

## The Influence of ESG Disclosure, Capital Structure, and Firm Size on Firm Value with Firm Age as a Moderating Variable (Study on IDX ESG Leaders in 2020-2024)

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### ABSTRACT

IDX ESG Leaders recorded the best ESG index performance in Indonesia, but the Tobin's Q values of its constituent companies have declined, indicating a mismatch between ESG performance and market valuation. This study examines the factors that influence Tobin's Q with company age as a moderating variable in IDX ESG Leaders companies 2020–2024. Using a quantitative approach, panel data from 12 companies were analyzed through panel data regression and Moderated Regression Analysis. The findings show that ESG Disclosure and Debt-to-Equity Ratio (DER) have a negative impact on Tobin's Q, while Company Size has a positive influence. Simultaneously, all independent variables are significant. Company Age weakens all relationships, indicating that investors prioritize performance over company age in the Indonesian capital market.

## INTRODUCTION

The growth of companies in Indonesia cannot be separated from the role of investment, particularly investment in the capital market. In recent years, the development of the Indonesian capital market has shown a positive trend, marked by an increase in the number of investors. Based on data from the Kustodian Sentral Efek Indonesia (KSEI) (2024), the number of investors in Indonesia has continued to experience significant growth during the 2022–2024.



Source : Kustodian Sentral Efek Indonesia (KSEI) (2024)

Figure 1. Growth of Investors in Indonesia

The growth in the number of investors in Indonesia is also inseparable from the development of Environmental, Social, and Governance (ESG)-based stock indices, which are attracting increasing attention from investors. The following graph shows a comparison of the performance of several ESG-based stock indices in Indonesia:



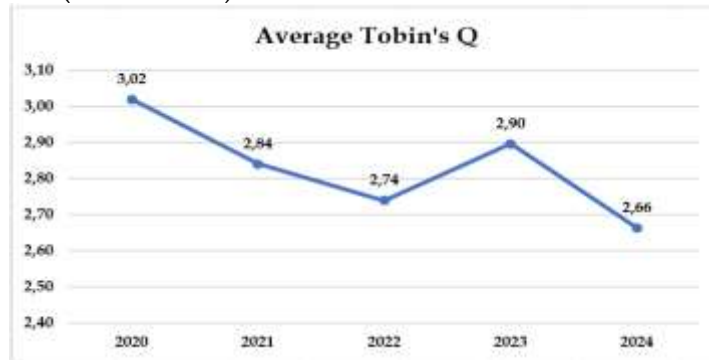
Source : Trading View (2025)

Figure 2. Comparison of ESG-Based Stock Index Growth

Based on Figure 2, IDX ESG Leaders showed the best performance. During the observation period, IDX ESG Leaders recorded the highest cumulative return of 9,42%. This condition shows that IDX ESG Leaders have better market performance. In addition, there is still a limited number of previous studies that use IDX ESG Leaders as the object of research, especially those related to the variables studied, such as the studies by Wangi & Aziz (2024), Putu & Devi (2024), Wulandari & Istiqomah (2024), dan Safitri & Paramita (2025). Therefore, the ESG-based index used in this study is IDX ESG Leaders.

Company value is an important indicator that reflects operational efficiency and investor confidence, while also illustrating the current condition and future prospects of the company (Ayulianis & Chandrayanti, 2024). In this study, company

value is measured using Tobin's Q ratio, which is widely used because it can comprehensively describe investment decisions. Tobin's Q is considered more rational because it takes into account the market value of equity, company liabilities, and company assets, thereby reflecting the interests of investors and creditors (Ana & Wibowo, 2025). Tobin's Q is the ratio of the market value of equity and debt to the company's total assets (Tobin, 1969).



Source: Secondary data processed, 2025

**Figure 3. Average Tobin's Q**

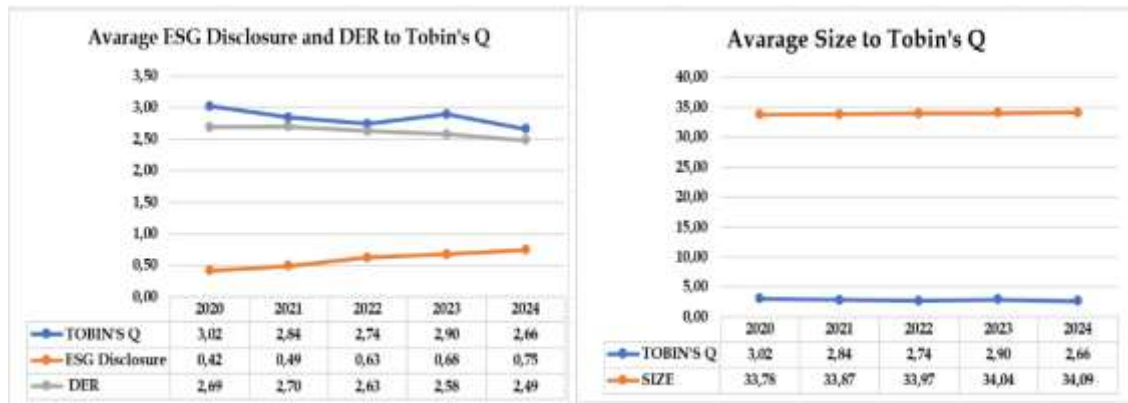
Based on Figure 3, the average Tobin's Q for the 2020–2024 period shows a downward trend, indicating a decline in market valuation of the company. Although Tobin's Q is above one, the downward trend reflects weakening market interest in the company's shares.

Companies that disclose ESG information demonstrate a commitment to responsible and sustainable growth, thereby increasing investor confidence (Arifah, 2024). As ESG data disclosure increases, investors are increasingly considering this aspect in their investment decisions because it is considered to increase company value (Safitri & Paramita, 2025). In this study, ESG Disclosure is measured by comparing the total number of ESG disclosure items to the maximum number of disclosure items based on the 2016 and 2021 GRI Standards obtained from sustainability reports.

Capital structure also affects company value. According to Menurut Amelia & M. Sembiring (2023) a company's capital structure reflects the percentage of debt used as a source of financing, so debt is part of the capital structure. A good capital structure plays a significant role in ensuring that a business runs influenceively. Capital structure in this study is proxied by the Debt to Equity Ratio (DER). DER is a debt ratio measured by comparing debt and equity (Sutrisno, 2017).

Firm Size is a scale used to classify the size of a company (Sembiring et al., 2025). It can be measured in various ways, such as total assets, total sales, total workforce, and stock capitalization (Tyas & Almurni, 2020). *Firm Size* is measured based on total assets, and this is an important factor for potential investors in considering investing (Setiawati et al., 2023).

The figure below shows the average ESG Disclosure, DER, and Firm Size against Tobin's Q in IDX ESG Leaders Companies for the 2020-2024 period.



Source: Secondary data processed, 2025

**Figure 4. Average ESG Disclosure, DER, and Firm Size on Tobin's Q**

In figure 4, an increase in ESG is not always followed by an increase in Tobin's Q. In the 2020–2021 period, ESG increased by 0,07, but Tobin's Q decreased by 0,18. In the 2021–2022 period, ESG increased by 0,14, but Tobin's Q decreased by 0,10, and in the 2023–2024 period, ESG increased by 0,07, but Tobin's Q decreased by 0,24. These conditions contradict the statements made by Clarkson, Li, Richardson, & Vasvari (2011); Farrel & Dewi (2025); Freeman (2010) based on stakeholder theory that ESG disclosure reflects a company's commitment to stakeholder interests, increases investor confidence, and has a positive impact on the company's reputation and value.

The DER to Tobin's Q indicates conditions that are not entirely ideal. In the 2020–2021 period, the DER increased by 0,01, but Tobin's Q decreased by 0,18. In the 2022–2023 period, the DER decreased by 0,07, but Tobin's Q increased by 0,16. This condition shows results that are not entirely in line with the statements made by Amelia & M. Sembiring (2023); Putu & Devi (2024); Spence (1973) dan Tunggal & Ngatno (2016) based on the signaling theory that the use of debt as external funds is viewed positively by investors because it reflects management's confidence in the company's ability to develop its business and meet its future obligations. High debt levels also indicate creditors' confidence in the company's performance and stability, which ultimately shapes positive investor perceptions and can increase the company's value.

An increase in firm size is not always accompanied by an increase in Tobin's Q. In the 2020–2021 period, firm size increased by IDR 43 trillion (0,05), but Tobin's Q decreased by 0,18. In the 2021–2022 period, firm size increased by IDR 52 trillion (0,14), while Tobin's Q decreased by 0,10. In the 2023–2024 period, firm size increased by IDR 27 trillion (0,12), but Tobin's Q decreased by 0,24. These conditions do not correspond with the statements made by Adhyasta & Sudarsi (2023); Amelia & M. Sembiring (2023) dan Yuniastri et al. (2021) that companies with large total assets reflect strong operational capacity and provide positive signals regarding company performance and stability. From a signaling theory perspective, large companies are perceived to have more stable advantages and prospects, thereby increasing investor confidence and driving up company value.

Previous studies have shown inconsistent findings regarding the influence of ESG Disclosure on Tobin's Q. Farrel & Dewi (2025) and Aydoğmuş et al. (2022) found

that ESG Disclosure has a positive influence. Conversely, Prayogo et al. (2023), and Angir & Weli (2024) stated that ESG Disclosure has a negative influence. Meanwhile, Wangi & Aziz (2024) and Husada & Handayani (2021) found that ESG Disclosure has no influence. Research on DER on Tobin's Q also shows mixed results. Putu & Devi (2024) and Amelia & M. Sembiring (2023) state that DER has a positive influence. However, Wahyuningtyas & Priyadi (2023) found that DER has no influence, while Sumarso *et al.* (2024) state that DER has a negative influence. Furthermore, research related to Firm Size on Tobin's Q also shows inconsistent results Putri (2022) and Adhyasta & Sudarsi (2023) found that Firm Size has a positive influence. Conversely, Wufron (2021) states that Firm Size has a negative influence.

Based on this background, it can be concluded that the research gap in this study lies not only in the differences in research results, but also in the context of the object, period, and mechanism of the relationship between the variables studied. Previous studies have shown inconsistent results regarding the effect of ESG Disclosure, Capital Structure, and company size on company value. Some studies have found a positive effect, while others have shown a negative effect or no effect. The inconsistency of these findings indicates that the relationship between these variables and company value is not yet conclusive and is still influenced by different company characteristics and market conditions.

Based on the above description, in this study, the researcher is interested in conducting further research with the title "The Influence Of ESG Disclosure, Capital Structure, And Firm Size On Firm Value With Firm Age as a Moderating Variable (Study On IDX ESG Leaders In 2020-2024)."

## **THEORETICAL REVIEW**

### ***Stakeholder Theory***

According to Freeman (2010) stakeholder theory emphasizes that companies are not only responsible to shareholders, but to all parties who can influence or be influenced by the achievement of organizational goals. Stakeholders are defined as groups or individuals who have an interest in the company's activities, so that companies must be able to manage these relationships strategically and action-oriented. In this study, stakeholder theory supports the ESG Disclosure variable because ESG disclosure is a form of fulfilling stakeholder demands for transparency and sustainability. The better a company discloses environmental, social, and governance aspects, the greater the support from stakeholders, which can increase the company's value.

### ***Signal Theory***

According to Spence (1973), signaling theory is a concept that explains how parties with more information, such as companies, send signals to external parties, such as investors, to reduce information asymmetry. These signals take the form of observable characteristics or actions and usually have a cost, so that only companies that are truly high quality are able to provide credible signals. Through these signals, the market can assess actual quality and ultimately make more informed decisions. In this study, ESG Disclosure acts as a positive signal to investors regarding the company's commitment to sustainability and good governance. These signals are expected to strengthen market perception, thereby increasing the company's value.

### **Firm Value**

Firm Value is a reflection of performance as seen from stock prices, which are determined by the balance of supply and demand in the capital market and represent investors' views on company performance (Harmono, 2009). The Firm Value in this study uses Tobin's Q ratio. This ratio combines common stock, equity, debt, share capital, and the company's total assets. This is because the company's operating funds do not only come from equity but also from debt provided by creditors (Ana & Wibowo, 2025). Tobin's Q ratio is calculated as follows (Tobin, 1969):

$$Tobin's\ Q = \frac{MVE + D}{Total\ Asset}$$

According to Sudiyanto & Puspitasari (2010), Tobin's Q is used to measure the performance of a company's asset management in creating value for shareholders. A Tobin's Q value of < 1 indicates that the stock is undervalued, while Tobin's Q = 1 reflects a stable stock. Meanwhile, Tobin's Q > 1 indicates that the stock is overvalued.

### **ESG Disclosure**

ESG Disclosure is public reporting conducted by companies regarding their performance in Environmental, Social, and Governance aspects (Mauliddin & Subardjo, 2024). Global Reporting Initiative is a measurement tool for assessing the quality of non-financial reports, where ESG variables are measured by giving a score of 1 for the disclosure of each item and a score of 0 for items that are not disclosed, and the values added up using the following predetermined formula (Safitri & Paramita, 2025).

$$ESG\ Disclosure = \frac{Total\ ESG\ Disclosure\ Items}{Total\ Maximum\ Disclosure\ Items}$$

### **Capital Structure**

According to Brigham & Houston (2019), the optimal capital structure is a mix of debt, preferred stock, and equity used by companies to plan for capital raising and maximize the intrinsic value of shares. This study uses the Debt to Equity Ratio (DER) to proxy the capital structure variable. DER was chosen because it directly reflects a company's funding policy in determining the proportion of debt to equity as a source of long-term financing. The formula used is as follows (Sutrisno, 2017):

$$Debt\ to\ Equity = \frac{Total\ Debt}{Total\ Equity} \times 100\%$$

### **Firm Size**

Firm Size is a scale for classifying the size of companies (Sembiring *et al.*, 2025). Large companies tend to be more closely monitored by the public, so they present financial information more carefully and with higher quality, and have better profit quality (Silalahi & Sihotang, 2021). In the Indonesian capital market, Firm Size can be classified based on POJK No. 53/POJK.04/2017 into small asset companies (< IDR 50 billion), medium asset companies (IDR 50 billion–IDR 250 billion), and large asset companies (> IDR 250 billion). Firm Size can be measured by total assets, total sales, total workforce, and market capitalization. In this study, it is proxied by total assets

because it is more stable and representative in describing the scale of the company and is an important consideration for investors (Setiawati *et al.*, 2023; Widiyati, 2017).

$$\text{Firm Size} = \text{Total Asset}$$

### ***Firm Age***

Firm Age is the length of time a company has been operating since its establishment to the present, which reflects the company's ability to maintain business continuity and competitiveness (Muzayin & Trisnawati, 2022). Companies with a longer age are generally considered more stable and experienced, making them an important consideration for investors (Wati *et al.*, 2025). The formula for calculating Firm Age (Hasan & Meidiyustiani, 2023)

$$\text{Firm Age} = \text{Year studied} - \text{Year the company was founded}$$

### ***The Influence of ESG Disclosure on Tobin's Q***

Before investing, investors will seek information about the condition of the company to make investment decisions. One piece of information that investors consider is whether the company applies ESG standards in its business activities (Wulandari & Istiqomah, 2024). ESG values reflect good corporate governance, which can increase Tobin's Q through positive investor perceptions. This commitment sends a positive signal to stakeholders, thereby strengthening trust and driving up stock prices. In accordance with signaling theory, good performance information will be received as a positive signal by investors and reflected in an increase in company value. (Andini Pratiwi *et al.*, 2025; Prayogo *et al.*, 2023). Previous studies by Farrel & Dewi (2025); Aydoğmuş *et al.* (2022) dan Melinda & Wardhani (2020) shows that ESG Disclosure has a positive influence on Tobin's Q.

H1: ESG Disclosure Has a Positive Influence on Tobin's Q.

### ***The Influence of Capital Structure on Tobin's Q***

When debt is used properly, the company's financial condition will be good, ultimately increasing Tobin's Q. A high debt ratio indicates that the company relies more on debt financing to run its operations and investments This shows that a high level of debt reflects creditors' confidence in lending to the company, because the company has good prospects for the future and the ability to meet its obligations, which ultimately increases investor confidence and the value of the company (Amelia & M. Sembiring, 2023). Previous studies by Putu & Devi (2024) dan Amelia & M. Sembiring (2023) shows that Capital Structure has a positive influence on Tobin's Q.

H2: Capital Structure Has a Positive Influelnce on Tobin's Q.

### ***The Influence of Firm Size on Tobin's Q***

Larger companies are better known to the public, making it easier to gain investor confidence (Silalahi & Sihotang, 2021). According to Adhyasta & Sudarsi (2023) companies with large total assets also have greater capacity to develop the company because these assets are resources that can support operational activities and growth. A higher Firm Size indicates that a company has good performance, and investors will respond positively, which will have an impact on increasing the

company's value. Previous research by Putri (2022) shows that Firm Size has a positive influence on Tobin's Q.

H3: Firm Size Has a Positive Influence on Tobin's Q.

***The Influence of ESG Disclosure on Tobin's Q with Firm Age as a Moderator***

Long-established companies have stable governance structures, enabling them to implement sustainability programs more influenceively. Older companies enjoy greater investor confidence and stronger stakeholder relationships, making their ESG practices more credible and increasing their value compared to younger companies. (Li & Turull, 2022 dan Febriantoko *et al.*, 2025). Previous research by Febriantoko *et al.* (2025) shows that Firm Age can strengthen the influence of ESG Disclosure on Tobin's Q value.

H4: Firm Age can Strengthen the Influence of ESG Disclosure on Tobin's Q.

***The Influence of Capital Structure on Tobin's Q with Firm Age as a Moderator***

According to Nopianti *et al.* (2024), The length of time a company has been in existence allows it to develop innovations. Maturity helps companies maintain their reputation and trust among investors, creditors, and the public. Older companies are more influenceive at managing their debt, so creditors are more confident in providing financing. Higher creditor and investor confidence in mature companies strengthens the influence of Capital Structure on Tobin's Q. Previous research by Tunggal & Ngatno (2016) shows that Firm Age can strengthen the influence of Capital Structure on Tobin's Q.

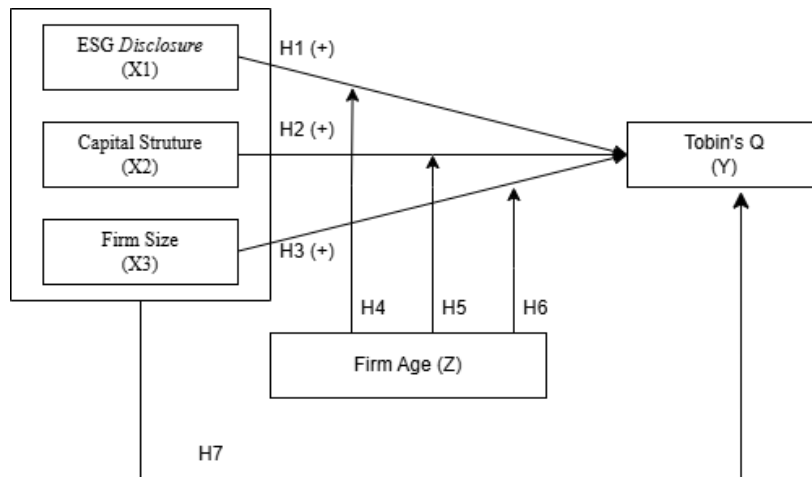
H5: Firm Age can Strengthen the Influence of Capital Structure on Tobin's Q.

***The Influence of Firm Size on Tobin's Q with Firm Age as a Moderator***

According to Wardani & Puspitasari (2022), A long-established firm reflects a level of maturity in business management, so Firm Size tends to increase. The level of maturity is seen from the total asset value, where companies with large assets are considered more stable. The longer a company operates, the greater its ability to utilize its Firm Size to increase the value of the company (Wati *et al.*, 2025). Previous research by Wati *et al.* (2025) shows that Firm Age can strengthen the influence of Firm Size on Tobin's Q value.

H6: Firm Age can Strengthen the Influence of Firm Size on Tobin's Q.

**Conceptual Framework**



**Figure 5. Research Paradigm**

**METHODOLOGY**

This study uses a quantitative approach with panel data and secondary data sources in the form of financial reports and corporate sustainability reports. The data was obtained from the official websites of each company. The research population includes 30 companies listed in the IDX ESG Leaders index for the 2020–2024 period. The research sample was determined using purposive sampling, with the criteria being companies that were consistently listed in the IDX ESG Leaders and had complete financial reports and sustainability reports during the observation period, resulting in 12 companies as samples. Using Eviews 13 software, this study used panel data regression analysis and Moderated Regression Analysis to analyze and interpret the data.

**RESULTS**

*Descriptive Statistics Test*

Table 1. Descriptive Statistical Test Results

	TOBIN,S Q	ESG DISCLOSURE	DER	FIRM SIZE	AGE
<b>Mean</b>	2,105	0,589	2,601	32,554	42
<b>Median</b>	1,525	0,610	1,500	32,195	40
<b>Maximum</b>	5,760	0,970	6,900	35,430	78
<b>Minimum</b>	0,630	0,290	0,100	28,730	12
<b>Std. Dev.</b>	1,635	0,164	2,396	1,909	19,11

Source: Results processed by Eviews 13, 2025

Based on the results of descriptive statistical tests, Tobin's Q has an average value of 2.105, which indicates that the market value of the company is greater than its asset value (Tobin's Q > 1). This condition indicates positive market expectations regarding the company's performance and prospects, meaning that the company is considered to have good investment appeal. The standard deviation value of Tobin's Q is 1.635 < its average value, indicating that the data is homogeneous. The ESG Disclosure variable has an average value of 0.589 or 58.9%. Referring to the Disclosure Intensity Interval classification proposed by Rusdiono (2017), this value

falls into the Partially Applied category (41%-75%), which indicates that the company has disclosed some ESG indicators. Although not yet comprehensive, it has been done well. The standard deviation value of  $0.164 <$  the average value indicates that the data is homogeneous. The capital structure (DER) has an average value of 2.601 or 260.1%, which indicates that the company uses debt in a fairly high proportion compared to its own capital. According to Sutrisno (2017), using a conservative approach, a healthy capital structure is indicated by a debt proportion that does not exceed equity ( $DER \leq 100\%$ ). The company's average DER is above the conservative limit, indicating a high dependence on debt, which has the potential to increase financial risk. The standard deviation value of DER  $2.396 <$  the average value indicates that the data is homogeneous. Firm Size shows an average total asset value of IDR 506.64 trillion (32.56), indicating that IDX ESG Leaders companies are classified as large-scale companies in accordance with POJK Number 53/POJK.04/2017. The standard deviation value of  $1.909 <$  the average value indicates that the data is homogeneous. Firm Age has an average value of 42 years, which indicates that most IDX ESG Leaders companies have been operating for a long time and have a good level of business maturity. The standard deviation value of  $19.11 <$  the average value indicates that the data is homogeneous.

### *Panel Data Regression Model Selection*

Tabel 2. Panel Data Regression Model Selection Results

Test	P-value	Conclusion
Chow Test	$0,0000 < 0,05$	FEM
Hausman Test	$0,3793 > 0,05$	REM
Lagrange Multiplier	$0,000 < 0,05$	REM

Source: Results processed by Eviews 13, 2025

#### *Chow Test*

The Cross-section Chi-Square value is  $0,0000 < 0,05$ . This indicates that the best estimate is the fixed influence model, so a Hausman test needs to be conducted to determine the best regression model between the random influence model and the fixed influence model.

#### *Hausman Test*

The Cross-section random value of  $0,3793 > 0,05$ . This means that the best estimation model is the random influence model, so the Lagrange multiplier test must be performed to determine the best regression model between the random influence model and the common influence model.

#### *Lagrange multiplier Test*

The one-sided cross-section value of  $0,0000 < 0,05$ . This means that the best estimation model chosen is the random influence model.

### *Panel Data Regression Estimation Results*

The random influence model was selected as the best estimate in this study, where in the random influence model with the generalized least squares (GLS)

approach, there is no need to test classical assumptions. The GLS approach is believed to be influenceive in dealing with time series autocorrelation and inter-observation correlation problems. Through this method, the resulting estimator meets the Best Linear Unbiased Estimation (BLUE) criteria, so that GLS can be used as a method for handling violations of heteroscedasticity and autocorrelation assumptions (Gujarati, 2003).

**Panel Data Regression (REM)**

Table 3. Panel Data Regression (REM) Results

Variabel Dependent: Firm Value (Tobin's Q)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7,148400	2,967107	-2,409215	0,0202
ESG Disclosure (X1)	-0,722748	0,272690	-2,650440	0,0111
Capital Structure (DER) (X2)	-0,396877	0,104112	-3,812007	0,0004
Firm Size (X3)	0,003284	0,000930	3,533103	0,0010
R-Square	0,353985			
Adjusted R-Square	0,309938			
F-statistic	8,036612			
Prob(F-statistic)	0,000222			

Source: Results processed by Eviews 13, 2025

Based on the results of panel data regression estimation, the regression model equation in this study is as follows:

$$\text{Tobin's Q} = - 7,148400 - 0,722748 \text{ ESG Disclosure} - 0,396877 \text{ DER} + 0,003284 \text{ Firm Size}$$

The constant value of -7.148400 explains that if the ESG Disclosure, Capital Structure (DER), and Firm Size variables are equal to 0, then Tobin's Q will be -7,148400. This condition indicates that before the influence of these independent variables, the market tends to give a low valuation to IDX ESG Leaders companies. For every one unit increase in ESG Disclosure, the value of Tobin's Q will decrease by 0,722748 if other variables are equal to 0, meaning that the market does not yet fully appreciate ESG disclosure. Increases in ESG are currently considered a cost, thereby lowering the valuation of the company. An increase of one unit in DER causes Tobin's Q to decrease by 0,396877 if other variables set at 0, reflecting that high debt usage increases a company's financial risk, thereby lowering its valuation. For every one-unit increase in Firm Size, Tobin's Q value will increase by 0,003284 if other variables set at 0, indicating that larger companies tend to be better known, more stable, and more trusted by investors, thereby increasing the company's valuation.

**Hypothesis Test**

**Partial Test (t-Test)**

Based on Table 3. it shows that H1 ESG Disclosure has a positive influence on Tobin's Q, but the findings of the ESG Disclosure coefficient value of -0,722 and the ESG Disclosure p-value of 0,0111 < 0,05 indicate that ESG Disclosure has a negative influence on Tobin's Q, this finding is an anomaly. H2 DER has a positive influence

on Tobin's Q, but the findings show that the DER coefficient value is -0,397 with a DER p-value of  $0,0004 < 0,05$ , meaning that DER has a negative influence on Tobin's Q, this finding is an anomaly. The coefficient value of Firm Size is 0,0032 with a p-value of Firm Size  $0,001 < 0,05$ , meaning that Firm Size has a positive influence on Tobin's Q.

**Simultaneous Test (Test F)**

Based on Table 3. it shows that the p-value of the F test is  $0,0002 < 0,05$ , so H1 is accepted and H0 is rejected. This means that in this study, ESG Disclosure, Capital Structure, and Firm Size simultaneously affect Tobin's Q.

**Determination Coefficient (R<sup>2</sup>) Test**

Based on Table 3. the adjusted R<sup>2</sup> value is 0,3099. This means that Tobin's Q variable can be explained by independent variables, namely ESG Disclosure, Capital Structure (DER), and Firm Size, by 30,99%, while the rest is explained by other variables not examined in this study.

**Moderated Regression Analysis (MRA) Test**

Table 4. Moderated Regression Analysis (MRA) Test Results

Variabel Dependent: Firm value (Tobin's Q)		
Variable	Coefficient	Prob.
C	-7,585264	0,5170
ESGD*AGE	0,004915	0,6815
DER*AGE	0,008147	0,1803
FIRM SIZE*AGE	-0,001719	0,1120

Source: Results processed by Eviews 13, 2025

The p-value for the interaction between ESG Disclosure and Firm Age is  $0,6815 > 0,05$ , therefore H0 is accepted and H1 is rejected, meaning that Firm Age weakens the influence of ESG Disclosure on Tobin's Q. The p-value for the interaction between DER and Firm Age is  $0,1803 > 0,05$ , so H0 is accepted and H1 is rejected, meaning that Firm Age weakens the influence of DER on Tobin's Q. The p-value for the interaction between Firm Size and Firm Age is  $0,1120 > 0,05$ , so H0 is accepted and H1 is rejected, meaning that Firm Age weakens the influence of Firm Size on Tobin's Q.

**DISCUSSION**

***The Influence of ESG Disclosure on Tobin's Q***

The test results show that ESG Disclosure has a negative influence on Tobin's Q. This condition indicates that even though companies have good ESG performance, ESG disclosure has not been carried out comprehensively. As a result, companies have incurred costs for ESG activities, while the information received by investors is not yet sufficient to assess the long-term benefits of ESG. In this situation, investors tend to view ESG activities as costly and potentially detrimental to investor interests, thereby reducing investment interest. This decline in interest ultimately has an impact on the decline in company value, as reflected in Tobin's Q. These results

are in line with the research of Angir & Weli (2024); Putu & Devi (2024); Prayogo et al. (2023), and not in line with the research Farrel & Dewi (2025) and Aydoğmuş et al. (2022) which show that ESG Disclosure has a positive influence on Tobin's Q. The higher the level of ESG Disclosure, the higher the company value, because ESG Disclosure increases stakeholder trust and strengthens the company's reputation, which ultimately has a positive impact on company value as reflected in the Tobin's Q value.

### *The Influence of Capital Structure on Tobin's Q*

The test results show that Capital Structure has a negative influence on Tobin's Q. This finding is reinforced by descriptive statistics with an average DER of 260.1%, indicating high use of debt compared to equity. High debt dependence has the potential to increase financial risk and reduce funding efficiency, thereby negatively impacting company value. Based on trade-off theory, companies will use debt up to an optimal level to obtain tax benefits from interest on debt. However, when debt usage exceeds this optimal level, the benefits of debt can no longer offset the increased costs of financial distress and agency costs, and a high DER reflects an increased risk of default and financial instability for the company, thereby increasing the perception of risk in the eyes of investors. This condition causes a decline in investor interest in the company's shares, which has an impact on the decline in share prices and ultimately reduces the company's value as reflected in Tobin's Q. These results are in line with the research by Sumarso et al. (2024), and not in line with the research Amelia & M. Sembiring (2023) and Putu & Devi (2024) yang menunjukkan DER berpengaruh positif terhadap Tobin's Q, which shows that DER has a positive influence on Tobin's Q, as high debt levels reflect creditors' confidence in the company's ability to meet its obligations, which ultimately increases investor confidence and company value as reflected in Tobin's Q.

### *The Influence of Firm Size on Tobin's Q*

The test results show that the Firm Size variable has a positive influence on Tobin's Q. This finding is reinforced by descriptive statistics with total assets averaging Rp506.64 trillion (32.56). This value indicates that the company is large in scale in accordance with POJK Number 53/POJK.04/2017. Large company size reflects good financial capacity and stability, enabling companies to maintain operational performance and business continuity. In addition, large-scale companies generally have a higher level of recognition in the eyes of the public and investors, making it easier to convey information related to the quality and performance of the company. This condition is a positive signal for investors and ultimately has an impact on increasing company value. These results are in line with the research by Adhyasta & Sudarsi (2023) Nuraghnia & Ramli (2024) and Putri (2022) , and not in line with the research Darmawan & Lestari (2023) and Wufron (2021) which shows that Firm Size has a negative influence on Tobin's Q. The view of investors is that companies with large assets tend to be less efficient in managing financial resources, thereby reducing profit levels and lowering company value as reflected in the Tobin's Q value.

### ***The Influence of ESG Disclosure on Tobin's Q with Firm Age as a Moderator***

The results of the test show that the Age of the Firm is the most influential factor in the relationship between ESG Disclosure and Tobin's Q. This observation indicates that the investor does not use the Age of the Firm as an additional factor in assessing the credibility of the company's ESG disclosure. In other words, even if the company has been in the business for a long time, it has increased the trust of the investor in the face of the information disclosed by the company. The investor seems to be more focused on the substance, quality, and usefulness of ESG information than on the length of the company's existence. This result is in line with the study Gani et al. (2025), and not in line with research Febriantoko et al. (2025) shows that *the Age of the Firm* can strengthen the influence of the ESG Disclosure on Tobin's Q, in the disclosure of ESG Disclosure on Tobin's Q, in the case of the ESG Disclosure, on the basis of the company's value that is longer considered to have a stronger relationship and legitimization, until the disclosure of ESG is more trusted by the investor and has a positive impact on the value of the company that is more than Tobin's Q's value.

### ***The Influence of Capital Structure on Tobin's Q with Firm Age as a Moderator***

The test results show that Firm Age weakens the influence of Capital Structure on Tobin's Q. Although long-established companies have better experience and capabilities in managing debt, thereby gaining greater trust from creditors, this does not automatically increase the market's assessment of the company. In older companies, debt financing policies tend to be used to maintain operational stability, meet long-term obligations, and refinance, rather than to drive expansion and growth. As a result, an increase in DER in mature companies is not perceived as a positive signal by investors, but rather as a potential increase in financial risk. Although older companies are relatively more trusted by creditors in obtaining financing, Firm Age does not play a role as a variable that strengthens the relationship between capital structure and Tobin's Q. These results are not in line with the research by Tunggal & Ngatno (2016) which shows that Firm Age can strengthen the influence of Capital Structure on Tobin's Q. In that study, investors viewed companies that had been operating for a long time as more stable and credible. Firm Age can reflect experience in managing funding, so that the use of debt in more mature companies is perceived as more efficient and has a positive impact on company value as reflected in Tobin's Q value.

### ***The Influence of Firm Size on Tobin's Q with Firm Age as a Moderator***

The test results show that Firm Age weakens the influence of Company Size on Tobin's Q. This indicates that investors do not view the length of time a company has been in operation as a prerequisite for a large company to be considered highly valuable. In an increasingly developed market, investor assessments are based more on a company's ability to manage assets and improve performance than on the age of the company itself. Companies with large total assets, whether newly established or long-established, are considered to have equal opportunities in providing assurance to the market regarding their stability, so that Firm Age does not play a role as a variable that strengthens the relationship between Firm Size and Tobin's Q. These results are not in line with the research by Wati et al. (2025) which shows that Firm Age can strengthen the influence of Firm Size on Tobin's Q. Investors view long-

established companies as having more mature capital management and financial systems, so that Firm Age can increase the influenceiveness of asset utilization and the company's capacity to drive company value growth as reflected in the Tobin's Q value.

### ***The Simultaneous Influences of ESG Disclosure, Capital Structure, and Firm Size on Tobin's***

Based on the results of the F-test, ESG Disclosure, Capital Structure, and Firm Size simultaneously affect Tobin's Q. To determine the extent to which independent variables can influence dependent variables, we can look at the Adjusted R<sup>2</sup> value of 0,3099, which identifies that Tobin's Q can be influenced by independent variables by 30,99%, while the remaining 69,01% is influenced by other variables not included in this study.

### **CONCLUSIONS AND RECOMMENDATIONS**

Based on the test results, it can be concluded that investors' assessment of a company's value is based more on the company's performance and ability to manage resources optimally and influenceively. ESG disclosure and high debt usage have not been able to increase company value because they are perceived as a cost burden and risk if not managed optimally and influenceively. Conversely, company size is the indicator that investors trust the most because it reflects asset strength, operational stability, and the company's ability to maintain business sustainability. Meanwhile, the length of time a company has been operating does not strengthen the influence of ESG disclosure, capital structure, or company size on company value. These findings indicate that investors tend to assess companies based on their long-term performance and prospects, rather than on the length of time the company has been operating or its commitment to sustainability, which is only reflected in formal disclosures. For companies, it is expected that they not only increase ESG activities, but also pay attention to the quality and completeness of ESG disclosure so that the long-term benefits of ESG can be well understood by investors. In addition, companies need to manage their capital structure optimally by maintaining a healthy debt ratio and utilizing asset size influenceively to improve financial performance and company value. Meanwhile, for investors, the results of this study can be used as consideration in assessing company value and making more informed investment decisions by evaluating risk, capital structure, and company characteristics, including age and size, and utilizing ESG Disclosure as additional information to minimize investment risk and ensure the sustainability of the company in the future.

### **FURTHER STUDY**

Based on the results of this study, researchers are advised to expand the sample, objects, and research period to obtain more comprehensive results, for example, by including companies from other sectors or a longer period. In addition, researchers can add other variables that may affect Tobin's Q. The use of different analytical methods, such as mediation, can also help to gain a deeper understanding of the relationship between ESG Disclosure, Capital Structure, Firm Size, Firm Age, and Tobin's Q.

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