companies in Indonesia and Singapore that were recorded on the stock exchange from 2015-2022. The sample was chosen purposively using certain criteria, such as the company has concern for ESG activities and the complete data needed for statistical estimation. Table 1. Showed the sampling procedure in this study.

Table 1. Sampling Procedure

| Description                              | Indonesia | Singapore |
|--|-----------|-----------|
| Companies recorded on the stock exchange | 825       | 631       |
| Companies without ESG data               | (773)     | (601)     |
| The company has complete data            | 52        | 30        |
| 8-year period (2015-2022)                | 416       | 240       |
| Incomplete data                          | 39        | 37        |
| Final Sample (firm years)                | 377       | 203       |

Source: processed data

Table 1 showed the largest sample came from Indonesia, which is 52 companies, and the sample from Singapore was 30 companies. The total firm-year sample of the two companies was 580 observations.

### Research Model

Testing the hypothesis of this research will use the Model in the following equation 1:

$$MTB_{it} = \alpha + \beta_1 ESG_{it} + \beta_2 DINDUSTRY_t + \beta_3 DCOUNTRY_t + \beta_4 ESG_{it} * DINDUSTRY_t + \beta_5 ESG_{it} * DCOUNTRY_t + \beta_6 ROA_{it} + \beta_7 DER_{it} + \beta_8 AGE_{it} + e_{it} \quad (1)$$

information:

$MTB_{it}$  = Market to Book Value firm i year t

$ESG_{it}$  = ESG Score

$DCOUNTRY_t$  = Dummy Country, score 1 for Singapore, 0 for Indonesia

$DINDUSTRY_t$  = Industry sector category, value 1 for the financial industry and 0 for non-financial

$ROA_{it}$  = Firm's Return on Asset

$DER_{it}$  = Debt to Equity Ratio

$AGE_{it}$  = Company Operating Life

In more detail, the measurement of the model was explained in the operational definition in Table 2.

Table 2. Operational Definition of Research

| No | Variable    | Operational Definition  | Measurement  |
|----|-------------|---|--|
| 1  | Firm Values | Firm value is a certain condition achieved by a company as a description of stakeholder trust in the company. (Winatama & Tundjung, 2021) | Market to Book Value (MTB)<br>$MTB = \frac{\text{Market Value/Share (MV)}}{\text{Book Value/Share (BV)}}$<br>Where: <ul style="list-style-type: none"> <li>• MV is the price of a company's stock in the market.</li> <li>• BV is the book value per share calculated by the formula:</li> </ul> |

| No | Variable  | Operational Definition  | Measurement  |
|----|-----------|---|--|
|    |           |   | $= \frac{\text{Total Shareholders' equity}}{\text{Number of Outstanding share}}$<br>(Pamungkas & Meini, 2023)  |
| 2  | ESG       | Refers to the evaluation and measurement of how a company or organization maintains and reports on aspects related to environmental, social, as well as governance in their business operations and strategies. (Inderst & Stewart, 2018) | The score of ESG is obtained from the Refinitiv (Bloomberg) database which assesses each company on 10 main themes with the ultimate product resulting in a score from 0 to 100 with the corresponding letter value from D to A indicating the quartile of the company's score. (Geraldina et al., 2023) |
| 3  | DINDUSTRY | Dummy Industry is a measurement to distinguish the behavior of companies between industries   | Dummy Industry where 1 is for the Financial Industry and 0 is for the Non-Financial Industry   |
| 4  | DCOUNTRY  | Dummy Country is a measurement to distinguish behavior between countries  | Dummy Country where 1 for Singapore and 0 for Indonesia  |
| 5  | ROA       | Profitability is the company's ability to make a profit (Fitri & Meini, 2023)   | $\text{ROA} = \frac{\text{Net Income after Tax}}{\text{Total Asset}}$<br>(Sasvinorita & Meini, 2020)   |
| 6  | DER       | Leverage is a measure of how much a company is financed with debt (Setijaningsih & Merisa, 2021)  | $\text{DER} = \frac{\text{Total Debt}}{\text{Total Equity}}$<br>(Setijaningsih & Merisa, 2021)   |
| 7  | AGE       | Company Life is a measure of the experience of a company in the industry  | Company Age = the length of the operating period (years) of the company since its establishment (Geraldina et al., 2023)   |

## RESULT AND DISCUSSIONS

### Descriptive Analysis

According to the results of data collection, the data distribution of each variable is outlined in Table 3 of the following statistical descriptive.



Table 3. Statistical Descriptive

| Variable  | Observation | Mean  | Median | Maximum | Minimum | Std. Dev. |
|-----------|-------------|-------|--------|---------|---------|-----------|
| MTB       | 580         | 3.70  | 1.61   | 86.30   | -2.97   | 13.67     |
| ESG       | 580         | 48.39 | 49.71  | 89.64   | 7.44    | 18.65     |
| ESG_E     | 580         | 39.19 | 37.62  | 91.64   | 0.00    | 24.40     |
| ESG_S     | 580         | 52.57 | 52.44  | 96.95   | 2.65    | 21.88     |
| ESG_G     | 580         | 51.17 | 51.80  | 97.60   | 5.56    | 22.02     |
| DINDUSTRY | 580         | 0.14  | 0.00   | 1.00    | 0.00    | 0.35      |
| DCOUNTRY  | 580         | 0.33  | 0.00   | 1.00    | 0.00    | 0.47      |
| ROA       | 580         | 0.07  | 0.04   | 0.49    | -0.17   | 0.08      |
| DER       | 580         | 0.93  | 0.44   | 28.34   | 0.00    | 1.98      |
| AGE       | 580         | 63.71 | 63.00  | 94.00   | 23.00   | 13.26     |

Description: MTB = Market to Book Value; ESG = Environment, Social, and Governance; DINDUSTRY = dummy 1 for the Financial industry, and 0 for non-financial industry; DCOUNTRY = dummy 1 for Singapore and 0 for Indonesia; ROA = Return on Asset; DER = Debt to Equity ratio; AGE = the age of the Company

Data source: processed data

According to Table 3, it was shown that the maximum ESG score was 89.64, meanwhile the lowest ESG score was 7.44. The maximum score indicates that the company or entity has excellent ESG performance. This means that the company strictly adheres to environmental, social, and good governance standards. Meanwhile, the minimum score indicates that the company or entity has very poor ESG performance. This means that the company fails to meet sustainability and social responsibility standards.

When viewed from each pillar, the ESG Governance pillar has the highest score of 97.60 and the lowest is ESG Environment, which is 0.00. This shows that there are companies in this research sample that have good governance performance and still have poor environmental concerns. Then the average score of DINDUSTRY is 0.14 which means that the sample of this study is dominated by non-financial companies. Meanwhile, DCOUNTRY showed an average value of 0.33 which means that the sample in this study came from more Indonesia state companies.

Moreover, a correlation test between independent variables was carried out to identify the no multicollinearity between variables.

Table 4. Correlation Test

| Correlation Probability | MTB                   | ESG                 | ROA                  | DER                | AGE      |
|-------------------------|-----------------------|---------------------|----------------------|--------------------|----------|
| MTB                     | 1.000000              |                     |                      |                    |          |
| ESG                     | 0.027881<br>0.5028    | 1.000000            |                      |                    |          |
| ROA                     | 0.533746<br>0.0000*** | -0.006400<br>0.8778 | 1.000000             |                    |          |
| DER                     | 0.092173<br>0.0264**  | -0.065817<br>0.1133 | -0.077095<br>0.0635* | 1.000000           |          |
| AGE                     | 0.044721<br>0.2823    | -0.017469<br>0.6746 | -0.036833<br>0.3759  | 0.011511<br>0.7821 | 1.000000 |

Description: MTB = Market to Book Value; ESG = Environment, Social, and Governance; ROA = Return on Asset; DER = Debt to Equity ratio; AGE = the age of the Company; \*significant at  $\alpha=0,10$ ; \*\*significant at  $\alpha = 0,05$ ; \*\*\* significant at  $\alpha \alpha=0,01$

Source: processed data

In Table 4, it can be seen there was no high correlation (above 0.80) between independent variables, so it can be said that there was no multicollinearity in this research model. The correlation between ESG performance and Firm Value (MTB) provided a positive direction, which can be an early indication of a positive effect between the two.

**Discussion**

The results of data processing using E-views software were shown in the following information:

**Table 5. Hypothesis Test Results**

| <b>Variable</b>    | <b>Coefficient</b> | <b>Prob.</b> |
|--------------------|--------------------|--------------|
| C                  | -14.03 ***         | 0.000        |
| ESG                | 0.08 ***           | 0.002        |
| DINDUSTRY          | -0.75              | 0.379        |
| DCOUNTRY           | 2.31 **            | 0.077        |
| ESG*DINDUSTRY      | 0.01               | 0.649        |
| ESG*DCOUNTRY       | -0.09 ***          | 0.003        |
| ROA                | 70.91 ***          | 0.000        |
| DER                | 1.03 ***           | 0.000        |
| AGE                | 0.13 ***           | 0.000        |
| Adjusted R-squared | 0.544              |              |
| F-statistic        | 69.021             |              |
| Prob(F-statistic)  | 0.000              |              |

Description: MTB = Market to Book Value; ESG = Environment, Social, and Governance; DINDUSTRY = dummy 1 for Finance, and 0 for non-financial; DCOUNTRY = dummy 1 for Singapore and 0 for Indonesia; ROA = Return on Asset; DER = Debt to Equity ratio; AGE = the age of the Company  
 \*significant at  $\alpha=0,10$ ; \*\*significant at  $\alpha = 0,05$ ; \*\*\* significant at  $\alpha = 0,01$

Data source: processed data

Table 5 shows that the Adjusted R-squared was 0.544, indicating that about 54.4% of the variability in the dependent variable can be explained by the existing model, which shows that the model has a fairly good match. An F-statistic of 69.021 with a p-value of 0.000 indicates that the model as a whole was significant, and the independent variables together explain the significant variability in the dependent variables.

**The Effect of ESG Performance on Firm Value**

The first hypothesis test that examined the effect of ESG Performance on firm value can be seen in a coefficient  $\beta_{of 1}$ . Based on the results in Table 3, evidence is obtained that ESG (*Environmental, Social, and Governance*) has a positive coefficient value of 0.08 with a very high level of significance (p-value = 0.002). It shows that the increase in ESG (*Environmental, Social, and Governance*) scores is closely related to the increase in the firm value, which is the *company's Market to Book Value (MTB)*. This supports the theory that companies with better ESG performance tend to be rated higher by the market because they are perceived as more responsible, sustainable, and less risky in the long run (Rau & Yu, 2022).

Companies that are committed to ESG tend to be better able to identify and manage risks that may be overlooked by companies that do not prioritize ESG. For example, companies with a focus on ESG will be better prepared to face stricter

environmental regulations, reducing legal risks and fines in the future. In ASEAN, where many countries are tightening environmental and social regulations, this is a very important factor (KPMG International, 2022). The commitment to ESG shows that the company has a sustainable long-term strategy. It is attractive to investors looking for stability and sustainable growth. In the context of ASEAN, where economic growth is often accompanied by environmental and social challenges, companies that focus on long-term sustainability are often considered safer investments (Friede et al., 2015; Amel-Zadeh & Serafeim, 2018).

### **The Effect of ESG Performance on Firm Value across Industries**

The Dummy for Industry (DINDUSTRY) shows that companies in the financial and non-financial industries in Indonesia and Singapore do not have different corporate values. This can be seen from the coefficient of -0.75 with p-value = 0.379.

Testing The second hypothesis that tests the ESG Performance's effect on the value of companies between industries can be seen in the interaction coefficient  $\beta_4$ . Based on the results in Table 3, it can be seen that the ESG\*DINDUSTRY coefficient (ESG and Industry Interaction) is 0.01, with p-value = 0.649. The coefficient of 0.01 shows that the interaction between ESG and DINDUSTRY has almost no effect on the dependent variable. Likewise, it is related to the significance with a p-value of 0.649, which means that it is not significant, which means that the effect of ESG on firm value does not differ between industries.

Stakeholder theory (Freeman & Reed, 1983) states that the company must consider the interests of all stakeholders involved in its business, not just shareholders. Stakeholders consist of customers, employees, the community, and the environment. Stakeholders from different industries tend to demand the same ESG standards, so companies from different industries must respond in a similar way to stay competitive and maintain their reputation. Thus, both companies in the financial industry and the non-financial industry alike consider that paying attention to ESG performance is very important because it can increase the firm value from the investors' perspective.

Furthermore, according to the Market Efficiency Theory (Fama, 1970), The share price fully reflects all available information. With the growing global attention to sustainability and social responsibility, information on ESG performance has become an important part of the market assessment of companies. If the capital market considers ESG to be an important factor in assessing a company, then information about ESG performance will be quickly integrated into the company's stock price across all industries. This may also explain the consistent effect of ESG on firm value across various industry sectors.

### **The Effect of ESG Performance on Firm Value between Countries**

The Dummy for Countries (DCOUNTRY) shows that companies based in Singapore tend to have a higher corporate value than those based in Indonesia, with a coefficient of 2.31 (p-value = 0.077), which indicates moderate significance. This could be due to a more stable business environment and more advanced market infrastructure in Singapore, which allows companies to operate more efficiently and attract more investment.

Hypothesis 3 testing can be seen from the estimation of the ESG\*DCOUNTRY coefficient (ESG and Country Interaction). In the results in Table 3, it can be seen that the interaction coefficient is -0.09 with a p-value = 0.003. The negative coefficient (-0.09) indicates that the effect of ESG on the dependent variable is reduced by 0.09 for companies in Singapore compared to Indonesia. It showed that in Singapore, the ESG impact on corporate value tends to be smaller than in Indonesia. This can be attributed to differences in investor perceptions or priorities towards ESG initiatives in both countries. In more developed countries such as Singapore, investors may have higher expectations of ESG practices, so the impact on corporate valuations is not as strong as in developing countries such as Indonesia.

Signaling theory (Spence, 1973) states that companies are signaling the market through their actions and policies. In developing countries such as Indonesia, companies that implement ESG policies well may send a stronger signal to the market compared to developed countries such as Singapore, where ESG practices are more expected and standardized.

In Indonesia, ESG adoption may still be considered an innovative or progressive practice, which makes companies with good ESG performance stand out in the eyes of investors. This created a greater impact on the firm value as the market saw the implementation of ESG as a signal of the company's commitment to sustainability and social responsibility. On the other hand, in Singapore, as ESG has become more commonly implemented and strictly regulated, the signals provided by companies through ESG policies may not be considered as significant differentiation, so the impact on firm's value is smaller.

### **Control variables explained**

An equally interesting finding is related to the effect of the company age variable (AGE) on firm value. The Company's Age Coefficient is 0.13 with p-value = 0.000. A coefficient of 0.13 indicates that the older the company's age, the higher the value of the dependent variable is 0.13 for each additional year. This could be due to the greater reputation and stability associated with companies that have been in operation for longer. Companies that have established longer may have more experience, a wider network, and trust from the market, all of which contribute to increased firm value. These results support the research by Ghafoorifard (2014) and Rwakihembo et al., (2023).

DER (*Debt to Equity Ratio*) has a coefficient value of 1.03, with p-value = 0.000. This means that every increase of one unit in the DER ratio is associated with an increase of 1.03 in the dependent variable i.e. the value of the company. This underscores the importance of prudent management in using debt as a tool to increase the value of the company without adding excessive risk (Modigliani & Miller, 1959; Jensen & Meckling, 1976; Ramadhan & Widiastuty, 2023).

ROA (Return on Assets) has a high coefficient of 70.91, with p-value = 0.000. A large coefficient (70.91) indicates that ROA has a significant effect on the dependent variable, with every increase in ROA increasing the firm value by 70.91. This agrees with the theory because more profitable companies tend to generate more profits, which increases shareholder equity and attracts more investment (Pambudi & Meini, 2023).

**Additional Testing**

This research examines in depth by looking at the effect of each ESG pillar on the firm value. In Table 4, the results of testing the effect of ESG on firm value can be seen by looking at each pillar of *Environment* (ESG\_E), *Social* (ESG\_S), and *Governance* (ESG\_G).

The ESG performance of the *Environment* (ESG\_E) pillar has a coefficient of 0.06 with p-value = 0.003. Thus, it is evident that investors have a positive view of companies that have good ESG *environment* performance. Meanwhile, the ESG performance of the *Social* pillar (ESG\_S) has no effect on the Firm value, this can be seen from the p-value = 0.298 which means > 0.05. ESG Social performance *is no longer a concern for investors, because it could be that almost all companies have been carrying out this for a long time through Corporate Social Responsibility (CSR) activities*. Meanwhile, the ESG Governance (ESG\_G) pillar has a coefficient of 0.05 with p-value = 0.026. This proves that ESG governance is also highly regarded by investors. It is a company with good governance that will further increase the firm value.

**Table 6. Additional Test Results**

| <b>Variable</b>  | <b>Coefficient</b> |     | <b>Prob.</b> |
|--|--------------------|-----|--------------|
| C  | -12.59             | *** | 0.000        |
| ESG_E  | 0.06               | *** | 0.003        |
| ESG_S  | -0.02              |     | 0.298        |
| ESG_G  | 0.05               | **  | 0.026        |
| DINDUSTRY  | -0.39              |     | 0.829        |
| DINDUSTRY*ESG_E  | -0.03              |     | 0.216        |
| DINDUSTRY*ESG_S  | 0.04               |     | 0.211        |
| DINDUSTRY*ESG_G  | -0.01              |     | 0.790        |
| DCOUNTRY   | 1.70               |     | 0.100        |
| DCOUNTRY*ESG_E   | -0.03              | *   | 0.099        |
| DCOUNTRY*ESG_S   | 0.00               |     | 0.955        |
| DCOUNTRY*ESG_G   | -0.06              | **  | 0.016        |
| ROA  | 72.26              | *** | 0.000        |
| DER  | 1.09               | *** | 0.000        |
| AGE  | 0.12               | *** | 0.000        |
| Adjusted R-squared   | 0.541              |     |              |
| F-statistic  | 39.478             |     |              |
| Prob(F-statistic)  | 0.000              |     |              |
| Description: ; MTB = Market to Book Value; ESG = Environment, Social, and Governance; DINDUSTRY = dummy 1 for Finance, and 0 for non-financial; DCOUNTRY = dummy 1 for Singapore and 0 for Indonesia; ROA = Return on Asset DER = Debt to Equity ratio; AGE = the age of the Company |                    |     |              |
| *significant at $\alpha=0,10$ ; **significant at $\alpha = 0,05$ ; *** significant at $\alpha_{\alpha=0,01}$   |                    |     |              |

Source: processed data

Furthermore, in Table 6, it can also be seen that DINDUSTRY's interaction with each ESG pillar is also not significant. The insignificance of DINDUSTRY and its interaction with ESG components suggests that the value of a company may not depend too much on its industry sector. This could mean that other factors, such as profitability and risk management, are more important in determining a firm value than whether it is in the financial or non-financial sector.

Furthermore, interesting findings also occurred when analyzing whether there were differences in the behavior of each ESG pillar between countries. In Table 6, it can be seen that the effect of ESG *Environment* (ESG\_E) on corporate value is lower in Singapore than in Indonesia. The results of this test are consistent with the main model, i.e. the direction is negative (-0.03). This shows that in Singapore, the impact of ESG\_E on firm value tends to be smaller than in Indonesia. This suggests that investors may have higher expectations for ESG practices in Singapore than in Indonesia (Singhania & Saini (2023).

Furthermore, in Table 6, it can be seen that the interaction coefficient of ESG\_S with DCOUNTRY has a coefficient of zero and is not significant ( $p=0.955$ ). This suggests that there was no significant difference between Indonesia and Singapore in terms of social performance (ESG\_S) related to the dependent variable. A very high p-value (0.955) indicates that state differences do not exert a significant effect on this social dimension. In other words, in both Indonesia and Singapore, social factors tend to have a similar or insignificant effect on this model. Signaling theory supports the argument that companies can use ESG performance disclosures as signals to minimize information asymmetry between management and external stakeholders, such as investors. However, in the context of social performance(s), the market may not always find these signals relevant or important. In addition, investors may find social performance more difficult to quantitatively measure (Margolis et al., 2007).

For the analysis of ESG\_G between countries, it can be seen that there is a negative coefficient of -0.06 indicating a significant difference between Indonesia and Singapore in terms of governance performance (ESG\_G), where there is strong evidence that the impact of governance performance on corporate value is higher in Indonesia than in Singapore. DCOUNTRY's interaction with ESG\_G shows the effect of governance on corporate value is stronger in Indonesia than in Singapore. This could indicate that markets in developing countries value good governance more, perhaps because bad governance is more common and riskier in those environments. On the other hand, in developed countries such as Singapore, good governance standards have become a basic expectation, so the impact on corporate value may not be as strong as in Indonesia (Gosal et al., 2018).

## **CONCLUSION**

Based on the research's results, it can be summarized that ESG has a positive impact on the firm value. Management should consider these factors in their financial and operational strategies to increase the firm value from the perspective of investors. In particular, ESG is an important factor that improves both the company's image and market value, especially in emerging markets. These results

support the view that the integration of ESG in corporate strategies, along with prudent financial management, can provide a competitive advantage in creating long-term value.

The impact of ESG components on firm value has different influences that show that not all ESG components have the same effect on firm value. Environmental (ESG\_E) and Governance (ESG\_G) have a positive and significant effect, which shows that environmental performance and good corporate governance are considered important by investors. On the other hand, Social (ESG\_S) does not have a significant effect, which shows that the social aspect should be considered by the company so that it is no longer the main concern of investors. These results have important implications that companies should focus on strengthening environmental and governance aspects to increase their value, especially in markets that appreciate these factors more.

The impact of ESG on firm value does not differ between industries. Both companies in the financial and non-financial industries consider that focus on ESG performance is very important because it can increase the value of the company from the perspective of investors. Furthermore, the effect of ESG on firm value has proven to be different between countries. The test results showed that the ESG impact on corporate value was lower in Singapore. Investors appreciate companies committing to ESG performance in developing countries because regulations in those countries are still being improved. In addition, ESG may still be considered an innovative or progressive practice, which makes companies with good ESG performance stand out in the eyes of investors.

This study has limitations because it only samples 2 countries representing developed and developing countries. Further research can expand further by adding a sample of many countries. The results of this research can be a reference for companies to continue to pay attention to their environmental, social, and corporate governance performance. When the company's ESG performance is good, it will be assessed positively by stakeholders. In addition, the results of this study can be a reference for the government to continue to improve regulations to direct companies to remain environmentally friendly, social and have good governance. The results of this study also open up further research opportunities to analyze whether companies with a strong ESG focus are more innovative and more competitive than companies that do not prioritize ESG. It is also interesting for future research on how changes in government policies that support ESG affect ESG adoption by companies as well as their financial performance.

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