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Empirical Testing of Corporate Governance, and ESG Risk Scores: Their Effect on Company Value

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Abstract: There are still few previous studies in Indonesia that have conducted research using corporate governance, and Environmental, Social, and Governance risk scores as independent variables with company value as the dependent variable. So, this research aims to determine the influence of corporate governance and ESG scores on the value of companies included in Morningstar Sustainalytics. This research is a quantitative type of research using the size of the board of commissioners, independent commissioners, and gender diversity, as a proxy for corporate governance, the Morningstar Sustainalytics version of the ESG risk score as a proxy for the ESG rating. Company size and leverage are used as control variables in this study, and Tobin's Q as a proxy for company value. The research results found that corporate governance variables (board size, independent commissioners, and gender diversity) and ESG risk scores had a positive effect, however, they did not have a statistically significant effect on company value. This means that, statistically, the variables used are not able to convincingly explain changes in the company's market value as measured using Tobin's Q.

Keyword: Corporate Governance, Corporate Finance, Financial Ratios, Environment, Sustainability

INTRODUCTION

Application of ESG The rapid growth cannot be separated from the SDG program issued by the UN, supported by countries in the world, and adopted in each country, including Indonesia. The SDGs were established at the UN General Assembly in September 2015 with 17 agenda items that are expected to be achieved by 2030 (HOME PAGE, n.d.). OJK supports SDG 2030 activities by establishing a Sustainable Finance Roadmap which is divided into several stages, and is now entering the second stage (2021 - 2025) which generally contains policies, products, infrastructure, K/A coordination, government support, human resources, and awareness (Sustainable Finance Roadmap Phase II (2021-2025), n.d.). Apart from government support programs, the implementation of ESG is also influenced by various research conducted throughout the world.

Research in China and Indonesia found that shares included in the ESG Index provided higher returns than conventional ones (Alfredo, Anita, and Pratama 2024; Huang 2024a). These

two studies provide evidence that companies that implement ESG provide better long-term returns than companies that have not implemented ESG optimally. Research on banking in Europe and the United States found that there was a significant positive relationship between ESG on banking performance (Buallay 2019; Koapaha 2023). Research on banking in all developing countries finds that there is a positive relationship between environmental and social and financial performance, except that governance does not affect bank financial performance (Shakil et al. 2019). Research in Malaysia found that ESG certification increased a company's Tobin's Q value (Wong, Jonathan A Batten, et al. 2021). Research in the United States during the COVID-19 period found that companies with the highest ESG performance performed better (Habib and Mourad 2024). Research in the European Union found that there was a positive relationship between disclosure ESG with company performance (Carnini Pulino et al. 2022a). However, research into 5360 the company found a negative relationship between controversy ESG with company performance (Elamer and Boulhaga 2024). The research above shows that it is still important to conduct research on ESG Ratings, because there are still research results that are pros and cons regarding the influence of ESG ratings on company value.

Corporate Governance is related to supervision carried out by parties with an interest in the company, especially shareholders supervising management's actions in running the company. Corporate governance seeks to ensure that management running the company does not harm the parties with an interest in the continuity of the company. Many studies in developing countries have been conducted that link the relationship between corporate governance and company value. One of them, research in Tunisia found that corporate governance has a positive relationship with company value (Haj-Salem, Damak Ayadi, and Hussainey 2020a). Research in other countries, such as Saudi Arabia, found that the voluntary “comply-or-explain” pattern of CG implementation in Saudi Arabia only had a limited impact on FV (Gerged and Agwili 2020a). Research in Egypt found that there is a significant positive relationship between corporate governance and the company's disclosure tone and firm value (El-Deeb, Halim, and Elbayoumi 2022). Research in China that uses company ownership as a corporate governance mechanism finds that ownership concentration is an efficient corporate governance mechanism. However, the effect is weaker for state-owned companies than for private companies (Kong et al. 2020). Research on Sharia Banks in the Gulf Countries, found that there is a positive relationship between corporate governance (firm size, board composition and CEO duality) and company value (Harun et al. 2020). However, research in Türkiye using lodging company objects using classification and regression tree (CRT) analysis, shows that there is no direct relationship between company value and governance (Ergene and Karadeniz 2021). Based on the results of previous research, it can be concluded that CG has a positive relationship with company value, although there is one study that rejects the existence of this relationship.

This research is novel by including ESG scores and corporate governance as independent variables in the analysis. This approach provides added value because it integrates two variables that are increasingly relevant in modern business. ESG scores reflect a company's commitment to environmental sustainability, social responsibility, and good governance. Corporate governance on the other hand highlights the aspects of effective supervision of management, accountability and transparency. The use of ESG scores and corporate governance as independent variables allows this research to fill the gap in literature which has tended to focus on traditional variables such as finance and operations. Thus, this research makes a significant contribution both theoretically and practically in understanding the factors that drive company success in the current era which tends to be complex and dynamic.

LITERATURE REVIEW

Agency Theory

This study uses agency theory, which is a theory that states the existence of a contract, in which one or two principals make an agreement with another person, in this case the agent to perform a number of actions on behalf of the principal which involves delegating some decision making to the agent (Jensen & Meckling, 1976). Agency theory focuses on solving two problems that arise in agency relationships, namely (1) the conflict of objectives between the principal and the agent, and (2) the costly or difficult for the principal to verify what the agent is doing (Eisenhardt, 1989). The principal incurs costs to solve this agency problem which is called agency costs. There are three types of agency costs, namely: supervisory expenditures by the principal, bonding expenditures by the agent, and residual loss (the cost of the agency relationship relating to the difference between the agent's decision and the decision that would maximize the principal's welfare with the potential that the difference in the decision made by the agent would cause a decrease in the principal's welfare in the form of a dollar equivalent) (Jensen & Meckling, 1976). Agency theory develops into two parts, namely: 1). Positivist agency theory which focuses on identifying situations where principals and agents have different objectives and describes governance mechanisms that limit the agent's self-serving behavior, and 2). Principal-agent focuses on a general theory of the principal-agent relationship. These two schools share common assumptions in people, organizations, and information. Their differences lie in mathematical rigor, dependent variables, and style (Eisenhardt, 1989).

The problem that arises between the principal and the agent is the imbalance of information obtained by both parties. Agents have unlimited information and get information about company developments faster because agents play a direct role in these activities. Meanwhile, the principal only obtains information from the agent or from the market, giving rise to distrust and fear from the principal that the agent will act to prioritize their own interests, rather than the interests of the principal due to this information imbalance. Problems related to moral hazard, adverse selection and opportunism are also associated with information imbalance (Zogning, 2017). In addition to supervising agents, principals can provide incentives in the form of shares and bonuses to agents if they take actions that are in accordance with the principal's objectives. Providing incentives convinces the agent to take actions in accordance with the principal's objectives, because he gets material rewards. However, providing incentives can lead to moral hazard and opportunistic nature of the agent to gain personal benefits at the expense of the principal. The shortcomings of incentives and information imbalance cause the element of supervision to remain in place in order to minimize moral hazard, adverse selection, and opportunism on the part of the agent.

The development of agency theory now in addition to discussing the classic relationship between shareholders and managers. This theory has also begun to be developed to discuss the relationship between majority shareholders and minority shareholders, franchisors and franchisees, shareholders and creditors and managers and creditors. The main focus is now on the relationship between shareholders and creditors. For example, if a company borrows funds at a high interest rate for a risky new project. This will lead to a required rate of return on the company's debt, which in turn will lead to a fall in the value of the company's bonds. If the project is successful, then all profits are taken by shareholders, whereas if the project fails, creditors are forced to participate in the losses (Zogning, 2017).

Corporate Governance

Corporate governance is a system that directs and regulates the way a company operates. The principles of corporate governance are transparency, accountability, independence, responsibility, equality and fairness. Research in the Middle East and North Africa region

found that independent commissioners have a negative influence on company profitability. Meanwhile, ownership concentration and gender diversity on the board of commissioners have a positive effect on profitability (Arayssi & Jizi, 2019). Research conducted in the Middle East and North Africa from 2007-2017 found that board size, and insider and institutional ownership are strong indicators in measuring company performance in various analysis models (Mertzanis et al., 2019). Research in Tunisia found that board size, audit committee independence, and the presence of women on the board of commissioners resulted in greater firm value (Haj-Salem et al., 2020). Research in Thailand found that the proportion of majority shareholders and firm size play a key role in value creation in the Thailand Sustainability Investment group (Lakkanawanit et al., 2022). A number of previously mentioned studies used the proxies of board size, board composition, CEO duality, gender diversity, number of meetings held by the board of directors, and ownership structure (Arayssi & Jizi, 2019; Haj-Salem et al., 2020; Lakkanawanit et al., 2022; Mertzanis et al., 2019). The above proxies are used to analyze the relationship between corporate governance practices and firm performance, strategic decision making, and the risk of irregularities such as agency conflict or fraud.

Environmental, Social, and Governance (ESG) Rating

ESG rating is a measure used to gauge how well a company manages environmental, social and corporate governance risks. ESG ratings are displayed in the form of numbers or letters. A number of leading rating companies in the world issue ESG ratings, such as Morningstar, Fitch, Refinitiv, MSCI, S&P, and Bloomberg. All of these rating agencies issue ESG rating scores with criteria that they set and tend to differ from one another. Research comparing ESG ratings between rating agencies found that there are inequalities in defining ESG (i) characteristics, (ii) attributes, and (iii) standards in defining the components of E, S, and G. This difference makes it difficult to measure the ability of fund managers if financial performance is strongly conditioned by the selected ESG benchmark (Billio et al., 2021). This opinion is reinforced by other studies using different types of ESG ratings with a sample of stocks listed on the North American, European, Asia-Pacific, and Japanese Stock Exchanges found that, first, the researchers confirmed the results of previous studies that ratings from various ESG service providers differ in assessing companies.

They also cover different companies as they only focus on one region. As a result, quintile portfolios sorted based on different ESG ratings contain different constituents, even when the portfolio sorting is based on the same sample of stocks. Second, while long-short portfolios based on ESG ratings may outperform in some markets, they underperform in others, thus on average not outperforming the broader market. Third, portfolios formed by sorting based on ESG ratings from one provider will result in quintile portfolios that do not exhibit significant differences in Sharpe ratio, alpha, and idiosyncratic risk compared to the same quintile portfolios based on ESG ratings from other providers. Therefore, none of the ESG rating providers offer ESG rating information that investors can use to construct a continuously well-performing portfolio (Horn & Oehler, 2024). Other research suggests switching to alternative ESG ratings developed through AI technology (Hughes et al., 2021).

Although the fatal problem of differences in ESG Rating criteria is still unsolved, many studies use ESG Rating as an independent variable that affects company performance. Research conducted in Europe found that there is a positive relationship between Environmental, Social, and Governance disclosures and company performance measured using EBIT (Carnini Pulino et al., 2022). Research in Malaysia found that ESG certification lowers the firm's cost of capital, but increases the firm's Tobin's Q significantly, and ESG disclosure may play a role where the firm can reduce the negative effect of ESG strength weakness and increase the positive effect of ESG strength (Sadiq et al., 2020; Wong et al., 2021). Based on the findings described above, it can be concluded that although ESG rating is becoming a popular instrument to assess the

integration of environmental, social, and governance aspects, the inconsistency of criteria and methodology among rating agencies poses significant challenges in the validity and comparability of results. Disharmonized definitions of ESG components, differences in geographical coverage, and the absence of universal standards cause research results related to the impact of ESG ratings on company performance or investment portfolios to be contradictory and contextual. Empirical studies show the potential benefits of ESG in improving financial performance (such as EBIT and Tobin's Q) and reducing the cost of capital. However, the lack of consistency across ratings hinders investors in building a stable and cross-market superior portfolio strategy. Therefore, future research needs to focus on developing a standardized ESG framework, including the exploration of AI technology to reduce subjectivity bias, as well as expanding the analysis by considering moderating factors such as local regulations, industry characteristics, and business culture dynamics. These efforts will not only strengthen the academic relevance of ESG as an independent variable, but also increase its practical utility for investors, regulators and companies in achieving measurable and inclusive sustainability goals.

Hypothesis Development

Independent Commissioner on Company Value

A number of studies conducted in Middle Eastern and North African countries, found that the independence of the board of commissioners has a negative effect on company profitability, and company performance (Arayssi & Jizi, 2019; Mertzanis et al., 2019). The results of research in Saudi Arabia found that the independence of the board of commissioners could not predict firm value. (Gerged and Agwili 2020b). Different research results were obtained in India and China, where independence of the board of commissioners adds to firm value in state-owned companies which is possible because the presence of independent commissioners in state-owned companies acts as a supervisor of company performance to protect minority investors, and the results of this study are reinforced by the results of other studies which find that the positive relationship between board independence and firm performance is stronger in state-controlled companies and companies with lower information acquisition costs (Liu et al., 2015; M. & Sasidharan, 2020). Research in Indonesia found that the independence of the board of commissioners has an influence on firm value during COVID-19 (Setiany et al., 2023). Based on the results of the research mentioned above, there are differences in the results of the influence of the independence of the board of commissioners on firm value depending on the region, and in certain regions, the independence of the board of commissioners has a positive impact on the value of state-owned companies. So, the hypothesis used in this study is:

H1: Independent Commissioners have a positive and significant effect on value

Board of Commissioners Size on Company Value

The results of research in Ghana found that the larger the board size, the better the company's performance (Kyereboah-Coleman & Biekpe, 2007). The same research results, found in India where the size of the board of commissioners has a positive relationship with company performance, both measured by ROA and Tobin's Q (Mishra & Kapil, 2018). Different research was found in Turkey, where there was no relationship between board size and firm performance (Topak, 2011). However, another study conducted in Turkey found that the larger the board of commissioners, the better the company's performance from the perspective of ROA and Tobin's Q (Ciftci et al., 2019). Research in Indonesia found that the size of the board of commissioners has a statistical effect on firm value (Setiany et al., 2023). Based on the results of research in developing countries described earlier, which shows that board size has a positive effect on firm value. So, this study uses the following hypothesis:

H2: Board of Commissioners size has a positive and significant effect on firm value

Gender Diversity in the Board of Commissioners on Firm Value

The results of research conducted in 116 countries found that increasing female representation on the board of commissioners has a positive influence on firm value (W. Huang, 2024). Research in Tunisia found that the presence of women on the board of commissioners resulted in greater firm value (Haj-Salem et al. 2020b). The same results were found in the UK using the object of companies listed on the FTSE 100, that there is a positive and significant relationship between diversity on the board of commissioners and company performance (Brahma, Nwafor, and Boateng 2021a). Research on 10,314 companies from 34 countries combined into groups based on regional zones, namely Africa, Asia, Europe, Latin America, North America, and Oceania found that the presence of female commissioners on the board of commissioners is positively associated with company performance (Pucheta-Martínez & Gallego-Álvarez, 2020). Based on the research results described in the previous section, it can be concluded that the presence of women on the board of commissioners is positively related to company performance. Thus, the hypothesis of this study is:

H3: Gender diversity is positively and significantly related to value.

ESG Risk Score to Firm Value

Research relating to the effect of ESG risk scores on firm value or performance has been conducted both internationally and in Indonesia. Research in India using the Nifty 100 index of the NSE index found that ESG risk scores have an insignificant negative impact on Tobin's Q. ESG risk scores have an insignificant negative impact on Tobin's Q (market-based performance) and environmental risk scores, social risk scores and governance risk scores have an insignificant positive impact on Tobin's Q. ESG risk score has an insignificant negative impact on ROA (operating performance) and ROE (funding performance) while environmental risk score, social risk score and governance risk score have an insignificant positive impact on ROA and ROE. Thus, ESG risk scores and its components do not show a significant impact on firm performance (Shobhwani & Lodha, 2023). Research in Indonesia provides different results, some studies found that ESG risk scores negatively affect firm value (Istikomah et al., 2023; Yudhanto & Simamora, 2023). However, another study found that ESG risk score has no significant effect on firm value (Utami and Sebrina 2024a). Based on the research results described previously, it can be concluded that ESG risk scores on firm value and performance still show varied and inconsistent results across countries and research periods. The hypothesis used in this study is

H4: ESG Risk Score has a negative and significant effect on value.

METHOD

This research is quantitative research using secondary data as the research object. Data regarding the number of Independent Commissioners and Size of the Board of Commissioners is taken from the IDX.com website. The research population is all shares listed on the Indonesia Stock Exchange with the research sample being all shares included in the ESG Rating version of Morningstar Sustainalytics which collaborates with the Indonesia Stock Exchange and is available on the IDX.com website. The source of this research was taken from the online journal aggregate site, namely Google Scholar, by selecting articles included on the Scimedirect.com, Emerald.com, and Sinta.com sites (accredited by Sinta 2 and Sinta 3).

This research uses the multiple linear regression method in the JASP application. This research uses corporate governance as an independent variable with proxies for commissioner size, percentage of independent commissioners, and gender diversity in the board of commissioners. ESG Rating is used as an independent variable using the Morningstar

Sustainalytics version score as a proxy. The control variables in this study use company size, measured by the natural logarithm of total assets, and leverage, measured using the debt to equity ratio. The dependent variable in this research is company value using Tobin's Q as a measuring tool. This research's multiple linear regression model is:

$$\text{Tobin's } Q = \beta_0 + \beta_1 \text{BSize}_{it} + \beta_2 \text{BIndpndnt}_{it} + \beta_3 \text{BGend}_{it} + \beta_4 \text{ESG Rating}_{it} + \beta_5 \text{SIZE}_{it} + \beta_6 \text{LEV}_{it} + \varepsilon_{it}$$

Where:

- BSize = Size of the company's board of commissioners
 BIndpndnt = Percentage of independent commissioners on the board of commissioners company
 BGend = Percentage of women on the company's board of commissioners
 ESG Rating = ESG score of each company according to Morningstar Sustainalytics
 Size = Company size measured using the natural logarithm of total assets
 Lev = Company leverage measured using the debt to equity ratio

RESULTS AND DISCUSSION

Table 1 Descriptive Statistics

<i>Descriptive Statistics</i>						
	Valid	Missing	Mean	Std. Deviation	Minimum	Maximum
Size of the Board of Commissioners	80	0	5.838	2.341	2.000	15.000
Percentage of Independent Commissioners	80	0	0.449	0.118	0.250	0.833
Percentage of Female Commissioners	80	0	0.136	0.157	0.000	0.600
ESG Risk Score	80	0	28.480	9.953	7.110	53.100
Firm Size	80	0	31.693	1.278	29.002	35.426
Leverage	80	0	1.433	1.985	0.046	12.520
Tobin's Q	80	0	1.512	1.316	0.252	7.576

Based on the table above, all variables have valid data of 80 and there is no missing data. This means that research was conducted on a sample of 80 companies included in the Morningstar Sustainalytics list. Based on the mean value, it can be seen that the average size of the board of commissioners is 5,838 (if you round up the average number to 6 commissioners). In terms of the percentage of independent commissioners, it can be seen that the mean (average) number of independent commissioners is 44.9%. The percentage of female commissioners in all companies is only 13.6% on average. The average ESG risk score for all companies studied was 28,480, which means that on average 80 companies had medium ESG risk. The average company size is 31,693. average leverage is 1,433 indicating low debt levels. The average Tobin's Q of 1.512 shows that the company's market value is slightly higher than the company's book value.

Based on the standard deviation value of 2,341 for the size of the board of commissioners, this means that there is significant diversity in the size of the board of commissioners in the research sample. This shows that not all companies have the same board of commissioners structure, some have a board of commissioners of 2 people, and some have a board of

commissioners of at most 15 people. The percentage of independent commissioners has a standard deviation of 0.118 (11.8%), which indicates that the composition of independent commissioners in the sample companies is relatively uniform. Although there are several companies that have a percentage of independent commissioners above 57%. However, the majority of independent commissioner composition lies in the range of 33% - 57%. This shows that there are external influences such as OJK regulations which require a minimum composition of 20% independent commissioners in public companies. The standard deviation for the percentage of female commissioners is 0.157 (15.7%) indicating that there is an unequal composition of female commissioners in the companies in the research sample. Most companies still have low female representation (13.6% on average). However, there are a small number of companies that have a composition of female representation on the board of commissioners of up to 60%. The standard deviation of the ESG risk score of 9.953 shows that there is extreme diversity in ESG risk scores among the companies in the research sample. This confirms that sustainability and governance issues have not been implemented evenly among the companies in the research sample. The cause of extreme diversity is due to the different sectors in which companies operate, resulting in different levels of ESG implementation. The standard deviation of 1.278 indicates that the company sizes in the sample are very similar, with little variation. This shows that the research focuses on large-scale companies. The leverage standard deviation of 1.985 shows that there is great diversity in debt policies between companies. Most companies have low leverage, but some companies have high leverage, especially companies in the banking sector. Tobin's Q standard deviation of 1.316 indicates that there is great diversity in market assessments of the sample companies, indicating that investors have very different perceptions of company prospects, even for companies with similar operational characteristics (such as size and leverage).

The minimum and maximum values show that the minimum value for the size of the board of commissioners is 2 with a maximum of 15 people. This shows that there are companies whose board size is far below average or above average with an average of 6 commissioners. The percentage of independent commissioners with a minimum value of 25% and a maximum of 83% shows that most companies have a percentage of independent commissioners close to the average and only a small percentage have an extreme (very low or very high) percentage of independent commissioners. The percentage of female commissioners with a minimum value of 0% and a maximum of 60% indicates that there are companies that do not have female representatives on their board of commissioners (100% of all commissioners are men), and there are companies that implement progressive policies with female commissioners amounting to 60% of all members of the board of commissioners. The minimum ESG risk score is 7,110 and the maximum is 53,100, indicating that there is an imbalance in sustainable practices in the companies in the research sample. Firm size (company size) with a minimum value of 29,002 and a maximum of 35,426 shows that the smallest company size is worth 29,0002 and the largest company size is worth 35,426. Leverage with a minimum value of 0.046 and a maximum of 12,520 shows that each company has a different financial strategy depending on the sector in which the company operates. For example, the banking sector has high leverage due to the natural consequences of its business pattern where banks collect funds from the public in the form of savings and deposits which are included in liability posts on the bank's balance sheet and lend these funds in the form of long-term loans such as KUR and KPR. Tobin's Q has a minimum value of 0.252 and a maximum of 7.576 indicating that there is extreme polarization in market assessments of sample companies. This shows that investors are not homogeneous in assessing the prospects of a company, and there are non-financial factors that play a big role in determining market value.

Table 2 Correlation

<i>Correlation</i>							
	Size of the Board of Commissioners	Percentage of Independent Commissioners	Percentage of Female Commissioners	ESG Risk Score	Firm Size	Leverage	Tobin's Q
Size of the Board of Commissioners	1.000	-0.082	-0.049	-0.068	0.464	0.341	0.038
Percentage of Independent Commissioners	-0.082	1.000	0.184	-0.236	0.199	0.403	-0.014
Percentage of Female Commissioners	-0.049	0.184	1.000	-0.257	0.118	0.061	0.065
ESG Risk Score	-0.068	-0.236	-0.257	1.000	-0.069	-0.221	0.001
Firm Size	0.464	0.199	-0.118	-0.069	1.000	0.566	-0.237
Leverage	0.341	0.403	0.061	-0.221	0.566	1.000	-0.009
Tobin's Q	0.038	-0.014	0.065	0.001	-0.237	-0.009	1.000

Correlation measures the strength and direction of the relationship between variables (scale -1 to 1) with a value close to 0 indicating there is no relationship between variables. Based on table *correlation* above shows that Tobin's Q has almost no correlation to ESG risk scores. Tobin's Q has a negative correlation with the percentage of independent commissioners, firm size, and leverage with respective values of -0.012, -0.237, and -0.009 with a moderate negative correlation found in the relationship between firm size and Tobin's Q, which means that the more independent commissioners, firm size, and leverage, the lower the value of the company's Tobin's Q. Tobin's Q has a weak positive correlation with the size of the board of commissioners, and the percentage of female commissioners with respective values of 0.039 and 0.066, which means that the greater the number of commissioners, and the greater the percentage of female commissioners, increases the value of Tobin's Q, although weak. The size of the board of commissioners with firm size and leverage has a moderate positive relationship, namely 0.464 and 0.341, which indicates that the larger the size of the board of commissioners, the greater the size of the company and the company's leverage. Leverage and firm size have a strong relationship of 0.566, which means that the bigger the company, the more likely it is to have higher leverage (debt). The percentage of independent commissioners has a weak negative relationship with the ESG risk score, indicating that a high percentage of independent commissioners tends to be associated with a lower ESG risk score.

Table 3 Model Summary

<i>Model Summary - Tobin's Q</i>				
Model	R	R ²	Adjusted R ²	RMSE
M ₀	0.000	0.000	0.000	1.317
M ₁	0.322	0.104	0.030	1.296

Note. M₁ includes Board of Commissioners Size, Percentage of Independent Commissioners, Percentage of Female Commissioners, ESG Risk Score, Firm Size, Leverage

Based on the table above, an R value of 0.322 means that the independent variable has a correlation of 32.2% with the dependent variable. R value² of 0.104 indicates that the independent variable can only explain 10.4% *variance* of the dependent variable. Adjusted R² of 0.030 indicates that the independent variable can only explain 3.0% *variance* of the dependent variable. This statistic means that this statistic shows that the regression model used has very weak predictive power or explanatory power regarding the dependent variable.

Table 4 ANOVA

<i>ANOVA</i>						
Model		Sum of Squares	df	Mean Square	F	p
M ₁	Regression	14.219	6	2.370	1.410	0.222
	Residual	122.704	73	1.681		
Total		136.923	79			

Note. M₁ includes Board of Commissioners Size, Percentage of Independent Commissioners, Percentage of Female Commissioners, ESG Risk Score, Firm Size, Leverage

Note. The intercept model is omitted, as no meaningful information can be shown.

The ANOVA table shows the calculated F value of 1.410, and *p-value* of 0.222. The calculated F value is smaller than the table F value of 2.23 with an α value of 0.05, df1 of 6, and df2 of 73. The value of *p-value* is greater than the α value, and the calculated F value is smaller than the F table, this indicates that a set of independent variables has a small or insignificant influence on the dependent variable.

Table 5 Coefficients

<i>Coefficients</i>						
Model		Unstandardized	Standard Error	Standardized	t	p
M ₀	(Intercept)	1.512	0.147		10.275	<.001
M ₁	(Intercept)	13.909	4.609		3.018	0.004
	Size of the Board of Commissioners	0.101	0.073	0.179	1.375	0.173
	Percentage of Independent Commissioners	0.249	1.424	0.022	0.175	0.862
	Percentage of Female Commissioners	0.166	0.988	0.020	0.168	0.867
	ESG Risk Score	0.004	0.016	0.031	0.259	0.796
	Firm Size	-0.422	0.151	-0.410	-2.806	0.006
	Leverage	0.105	0.098	0.159	1.071	0.288

Table *coefficients* above show the t value which shows the value of the independent variable on the dependent variable and p which shows the significance of that value. Regression formula based on table *coefficient* above are:

$$Y=13.909+0.101+0.249X_2+0.166X_3+0.004X_4-0.422X_5+0.105X_6$$

The constant value in the equation of 13,904 means that if all independent variables have a value of 0, then the value of the dependent variable or Tobin's Q is 13,909. The value of the number of commissioners or 1 A positive value indicates that there is a positive relationship between the number of commissioners and Tobin's Q. A value of 0.101 means that a one unit increase in the number of commissioners will cause an increase in Tobin's Q of 0.101, and vice versa provided that all other independent variables have constant or fixed values.

The variable value of the percentage of independent commissioners or X_2 A positive value indicates that there is a positive relationship between the variable percentage of independent commissioners and Tobin's Q. A value of 0.249 means that a one unit increase in the variable percentage of independent commissioners will cause an increase in Tobin's Q of 0.249, and vice versa provided that all other independent variables have a constant or fixed value. Variable value of the percentage of female commissioners or X_3 A positive value indicates that there is a positive relationship between the variable percentage of female commissioners and Tobin's Q. A value of 0.166 means that a one unit increase in the variable percentage of female commissioners will cause an increase in Tobin's Q of 0.166, and vice versa provided that all other independent variables are constant or fixed.

ESG or X_4 risk score variable value A positive value indicates that there is a positive relationship between the ESG risk score variable and Tobin's Q. A value of 0.004 means that a one unit increase in the ESG risk score variable will cause an increase in Tobin's Q of 0.004, and vice versa provided that all other independent variables have constant or fixed values. The value of the firm size or X_5 variable A negative value indicates that there is a negative relationship between the firm size variable and Tobin's Q. A value of -0.422 means that a one unit increase in the firm size variable will cause a decrease in Tobin's Q of 0.422, and vice versa provided that all other independent variables have a constant or fixed value.

Leverage or X_6 variable value A positive value indicates that there is a positive relationship between the leverage variable and Tobin's Q. A value of 0.105 means that a one unit increase in the leverage variable will cause an increase in Tobin's Q of 0.105, and vice versa provided that all other independent variables have a constant or fixed value.

Hypothesis testing

H1: independent commissioners have a positive and significant effect on company value

Based on the regression results above, it was found that the t value was 0.175 with a p-value of 0.862. A low t value with a high p-value far above the p-value of 0.05 indicates that there is no statistically significant influence between independent commissioners and company value, even though the t value shows a positive relationship. This shows that the presence of independent commissioners is not necessarily effective in increasing company value, especially if it is not accompanied by good quality supervision. So, thus, it can be concluded that H1 is rejected. The results of this research are the same as the results of research conducted in Jordan which found that independent commissioners had no significant influence, and in Bangladesh which found that the relationship between independent commissioners and Tobin's Q was positive and not significant (Maniruzzaman and Hossain 2019; Shatnawi, Eldaia, and Adaa 2021). The results of this research are different from the results of research conducted in Indonesia which found the influence of independent commissioners on company value during COVID-19, as well as research in India and China which found that the independence of the board of commissioners increase company value in state-owned companies which was possible

because the presence of independent commissioners in state-owned companies acted as supervisors of company performance to protect minority investors, and the results of this research are reinforced by the results of other research which found that the positive relationship between board independence and company performance is stronger in companies controlled by the state and companies with lower information acquisition costs (Liu, Mihail K Miletkov, et al. 2015; Sasidharan 2020; Setiany, Utami, and Zamzami 2023b).

H2: The size of the Board of Commissioners has a positive and significant effect on company value

Based on the regression results above, it was found that the t value was 1.375 with a p-value of 0.173. Although the value indicating the direction of the relationship between the size of the board of commissioners and company value is positive according to the hypothesis. However, a p-value greater than 0.05 indicates that the relationship is not significant. So, H2 is rejected. This means that the size of the board of commissioners has not been empirically proven to have a real influence on increasing company value. A larger number of board members does not necessarily guarantee effective supervision or strategic decision making that can boost the company's market value. The results of this study are the same as the results of research conducted in Nigeria which found that the size of the board of commissioners had an insignificant positive influence on Tobin's Q (Audu, Uba, and Ekpa 2022). The results of this research are different from the results of research conducted in Indonesia that the size of the board of commissioners has a statistical effect on company value (Setiany et al. 2023b).

H3: Gender diversity is positively and significantly related to company value

The gender diversity variable, which is represented by the percentage of women on the board of commissioners, found that the t-value was 0.168 and the p-value was 0.867. Even though it shows a positive relationship between gender diversity and company value, the high p-value of 0.867 indicates that this relationship is not statistically significant. So, hypothesis H3 is rejected. This means that gender diversity on the board of commissioners, as measured by the percentage of women, has not been proven to have a significant influence on company value. Although the direction of the relationship shows that a higher percentage of women on the board of commissioners tends to be followed by an increase in company value, this relationship is not statistically strong enough to support the hypothesis. The high p-value indicates that the presence of female commissioners is not yet a determining factor in the market's perception of company value. This can be caused by several factors, such as women's representation which is still low, the role of women on the board which is not yet strategic, or the existence of structural bias which means that women's contribution in decision making is not yet fully recognized. The results of this research are the same as the results of research conducted in Malaysia which found that gender diversification on the board of directors had no effect on measures of company efficiency (Tobin's Q, ROE, and profit margin) (Firew 2024). The results of this research are different from the results of research conducted in England which found that there was a positive and significant relationship between diversity on the board of commissioners and company performance (Brahma, Nwafor, and Boateng 2021b).

H4: ESG Risk Score has a Negative and Significant Influence on Company Value

The ESG risk score variable in this study has a t-value of 0.259, and a p-value of 0.796. The t coefficient which shows a positive number is contrary to the initial hypothesis which assumed there was a negative relationship between the ESG risk score and company value. In addition, a high p-value indicates that the effect is not statistically significant. So, hypothesis H4 is rejected. This shows that the ESG risk score does not have a significant influence on company value, and even the relationship coefficient found in the model is contrary to the

initial assumption. Based on theory and previous findings, a higher ESG risk score should reflect a company's higher exposure to environmental, social and governance risks, which can ultimately reduce investor confidence and the company's market value. However, in this study, a positive t coefficient actually indicates that companies with higher ESG risk tend to have higher market value, although this relationship is not statistically significant. This phenomenon can be caused by market perceptions that have not fully considered ESG risk in assessing company value, or because companies that have a high ESG risk score are large companies that are active in strategic sectors, so they are still highly valued by the market. The results of this research also provide additional information that ESG practices have not yet become a major factor in investment decisions in the Indonesian capital market, or that ESG information has not been fully integrated by investors in evaluating company value. The results of this research are the same as the results of research in Indonesia which found that ESG risk scores did not have a significant influence on company value (Utami and Sebrina 2024b). The results of this study are different from other studies which found that ESG risk scores have a negative and significant influence on company value (Istikomah, Rahmawati, and Amperawati 2023b; Yudhanto and Simamora 2023b).

The Influence of Control Variables on Company Value

The firm size variable as a control variable has a t value of -2.806 and a p value of 0.006. This result means that firm size has a negative and significant influence on company value because the p value is below 0.05, indicating that the relationship is significant at the 95% confidence level. A negative t value means that the larger the company size, the lower the company value as measured by Tobin's Q. The results of this research indicate that large companies do not always get high market valuations, possibly due to factors such as operational inefficiency, managerial complexity, or investors' assessment of growth potential which is lower than smaller companies. So, it can be concluded that company size can be a limiting factor in increasing market value, especially if it is not accompanied by an efficient and effective management strategy.

The leverage variable as a control variable has a t value of 1.071 and a p value of 0.288. This result means that leverage has a positive and insignificant influence on company value because the p value is above 0.05. A positive t value means that the higher the leverage, the higher the company value. However, this relationship is not statistically significant so it cannot be concluded that high leverage has a good influence on company value. This insignificant relationship may indicate that the debt funding structure, especially the use of debt, has not been fully taken into account by the market in determining company value or that the effect of leverage may vary depending on the industry sector and financial strategy of each company.

CONCLUSION

Based on the research results above, it can be concluded that corporate governance (size of the board of commissioners, independent commissioners, and gender diversity) and ESG risk ranking have a positive and insignificant influence on company value. This means that, statistically, the variables used are not able to explain convincingly changes in the company's market value as measured using Tobin's Q. However, firm size as a control variable has a negative and significant relationship with company value. This indicates that the larger the size of the company, the more likely it is that the company's market value is lower than its book value, which is caused by operational efficiency factors, complex organizational structures, or investors' perceptions of the growth of large companies.

The limitation of this research is the limited number of research samples, so the generalization of the research results is still limited. The short observation period is only one

year, so it is not enough to describe the long-term relationship trend of the variables studied. This research has not considered other relevant variables, such as ownership concentration, institutional ownership, profitability and audit quality which also have the potential to influence company value. Finally, the ESG data used is ESG data which only relies on ESG rating risk data, without in-depth separation of environmental, social and corporate governance dimensions.

Suggestions for further research are based on the research limitations that have been explained, namely that future research is advised to use panel data with a longer time span (above one year) in order to see the dynamics of the influence of ESG and corporate governance on company value more comprehensively. The addition of moderating or mediating variables, such as financial performance (ROA, ROE) or company reputation, can help explain the indirect relationship between ESG/CG and company value. Future researchers can explore the ESG dimensions in more detail, for example finding out the separate influences of environmental, social and governance on company value, so that they know which aspects have the most influence on company value.

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