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Towards A Sustainable Future: Measuring The Impact Of ESG (Environmental, Social And Governance) Implementation, And The Crucial Role Of Independent Commissioners On Firm Value

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Abstract
This research is related to the increasing pressure from stakeholders on companies to implement good ESG practices. This pressure is getting stronger because it is influenced by climate change factors, social crises, and demands for better corporate governance. Previous research found that ESG Giving advantage within firm value. Independent commissioners given maximum role within application of ESG in the company to minimize management's greenwashing methods. Research in Indonesia that examines the application of ESG to firm value by considering the role of Independent Commissioners as a supporting factor is still small. This study is expected to be able to explain the role of independent commissioners and encourage stakeholders to maintain the independence of an Independent Commissioner in public companies in Indonesia. This study uses a regression statistical model with ESG Risk Rating as the independent variable, Independent Commissioner as the moderating variable, and Tobin's Q as the dependent variable. The results showed that ESG risk Rating has a positive relationship and insignificant with Tobin's Q of 0.223, and this study found that independent commissioners as a moderator variable of ESG risk rating and Tobin's Q, have a negative relationship and insignificant of -0.523.
Keywords: *stock market; financial market; environment; green economics;Statistical Method.*

INTRODUCTION

ESG implementation is increasingly important in the business world, both in Indonesia and around the world. Shareholders are increasingly concerned with the implementation of financial reports in the companies they own, and demand sustainable reports from companies. If companies do not implement ESG policies, shareholders will sell their shares, which will reduce the principal of company. Currently, companies that have implemented ESG are considered good companies. However, this phenomenon also decreases impact, namely, the emergence of a stock bubble and greenwashing. (Cao et al., 2022) This potentially reduces investor confidence in the sustainability reports issued by companies in the future. ESG implementation policies in Indonesia are still voluntary. Research in Australia found that, if sustainability disclosure is voluntary, companies tend to release low-quality sustainability reports. (Zharfpeykan, 2021). The Indonesian authorities issued regulations that assist the policy of ESG in Indonesia in accordance with the SDG roadmap that the government is targeting until 2030. The IDX cooperates with Morningstar Sustainalytics to control the ESG evaluation of companies in Indonesia.

41 companies received an increase in ESG Rating, 1 company remained, and 37 companies experienced a decrease. ESG risk assessment conducted by Morningstar Sustainalytics uses the concept of risk decomposition where companies are faced with two dimensions of ESG issues, namely exposure and management. Management is the company's commitment and concrete actions in addressing ESG issues through various company policies and work programs. 4 companies in the mining sector are included in the top 5 companies with the largest ESG in Indonesia. The high ESG scores of mining sector companies in Indonesia indicate that management is not very serious in policing ESG in their companies, and tends to just follow the current trend, without intending to implement it seriously. Research in Indonesia has discovered that the correlation between ESG and firm value varies, with some studies finding negative ESG results (Nurachman & Soeratin, 2025), and others finding positive and significant results (Lindawati et al., 2023); (Widiyanti et al., 2019). Mining companies around the world, especially in developed countries, are taking ESG very seriously. This is done to improve the negative image that exists in the wider community that mining companies only focus on profits obtained from destroying the environment, health, culture, and livelihoods of communities around mining areas, as depicted in the Sexy Killers documentary film made by Dandhy Laksono (Fajar & Ryan, 2021). Another factor that influences the policy of mining companies to implement ESG is the results of research that found that the application of ESG has a value from weak positive to strong positive on firm value, and reduces the cost of debt ; (H. Chen, 2024); (Boccaletti & Gucciardi, 2025); (Hoang et al., 2020). University of Malta, Department of

Banking & Finance, Malta et al., 2022). This study uses agency theory as a theoretical basis. According to agency theory, there is a clash of interests between the holding company and the agent. Agency theory postulates that because people are, in the end, self-interested, they will have conflicts of interest over at least some issues any time they attempt to engage in cooperative endeavors. Agency theory is related to two issues that can arise in agency relationships, namely (i) the conflict of goals between the principal and the agent, and (ii) the principal incurring high costs to monitor the work done by the agent.
Principals can use two ways to make management have policies that are in line with the principal's policies, namely through financial compensation (bonuses, and share ownership) or non-financial (the board of commissioners is used as a supervisor of the daily operations of the directors. Autonomous commissioners must supervise and provide advice to management. So that management can provide the best long-term value for the company. A Research directed by (Rashid, 2015) In Bangladesh, conclude whether independent boards will lessen operation cost only under the 'active asset' scale of agency cost. Research in Spain found that Independent Commissioners will initially show objection to Corporate Social Responsibility Exposure practices except in companies that have high equity capital and low proprietary costs. However, this opposition will end if they are convinced that CSR disclosure will reduce the risk of damage to their reputation. (Martínez-Ferrero et al., 2015a). Other research has found there's a productive connection between CSR and the attributes of the BOC, such as political influence, international experience, business expertise, other commissioner roles, and BOC independence. (Al-Mamun & Seamer, 2021)However, engagement with CSR decreases in family-controlled companies, despite the presence of independent commissioners.
This study has a novelty in the independent commissioner as a moderator variable that affects the relationship between ESG rating and Tobin's Q as a proxy for firm value. There are still few studies that make independent commissioners a moderator variable, especially in Indonesia. This research pursue to determine whether Autonomous Boards would give a positive or negative effect when they become a moderator variable within ESG rating and Tobin's Q. This research is expected to be able to provide the latest perspective to companies in Indonesia to pay more attention to ESG rating and the composition of autonomous boards in order to provide maximum company value. This research is also able to fill the research gap and add insight related to ESG in Indonesia.

LITERATURE REVIEW AND HYPOTHESES

Literature Review

(Panda & Leepsa, 2017), conclude in their article that agency theory is a highly pragmatic and applied theory. It is rooted in many different academic fields, and its usefulness is wide and prominent. (C. Jensen & Meckling, 1976) Developed the agency theory paradigm by defining a Representation relationship as a contract between one or more people (in this case referred to as principals) relating to another person (agent) to perform several functions on behalf of the principal, which involves the transfer of several decision-making powers to the agent. The Authority can limit deviations from its interests by setting a Proper boost to the agents in ways of sustaining observation fees outlined to curb the agents' deviant activities. Furthermore, (M. C. Jensen, 1994)The idea of agency theories is individual with self-interests, mostly finding ways to lessen or sway disputes to lower the negative effect of the disagreements so they can then split the earnings. In addition, the theory lays out a broad structure to navigate through multiple solution pathways. Extension of the theory accommodates a common form to lead the way to dissimilar types of answers to this complication. Agency theories have two standpoints positivist agency theory and principal-agent theory. Positivist researchers concentrate on situations and factors where principals and agents tend to follow divergent goals, then provide an overview of governance mechanisms that restrain agents' self-serving behavior. Characteristic of the formal theory, the principal-agent paradigm has involves careful specification the assumptions, which they are followed by mathematical proof and logical deduction. (Eisenhardt, 1989). (Bosse2014, n.d.), in their research extended the assumptions of agency theory from a narrow self-interest assumption, extended by adding norms of fairness. The underlying logic is that perceived fairness mediates Interactions resulting from standard agency theory using positive and negative behavior, reciprocal. Recent research combines agency theory with behavioral theory, called behavioral agency theory. Building on the standard agency framework that targets monitoring costs and performance alignment, behavioral agency theory highlights the central role of the agent's performance, ensuring shareholder interests are prioritized and their agents are likely to be aligned if executives are motivated to perform to the best of their ability (Pepper & Gore, 2015).
ESG scores are introduced by various global rating agencies, such as Bloomberg, and Morningstar using their own criteria. One study focuses on the uniqueness applied by rating agencies through indicators of (i)characteristics,

(ii)attributes, and (iii)standards in interpreting the components of E, S, and G. Researchers identified three main points: (i) heterogeneity in ranking criteria can cause institutions to have opposing views on the same evaluated company, and the agreement among these providers is very low, (ii) it affects sustainable investments, lead Resulting in the identification of multiple investment categories, which in turn leads to the creation of diverse benchmarks, while differing ratings from agencies amplify the influence of investor ESG preferences on asset prices to the extent Even when there is consensus, it fails to influence financial performance (Billio et al., 2021). The differing ESG criteria applied by global rating agencies have resulted in((Dimson, 2020)) to argue that ESG ratings should not be treated as a black box or used mechanically. Blanket use of ESG scores is not the solution. At best, they are a starting point. (Hughes et al., 2021), they found that differences in rankings are driven by four main factors: (i) differences in ESG theory based on the selection of key issues, (ii) differences in the data sources analyzed, (iii) differences in the weighting structure for ranking aggregation, and finally, (iv) differences in controversy analysis. They suggest using AI-based ESG rankings developed by Truvalue Labs. They argue that AI-based ESG rankings have several advantages, including (i) a higher level of standardization, (ii) a transparent 'outside-in' perspective on the rankings, (iii) a more democratic aggregation process, and (iv) rigorous real-time analysis.

Despite its shortcomings, a number of studies have used ESG ratings as one of the independent variables or moderator variables in their research. A study comparing various ESG ratings in nations in eastern and central Europe discovered that companies should pay attention to the methodologies and practices applied by differing agencies to make sure that their efforts are appropriately evaluated, The analysis of CEE companies shows a clear difference in trading volumes between those with ESG ratings and those without, pointing to the critical role of ESG scores for investors and firms. (Zumente & Lāce, 2021). (Horn & Oehler, 2024), in their study used five rating providers on stocks listed in North America, Europe, Asia-Pacific (excluding Japan), and Japan found that the portfolios considerably differ regarding their constituents. The study, which used 727 financial companies operating in 22 countries, found that financial firms' ESG scores are growing on a linear trend over time, and such tendency is enhanced by their size and profitability, together with the economic and social development of the country within which they operate (Crespi & Migliavacca, 2020). The research on Class A publicly listed companies in China revealed that ESG ratings have a significant positive impact on both the quantity and quality of corporate green innovation, facilitated by reduced financial constraints and enhanced environmental awareness among managers (Tan & Zhu, 2022). A different study of class A public enterprises in China found a "U"-shaped correlation between ESG ratings and green innovation (Yang et al., 2024). (Elamer et al., 2024) It can be demonstrated that ESG ratings have a significant negative moderating effect on the relationship between corporate tax evasion and corporate market valuation.

Several studies found that board diversity enhances the oversight function and independence of board members in the interest of shareholders, showing a positive relationship within board size, independence, diversity, and activity with integrated reporting quality, that voluntary disclosure increases with the number of non-executive directors on the board. Companies with non-executive directors are more likely to disclose information voluntarily than those without (Donnelly & Mulcahy, 2008; Tahir et al., 2020; Vitolla et al., 2020). Different research results show that independent commissioners show initial resistance to CSR disclosure practices, except in companies with higher annual cost of capital and lower cost of ownership. Moreover, this opposition will be avoided if there is a statement of assurance that reduces their reputational risk associated with potentially misleading CSR information (García-Sánchez & Martínez-Ferrero, 2017; Martínez-Ferrero et al., 2015). The presence of women on the board of directors extends beyond ethical considerations and is crucial from a business perspective, (such as fostering better risk-taking). It has been found that the presence of a larger share of independent female directors on the board correlates with an increase in business risk (i.e., The expectation is to improve future performance without posing risks to current performance), emphasizing the core concept of a family's desire to preserve its social and emotional wealth, particularly in low-risk companies Conversely, the assignment of non-independent female directors on the company's board significantly increases the risk of harm to company performance, but this effect is only observed in family-owned businesses. (Poletti-Hughes & Briano-Turrent, 2019).

Hypothesis

Research conducted by (Aydoğmuş et al., 2022b) On 5000 public companies listed on the Bloomberg Database found that the overall ESG composite positive and significant score is related to firm value. Governance and social scores individually have increased and show a significant relationship, while Environmental scores have a stagnant relationship with firm value. Alternatively, the ESG composite score, Environmental, Scores for social and governance performance has increased and significant score relationship in firm profitable. These findings assumed that investing in high ESG performance promises financial benefits for companies in terms of both value and profitability. Research conducted by (S. Chen et al., 2023) On 3332 companies worldwide from 2011-2020 found that the effect of ESG ratings on company performance is significant for large-scale companies and insignificant for small-scale companies. The results show that the increase in impact of ESG ratings on corporate financial report performance is more pronounced in high-risk cases compared to low-risk cases. Research conducted by (Wong et al., 2021) Malaysian firms found that the ESG certification lowers the company's cost of capital, alongside a positive Tobin's Q value, and significantly. These findings, while consistent with existing studies in developing countries, suggest an increased value of CSR disclosure by companies in both developing and developed countries. Research conducted in Indonesia found the opposite with regard to ESG risk scores; a number of studies found that ESG risk scores have a negative effect on firm value. (Istikomah et al., 2023a; Yudhanto & Simamora, 2023a). However, other studies have found that ESG risk scores have no significant effect on firm value. (Utami & Sebrina, 2024). Based on previous studies, the hypotheses of this study are H1: ESG Risk Score has a negative influence on firm value

Research conducted by (Shahbaz et al., 2020) Found that the diligence of CSR boards and committees is a strong driver of CSR performance, proxied by the environmental, social, and governance (ESG) composite score and its three individual indicators. Although board independence has a greater influence in improving aggregate ESG scores and governance indicators, gender diversity board independence authority is more influential on governance and environmental indicators. However, higher CSR performance does not guarantee higher financial report performance - as proxied by market value and accounting performance. Research conducted by (Uyar et al., 2020) It was found that the presence of a Having a CSR committee and female directors on the board serves as are key factors that drive companies to excel in CSR performance across all areas, comprising environmental, social, and governance (ESG) dimensions. Investigating the relationship between CSR indicator performance and corporate financial performance did not yield significant results. Research conducted by (Oh et al., 2019a) Using Korean firms as the research sample, found that when the board consists of outside directors with equity ownership and directors with diverse backgrounds, CSR involvement increases among professionally managed companies, but decreases among family-managed companies. Overall, board characteristics have different implications depending on the level family involvement in management. Research conducted by (Donnelly & Mulcahy, 2008) found that voluntary disclosure increases with the number of non-executive directors on the board. Companies that have non-executive directors make greater voluntary disclosures than other companies.

H2: Independent Commissioners had Positive Effect by Strengthening the Relationship within ESG and Firm Value

MATERIALS AND METHODS

This study uses secondary data taken through a site that publishes the financial statements of public companies that are used as research objects, the site of each company that publishes Board of Commissioners and the Board of Directors, as well as the IDX site that informs public companies that are included in the ESG category of the Morningstar Sustainalytics version. The sample used in this study is all public companies that have implemented ESG and are published on Morningstar Sustainalytics. The source of the article in this study was obtained from sciencedirect.com. This study uses Regression as a statistical analysis tool on JASP software. The percentage of Independent Commissioners owned by the company is used as a proxy for the moderating variable of Independent Commissioners. Some studies use Refinitiv's ESG score (Aydoğmuş et al., 2022a). However, in this study, the ESG score of Morningstar Sustainalytics, which has official cooperation with the IDX, is used. The control variables in this study use leverage, namely total debt divided by total assets (Oh et al., 2019b), company size using the natural logarithm of total assets owned by the company (Carnini Pulino et al., 2022); (Gao et al., 2023); (Qing et al., 2022), and profitability as measured by net profit divided by total assets. Tobin's Q ratio is used as a proxy for firm value like other studies (Kurniawan & Rokhim, 2023); (Singh et al., 2018). The formula used in this study is:

$$\text{Tobin's } Q_{it} = \beta_0 + \beta_1 \text{ESG Rating}_{it} + \beta_2 \text{IND}_{it} + \beta_3 \text{ESG Rating}_{it}\text{IND}_{it} + \beta_4 \text{LEV}_{it} + \beta_5 \text{Size}_{it} + \beta_6 \text{Profit}_{it} + \varepsilon_{it}$$

RESULTS AND DISCUSSION

Table 1 Descriptive Statistic

Descriptive Statistics

	ESG Rating	Komisaris Independen	Leverage	Firm Size	Profitability	Tobin's Q
Valid	79	79	79	79	79	79
Missing	0	0	0	0	0	0
Mean	29.322	0.461	0.437	31.372	0.059	1.582
Std. Deviation	9.648	0.117	0.223	1.386	0.081	1.351
Minimum	12.670	0.300	0.030	28.078	-0.200	0.340
Maximum	53.100	0.830	0.869	35.315	0.280	8.750

In Table 1, it is shown that all the samples used in this study, which amount to 79 samples, are valid, meaning they are reliable for the research. The mean ESG Rating value shows that companies in Indonesia have an average score of 29.322, which means that all Indonesian companies listed in Morningstar Sustainalytics have a medium ESG risk. The mean value of independent commissioners at 0.461 indicates that the composition autonomous boards in all sampled companies is 46.1% of the total composition board of commissioners. A leverage of 0.437 indicates that the average debt held by the companies in the research sample is 43.7% of the total company capital. The mean value of 31.372 indicates that the average size of the companies in the research sample is 31.372, which suggests that the companies included in Morningstar Sustainalytics are classified as large companies. The mean profitability value of 0.059 indicates that the profitability generated by all the companies averages 5.9%. The mean value of 1.582 for Tobin's Q indicates that investors consider the created value of the company to be higher than the book value of the company. This means that the companies sampled in the study are, on average, overvalued. The standard deviation value of 9.648 for ESG Rating indicates there is a deviation of 9.648 in the calculation of ESG Rating from the mean ESG Rating value. The standard deviation value of 0.117 for independent commissioners indicates there is a deviation of 11.7% in the value of independent commissioners from the mean value of independent commissioners. The standard deviation value of 0.223 for leverage indicates there is a deviation of 22.3% in leverage from the mean leverage value. The standard deviation of 1.386 for firm size indicates there is a deviation of 1.386 from the mean firm size value. The standard deviation value of 0.081 for profitability indicates there is a deviation of 8.1% in profitability from the mean profitability value. The standard deviation value of 1.351 for Tobin's Q indicates there is a deviation of 1.351 in Tobin's Q from the mean Tobin's Q value. Minimum indicates the smallest value, and maximum indicates the largest value. Both of these values are used to calculate the dispersion of a variable. In the ESG Rating variable, there is a data spread of 40.43, which is the result of the difference between 53.100 and 12.67. In the independent commissioner variable, there is a data spread of 0.53, which is the difference between 0.830 and 0.300. In the leverage variable, there is a data spread of 0.839, which is the difference between 0.869 and 0.030. In the firm size variable, there is a data spread of 7.237, which is the difference between 35.315 and 28.078. In the profitability variable, there is a data spread of 0.080, which is the difference between 0.280 and -0.200. In the Tobin's Q variable, there is a data spread of 8.420, which is the difference between 8.750 and 0.340.

Table 2 Model Summary

Model Summary - Tobin's Q

Model	R	R^2	Adjusted R^2	RMSE
M_0	0.000	0.000	0.000	1.351
M_1	0.447	0.200	0.133	1.258

Note. M_1 includes ESG Rating, Independent Commissioner, Leverage, Firm Size, Profitability, ESG Rating:Independent Commissioner.

M_1 is the model that illustrates the model summary of the research variables. The R value = 0.447 indicates that the relationship between the independent variable and the dependent variable is 44.7%. This shows that the relationship within the independent variable and the dependent variable is quite strong. The R^2 value = 0.200 indicates that the independent variables in the model can only explain 20.0% of the dependent variable. This suggests that there are other independent variables not included in the model that can explain the dependent variable. The Adjusted R^2 value = 0.133 indicates that the model only has a strength of 13.3% and needs to be supplemented with other independent variables to strengthen the model. The RMSE value = 1.258 indicates that the model's error value is 1.258, which shows that the model has a fairly good estimation.

Table 3 ANOVA

ANOVA

Model		Sum of Squares	df	Mean Square	F	p
M_1	Regression	28.436	6	4.739	2.995	0.011
	Residual	113.950	72	1.583		
	Total	142.386	78			

Note. M_1 includes ESG Rating, Komisaris Independen, ESG Rating:Komisaris Independen, Firm Size, Profitability, Leverage

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

The F table value with df1 = 6 and df2 = 72, with a p-value of 0.011, has an F value of 2.995. In the ANOVA table, it is known that the calculated F is 3.859 with a p-value of 0.002. This suggests that the null hypothesis is rejected, indicating a significant difference between the groups.

Table 4 Coefficients

Coefficients

Model		Unstandardized	Standard Error	Standardized	t	p
M_0	(Intercept)	1.582	0.152		10.407	2.100×10^{-16}
M_1	(Intercept)	3.658	3.862		0.947	0.347
	ESG Rating	0.017	0.074	0.118	0.223	0.824
	Komisaris Independen	3.627	4.564	0.313	0.795	0.429
	Firm Size	-0.106	0.115	-0.109	-0.919	0.361
	Profitability	5.895	1.944	0.351	3.032	0.003
	Leverage	-0.177	0.697	-0.029	-0.254	0.800
	ESG Rating ✻ Komisaris Independen	-0.090	0.171	-0.292	-0.523	0.603

Coefficients

Model	Unstandardized	Standard Error	Standardized	t	p

In the coefficient table, model M_1 shows the relationship between the independent variable and the dependent variable. Based on the table above, a linear regression model can be formed as follows:

$$Y = 3.658 + 0.017X_1 + 3.627X_2 - 0.090(X_1X_2) - 0.177C_1 - 0.106C_2 + 5.895C_3$$

The constant value (β_0) has a positive value of 3.658. The constant value of 3.658 indicates that if all independent, moderating, and control variables are valued at zero, then the Tobin's Q value is 3.658.

The coefficient X_1 (ESG Rating) has a positive value, indicating a direct relationship between the independent variable and the dependent variable. The independent variable value is positive 0.017, which means that when a 1% increase in the ESG Rating variable, there will be an increase in the Tobin's Q value by 0.017, assuming other variables remain constant.

The coefficient X_2 (Independent Commissioner) is positive, indicating a direct relationship between the moderating variable and the dependent variable. The score of the moderating variable is positive 3.627, which means that when have a 1% increase in the independent commissioner variable, there will be an increase in Tobin's Q value by 3.627, assuming other variables remain constant.

The coefficient X_1X_2 (interaction within ESG Rating and Independent Commissioner) is negative, indicating an inverse relationship between the interaction of ESG Rating and Independent Commissioner with the dependent variable. The interaction value between the independent variable and the moderating variable is -0.090, which means that when there is a 1% increase in the interaction variable between the independent variable and the moderating variable, there will be a decrease in Tobin's Q value by 0.090, assuming other variables remain constant.

The coefficient C_1 (leverage) is negative, indicating an inverse relationship between the leverage control variable and the dependent variable. The score of the leverage control variable is positive 0.177, which means that when have a change 1% increase in the leverage control variable, there will be a decrease in Tobin's Q value by 0.177, assuming other variables remain constant.

The coefficient C_2 (firm size) is negative, indicating an inverse relationship between the control variable and the dependent variable. The Score of the control variable firm size is 0.106, which means that for every 1% increase in the control variable firm size, there will be a decrease in Tobin's Q by 0.106, assuming other variables remain constant.

The coefficient C3 (profitability) is positive, indicating a direct relationship between the control variable and the dependent variable. The Score of the control variable profitability is 5.895, which means that for every 1% increase in the control variable firm size, there will be an increase in Tobin's Q by 5.895, assuming other variables remain constant.

In the t-value indicating the relationship between independent variables, moderation, and control variables, it was found that there is has positive relationship and insignificant within ESG scores as an independent variable and the dependent variable, Tobin's Q, of 0.223. The moderating variable, independent commissioners, has a stronger relationship with the dependent variable of 1.802. However, when the moderating variable acts as a moderator between the independent variable ESG Rating, and the dependent variable, Tobin's Q, the resulting value is negative at -0.523. The control variable with the highest influence on the dependent variable, Tobin's Q, is profitability with a value of 3.032, followed by leverage with a negative value of -0.254, and finally firm size, which has a negative relationship of -0.919.

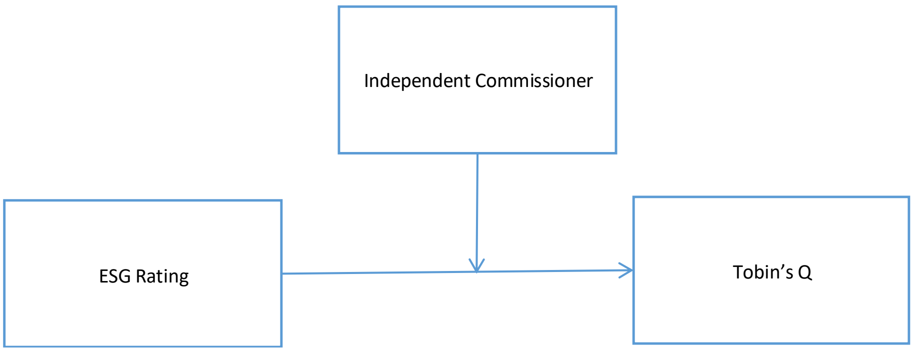

Figure 1. Empirical Research Method

Based on the regression results displayed in the table 4, it can be concluded that:
H1: The hypothesis stating that the ESG risk score has a negative influence on firm value is DENIED. In the coefficient table, the value on ESG Rating on Tobin's Q is 0.223. This value indicates that the ESG risk score, as measured by Morningstar Sustainalytics, still has a positive influence on firm value, meaning that higher ESG risk is associated with higher firm value counterintuitive finding. This suggests that markets may not yet fully price in ESG risks or that firms with higher ESG risks might be compensating investors through other mechanisms such as higher returns or market activity.H2: The hypothesis stating that Independent commissioners have a Positive Influence by strengthening the Relationship between ESG and Firm Value is DENIED. In the coefficient table, the relationship within ESG risk score and Tobin's Q through Independent Commissioners, the coefficient is -0.523. This indicates that ESG Rating has a negative indirect effect on Tobin's Q through the role of Independent Commissioners, but the effect is insignificant.
Based on the research results above, it have a concluded that ESG risk score has a positive influence but is statistically insignificant on firm value (Tobin's Q). This study denied the results of previous studies which state a negative influence on firm value (Istikomah et al., 2023b); (Yudhanto & Simamora, 2023b). Our suggestion is that companies with higher ESG risk scores conduct transparent risk management disclosures and communicate their sustainability transition strategies clearly to stakeholders, in order to assess whether such strategies contribute to firm value despite higher ESG risks.Based on the second hypothesis, it reveals that the Independent Commissioner has a positive but statistically insignificant influence on firm value as a variable independent. The results in this study provided a new perspective role independent the Board of Commissioners or increase of effect increasing the percentage of Independent Commissioners in the Board of Commissioners can increase the company's value in the future. The increase in firm value can be caused by the more transparent the company's financial statements, the higher the independence of members of the Board of Commissioners, and the more transparent the company's financial statements. However, independent commissioners have a negative but insignificant statistical relationship when used as a moderating variable within the ESG risk score and Tobin's Q. This indicates that the presence of independent commissioners weakens the positive influence of the ESG risk score on firm value. It suggests that, rather than enhancing firm value in the context of ESG risk, the role of independent commissioners maybe more focused on risk mitigation and compliance, which could lead to more conservative strategies that are less appealing to investors in the short term.

5. CONCLUSIONS

This study investigated the relationship between ESG risk score, as assessed by Morningstar Sustainalytics, and firm value measured by Tobin's Q. The result show that the ESG risk score does not have a statistically significant effect on firm value. Although the coefficient for ESG rating is positive (0.223), its associated p-value (0.824) suggests that the relationship lack statistical significance. This result contradicts several previous studies, which report a negative influence of ESG risk on firm value (Istikomah et al., 2023; Yudhanto & Simamora, 2023), and instead highlights the complexity of how ESG risk is perceived by the market. Among the control variables, profitability stands out as having a strong and significant influence on firm value (coefficient =5.895, p = 0.003). This reinforces the notion that financial performance remains a fundamental driver of firm valuation in capital market.
Furthermore, the moderating effect of independent commissioners on the relationship between ESH risk score and firm value is found to be negative but statistically insignificant (coefficient = 0.523, p 0.603). This may suggest that the governance function of independence commissioners leans toward risk mitigation and regulatory compliance, potentially dampening a firm's ability to extract value from ESG-related initiatives. These results imply that while ESG considerations are increasingly relevant in strategic discourse, their impact on firm value is not yet definitive and may be shaped by internal performance metrics and governance dynamics. The lack of statistical significance calls for cautious interpretation, suggesting that ESG risk, when considered in isolation, may not be a strong predictor of market valuation in the current context.

Ethical considerations
Not applicable
Conflict of Interest
The authors declare no conflicts of interest.
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REFERENCES

1. Al-Mamun, A., & Seamer, M. (2021). Board of directors attributes and CSR engagement in emerging economy firms: Evidence from across Asia. *Emerging Markets Review*, *46*, 100749.
2. Aydoğmuş, M., Gülay, G., & Ergun, K. (2022a). Impact of ESG performance on firm value and profitability. *Borsa Istanbul Review*, *22*, S119–S127.
3. Aydoğmuş, M., Gülay, G., & Ergun, K. (2022b). Impact of ESG performance on firm value and profitability. *Borsa Istanbul Review*, *22*, S119–S127. https://doi.org/10.1016/j.bir.2022.11.006
4. Billio, M., Costola, M., Hristova, I., Latino, C., & Pelizzon, L. (2021). Inside the ESG ratings: (Dis)agreement and performance. *Corporate Social Responsibility and Environmental Management*, *28*(5), 1426–1445. https://doi.org/10.1002/csr.2177
5. Boccaletti, S., & Gucciardi, G. (2025). ESG performance, institutional factors, and the cost of debt. *Journal of Sustainable Finance & Investment*, 1–29.
6. *Bosse2014*. (n.d.).
7. Cao, Q., Zhou, Y., Du, H., Ren, M., & Zhen, W. (2022). Carbon information disclosure quality, greenwashing behavior, and enterprise value. *Frontiers in Psychology*, *13*, 892415.
8. Carnini Pulino, S., Ciaburri, M., Magnanelli, B. S., & Nasta, L. (2022). Does ESG disclosure influence firm performance? *Sustainability*, *14*(13), 7595.
9. Chen, H. (2024). ESG and Leverage Adjustment: Based on Stakeholder Theory and Signaling Theory. *Advances in Economics, Management and Political Sciences*, *72*, 82–91.
10. Chen, S., Song, Y., & Gao, P. (2023). Environmental, social, and governance (ESG) performance and financial outcomes: Analyzing the impact of ESG on financial performance. *Journal of Environmental Management*, *345*, 118829. https://doi.org/10.1016/j.jenvman.2023.118829
11. Crespi, F., & Migliavacca, M. (2020). The Determinants of ESG Rating in the Financial Industry: The Same Old Story or a Different Tale? *Sustainability*, *12*(16), 6398. https://doi.org/10.3390/su12166398
12. Dimson, E. (2020). *Divergent ESG ratings: Elroy Dimson, Paul Marsh, and Mike Staunton*.
13. Donnelly, R., & Mulcahy, M. (2008). Board Structure, Ownership, and Voluntary Disclosure in Ireland. *Corporate Governance: An International Review*, *16*(5), 416–429. https://doi.org/10.1111/j.1467-8683.2008.00692.x
14. Eisenhardt, K. M. (1989). Agency Theory: An Assessment and Review. *The Academy of Management Review*, *14*(1), 57–74.
15. Elamer, A. A., Boulhaga, M., & Ibrahim, B. A. (2024). Corporate tax avoidance and firm value: The moderating role of environmental, social, and governance (ESG) ratings. *Business Strategy and the Environment*, *33*(7), 7446–7461. https://doi.org/10.1002/bse.3881
16. Fajar, Y., & Ryan, J. C. (2021). Environmental Exploitation in Sexy Killers: Narrative Analysis and Ecocriticism Perspectives. *ISCS 2020: Proceedings of the 1st International Seminar on Cultural Sciences, ISCS 2020, 4 November 2020, Malang, Indonesia*, 199.
17. Gao, A., Xiong, T., Luo, Y., & Meng, D. (2023). Promote or crowd out? The impact of environmental information disclosure methods on enterprise value. *Sustainability*, *15*(4), 3090.
18. García-Sánchez, I. M., & Martínez-Ferrero, J. (2017). Independent Directors and CSR Disclosures: The moderating effects of proprietary costs. *Corporate Social Responsibility and Environmental Management*, *24*(1), 28–43. https://doi.org/10.1002/csr.1389
19. Hoang, T., Przychodzen, W., Przychodzen, J., & Segbotangni, E. A. (2020). Does it pay to be green? A disaggregated analysis of US firms with green patents. *Business Strategy and the Environment*, *29*(3), 1331–1361.
20. Horn, M., & Oehler, A. (2024). Constructing stock portfolios by sorting on ESG ratings: Does the rating provider matter? *International Review of Financial Analysis*, *96*, 103568. https://doi.org/10.1016/j.irfa.2024.103568
21. Hughes, A., Urban, M. A., & Wójcik, D. (2021). Alternative ESG Ratings: How Technological Innovation Is Reshaping Sustainable Investment. *Sustainability*, *13*(6), 3551. https://doi.org/10.3390/su13063551
22. Istikomah, I., Rahmawati, R., & Amperawati, E. D. (2023a). The Impact of ESG Risk Scores on Firm Value: Foreign Ownership as A Moderating Role. *Accounting and Financial Review*, *6*(1), 139–147.
23. Istikomah, I., Rahmawati, R., & Amperawati, E. D. (2023b). The Impact of ESG Risk Scores on Firm Value: Foreign Ownership as A Moderating Role. *AFRE (Accounting and Financial Review)*, *6*(1), 139–147.
24. Jensen, C., & Meckling, H. (1976). THEORY OF THE FIRM: MANAGERIAL BEHAVIOR, AGENCY COSTS AND OWNERSHIP STRUCTURE. *Journal of Financial Economics*, *3*(4), 305–360.
25. Jensen, M. C. (1994). *Self-Interest, Altruism, Incentives, and Agency Theory*.
26. Kurniawan, I., & Rokhim, R. (2023). Is ESG companies' performance influenced by ownership structure? Evidence in ASEAN. *Interdisciplinary Social Studies*, *2*(9), 2397–2413.
27. Lindawati, A. S. L., Geraldine, T. G., Handoko, B. L., Widuri, R., & Mustapha, M. (2023). Analysis of Sustainability Performance, Green Accounting, and ESG Disclosure on Firm Valuation. *International Journal of Contemporary Accounting*, *5*(2), 183–198.
28. Martínez-Ferrero, J., Garcia-Sanchez, I. M., & Cuadrado-Ballesteros, B. (2015a). Effect of financial reporting quality on sustainability information disclosure. *Corporate Social Responsibility and Environmental Management*, *22*(1), 45–64.
29. Martínez-Ferrero, J., Garcia-Sanchez, I. M., & Cuadrado-Ballesteros, B. (2015b). Effect of Financial Reporting Quality on Sustainability Information Disclosure. *Corporate Social Responsibility and Environmental Management*, *22*(1), 45–64. https://doi.org/10.1002/csr.1330
30. Nurachman, I. A., & Soeratin, H. Z. (2025). ANALISIS PENERAPAN ESG TERHADAP NILAI PERUSAHAAN BERDASARKAN LITERATUR REVIEW TERINDEKS SINTA. *Integrative Perspectives of Social and Science Journal*, *2*(01 February), 703–713.

31. Oh, W.-Y., Chang, Y. K., & Jung, R. (2019a). Board characteristics and corporate social responsibility: Does family involvement in management matter? *Journal of Business Research*, *103*, 23–33. https://doi.org/10.1016/j.jbusres.2019.05.028
32. Oh, W.-Y., Chang, Y. K., & Jung, R. (2019b). Board characteristics and corporate social responsibility: Does family involvement in management matter? *Journal of Business Research*, *103*, 23–33.
33. Panda, B., & Leepsa, N. M. (2017). Agency Theory: Review of Theory and Evidence on Problems and Perspectives. *Indian Journal of Corporate Governance*, *10*(1), 74–95. https://doi.org/10.1177/0974686217701467
34. Pepper, A., & Gore, J. (2015). Behavioral Agency Theory: New Foundations for Theorizing About Executive Compensation. *Journal of Management*, *41*(4), 1045–1068. https://doi.org/10.1177/0149206312461054
35. Poletti-Hughes, J., & Briano-Turrent, G. C. (2019). Gender diversity on the board of directors and corporate risk: A behavioural agency theory perspective. *International Review of Financial Analysis*, *62*, 80–90. https://doi.org/10.1016/j.irfa.2019.02.004
36. Qing, L., Chun, D., Dagestani, A. A., & Li, P. (2022). Does proactive green technology innovation improve financial performance? Evidence from listed companies with semiconductor concepts stock in China. *Sustainability*, *14*(8), 4600.
37. Rashid, A. (2015). Rashid, A. (2015). Revisiting Agency Theory: Evidence of Board Independence and Agency Cost from Bangladesh. *Journal of Business Ethics*, *130*, 181–198.
38. Shahbaz, M., Karaman, A. S., Kilic, M., & Uyar, A. (2020). Board attributes, CSR engagement, and corporate performance: What is the nexus in the energy sector? *Energy Policy*, *143*, 111582. https://doi.org/10.1016/j.enpol.2020.111582
39. Singh, S., Tabassum, N., Darwish, T. K., & Batsakis, G. (2018). Corporate governance and Tobin's Q as a measure of organizational performance. *British Journal of Management*, *29*(1), 171–190.
40. Tahir, H., Masri, R., & Rahman, M. M. (2020). Impact of board attributes on the firm dividend payout policy: Evidence from Malaysia. *Corporate Governance: The International Journal of Business in Society*, *20*(5), 919–937. https://doi.org/10.1108/CG-03-2020-0091
41. Tan, Y., & Zhu, Z. (2022). The effect of ESG rating events on corporate green innovation in China: The mediating role of financial constraints and managers' environmental awareness. *Technology in Society*, *68*, 101906. https://doi.org/10.1016/j.techsoc.2022.101906
42. Utami, L. F., & Sebrina, N. (2024). Pengaruh Rating Risiko ESG dan Pengungkapan Keanekaragaman Hayati terhadap Kinerja Keuangan Perusahaan. *JURNAL EKSPLORASI AKUNTANSI*, *6*(3), 1241–1256. https://doi.org/10.24036/jea.v6i3.1761
43. Uyar, A., Kilic, M., Koseoglu, M. A., Kuzey, C., & Karaman, A. S. (2020). The link among board characteristics, corporate social responsibility performance, and financial performance: Evidence from the hospitality and tourism industry. *Tourism Management Perspectives*, *35*, 100714. https://doi.org/10.1016/j.tmp.2020.100714
44. Vitolla, F., Raimo, N., & Rubino, M. (2020). Board characteristics and integrated reporting quality: An agency theory perspective. *Corporate Social Responsibility and Environmental Management*, *27*(2), 1152–1163. https://doi.org/10.1002/csr.1879
45. Widiyanti, M., Sadalia, I., Irawati, N., & Hendrawaty, E. (2019). Determining a firm's performance: The moderating role of CSR in the renewable energy sector of Indonesia. *Polish Journal of Management Studies*, *19*.
46. Wong, W. C., Batten, J. A., Ahmad, A. H., Mohamed-Arshad, S. B., Nordin, S., & Adzis, A. A. (2021). Does ESG certification add firm value? *Finance Research Letters*, *39*, 101593. https://doi.org/10.1016/j.frl.2020.101593
47. Yang, C., Zhu, C., & Albitar, K. (2024). ESG ratings and green innovation: A U-shaped journey towards sustainable development. *Business Strategy and the Environment*, *33*(5), 4108–4129. https://doi.org/10.1002/bse.3692
48. Yudhanto, W., & Simamora, A. J. (2023a). Environmental, Social, and Governance Risk on Firm Performance: The Mediating Role of Firm Risk. *Binus Business Review*, *14*(2), 223–234. https://doi.org/10.21512/bbr.v14i2.8935
49. Yudhanto, W., & Simamora, A. J. (2023b). Environmental, Social, and Governance Risk on Firm Performance: The Mediating Role of Firm Risk. *Binus Business Review*, *14*(2), 223–234.
50. Zharfpeykan, R. (2021). Representative account or greenwashing? Voluntary sustainability reports in Australia's mining/metals and financial services industries. *Business Strategy and the Environment*, *30*(4), 2209–2223.
51. Zumente, I., & Lāce, N. (2021). ESG Rating—Necessity for the Investor or the Company? *Sustainability*, *13*(16), 8940. https://doi.org/10.3390/su13168940