UBS Journal of Economics and Business
e-ISSN: 2774-7042 p-ISSN: 2302-8025
Vol. 15 No. 3 June 2026

The Effect of ESG Disclosure and Firm Size on Firm Value: An Analysis Using Tobin's Q as a Market Value Proxy Moderated by Financial Performace

Darfin Go Arianto*, Sofie
Universitas Trisakti, Indonesia
Email: 123012504012@std.trisakti.ac.id*, sofie@trisakti.ac.id

Keywords:
Environmental; Social; and Governance (ESG); Firm Value; Tobin's Q

Abstract

This study aims to examine the effect of Environmental, Social, and Governance (ESG) performance and firm size on firm value, proxied by Tobin's Q, among energy sector companies in Indonesia, with profitability serving as a moderating variable and leverage and firm age included as control variables. The study employed a quantitative approach using panel data from 91 energy sector companies listed on the Indonesia Stock Exchange during the 2021–2024 period, resulting in a total of 212 observations. The data were analyzed using panel data regression, with the most appropriate model selected through the Chow, Hausman, and Lagrange Multiplier tests, indicating that the common effect model was the best-fitting model. The findings reveal that ESG has a negative and significant effect on firm value, while firm size has a positive and significant effect on firm value. Furthermore, profitability was found to strengthen the relationship between ESG and firm value but weaken the effect of firm size on firm value. These findings suggest that ESG practices have not yet been fully appreciated by the market within Indonesia's energy sector and only generate added value when supported by strong financial performance. This study provides both theoretical and practical implications for corporate management, investors, and regulators in understanding the role of ESG in firm value creation.

INTRODUCTION

ESG ratings provided by institutions such as Refinitiv, Bloomberg, and MSCI are increasingly utilized by investors to assess corporate sustainability performance through Environmental, Social, and Governance (ESG) scores, which subsequently influence investment decisions and market valuation (Aydoğmuş et al., 2022). In Southeast Asia, particularly in Indonesia, ESG scores have increasingly been adopted in both academic research and capital market practices (Danila, 2026; Setiani et al., 2024; Syahputri et al., 2025; Tulya et al., 2025; Zakaria et al., 2025; 박주현, 2025). However, given the relatively recent adoption of ESG frameworks in the region, their impact on firm value remains a subject of ongoing debate (Sukaryono, 2025).

From the perspective of modern financial theory, firm value is shaped by a company's ability to create long-term value, manage risk effectively, and maintain legitimacy among stakeholders (Bani-Khaled et al., 2025; Hossain et al., 2024; Huang, 2022; Moridu, 2023; Salas-Paramo & Escandon-Barbosa, 2025; Tan et al., 2025). Tobin's Q is widely employed as a proxy for market value because it reflects the extent to which a firm's market valuation

exceeds or falls below the book value of its assets, thereby providing a relevant measure for assessing whether the market values ESG practices (Aydoğmuş et al., 2022). ESG performance and disclosure are commonly perceived as signals of managerial quality, risk management capability, and long-term corporate commitment, which may reduce the cost of capital and enhance firm value (Abdi et al., 2022).

Although numerous studies have documented a positive relationship between ESG performance or disclosure and Tobin's Q, empirical findings remain inconclusive (Abdelmoneim & El-Deeb, 2024; Carnini Pulino et al., 2022; Del Gesso & Lodhi, 2025; Moharram et al., 2026; Pu, 2023). Aydoğmuş et al. (2022), in a study involving 1,720 global companies, found that the ESG combined score had a positive and significant effect on Tobin's Q (coefficient = 0.008, $p < 0.01$), whereas the environmental score showed no significant effect. Several studies have reported a positive relationship between ESG and firm value in countries such as China, Germany, and Malaysia, as well as across specific industries; however, the significance of individual ESG pillars varies, with some studies identifying governance or environmental dimensions as the dominant drivers (Aydoğmuş et al., 2022). Conversely, other studies have found insignificant or even negative relationships between ESG scores and Tobin's Q (Abdi et al., 2022).

Empirical evidence from Indonesia and Southeast Asia also demonstrates mixed findings. Sukaryono (2025), in a study of 80 companies listed on the Indonesia Stock Exchange, confirmed that ESG had no significant effect on ROA, ROE, or Tobin's Q. While some studies suggest that ESG performance or ESG disclosure positively influences Tobin's Q, others report insignificant or even negative effects of overall ESG performance, with varying contributions across the environmental, social, and governance pillars (Sukaryono & Tasrim, 2023). More recent studies have incorporated moderating variables such as firm size and financial performance (ROA/ROE), with findings indicating that these factors may either strengthen or weaken the relationship between ESG and firm value (Abdi et al., 2022; Sudiyatno et al., 2021). These inconsistencies highlight an important research gap, emphasizing the need for a more comprehensive analysis of whether and how ESG scores affect firm value, as measured by Tobin's Q, within the Indonesian context while considering firm size and corporate financial performance as moderating factors (Aydoğmuş et al., 2022; Sudiyatno et al., 2021).

The novelty of this research lies in three aspects: first, the simultaneous examination of ESG and firm size as independent variables affecting firm value; second, the analysis of profitability as a moderating variable in both relationships; and third, the focus on the Indonesian energy sector, which is characterized by high asset intensity and substantial environmental compliance costs. This study employs a GRI-based ESG measurement framework and Tobin's Q as a firm value proxy, providing a comprehensive analytical approach.

The energy sector was selected due to its substantial exposure to environmental and sustainability issues, as well as its financial characteristics, which require prudent cash flow management in response to energy price fluctuations and significant capital investment demands.

Recent developments in Indonesia indicate that ESG implementation has become increasingly important among publicly listed companies, particularly in environmentally

sensitive sectors such as energy. According to the Indonesia Stock Exchange (IDX), the number of companies participating in sustainability reporting and ESG-related disclosures has increased significantly following the implementation of POJK No. 51/POJK.03/2017 concerning Sustainable Finance. Furthermore, ESG-based investment products and sustainability indices such as the IDX ESG Leaders Index have gained growing attention from institutional investors. Despite this increasing emphasis on sustainability practices, the market response toward ESG initiatives remains inconsistent. Several energy companies continue to face environmental controversies, transition risks, and high compliance costs associated with ESG implementation, raising questions regarding whether ESG activities are genuinely perceived by investors as value-enhancing mechanisms or merely as additional operational expenses. This phenomenon highlights the importance of examining the relationship between ESG performance and firm value within Indonesia's energy sector.

METHOD

Data and Sample

This study employed a causal research design using quantitative data derived from companies' financial statements and sustainability reports. Secondary data were collected from 91 energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2024 period, sourced from annual reports and sustainability reports.

This study utilized panel data regression analysis as the primary analytical approach. The analysis involved estimating three panel regression models, namely the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). Subsequently, the most appropriate regression model was selected based on the results of the Chow test, Hausman test, and Lagrange Multiplier test. After determining the optimal regression model, classical assumption tests were conducted, followed by hypothesis testing.

Dependent Variable

The dependent variable refers to the variable influenced by one or more independent variables. In this study, the dependent variable is firm value, measured using Tobin's Q. Tobin's Q was calculated by comparing a company's market equity value with its book equity value. The use of Tobin's Q as a proxy for firm value is justified by its ability to determine whether a company is overvalued or undervalued in the market (Aydoğmuş et al., 2022).

Independent Variables

Environmental, Social, and Governance (ESG)

The first independent variable in this study is Environmental, Social, and Governance (ESG). ESG was measured using the Global Reporting Initiative (GRI) Index disclosure framework, whereby the ESG score was calculated by comparing the total number of disclosures made by a company against the disclosure standards established in the GRI Index, consisting of 93 indicators. Previous studies, such as Aydoğmuş et al. (2022), generally relied on ESG disclosure data obtained from independent institutions providing sustainability assessments. However, the GRI Index was selected in this study because it offers a more comprehensive and structured framework for capturing corporate environmental, social, and governance dimensions.

Firm Size

The second independent variable is firm size. Larger firm size indicates stronger managerial capacity to mitigate risk and generate higher returns. In this study, firm size was measured using the natural logarithm of total assets (Handini & Susilo, 2025).

Moderating Variable

The moderating variable in this study is company performance, proxied by profitability, which is expected to strengthen the relationship between ESG disclosure and firm size on firm value. Higher company performance may encourage greater disclosure practices and facilitate firm expansion through accumulated profits, thereby enhancing firm value. Profitability was measured by comparing net income for the current year to total assets in the corresponding year, commonly referred to as Return on Assets (ROA).

Control Variables

This study incorporates two control variables, namely leverage and firm age.

The first control variable is leverage, which was measured by comparing total debt in the current year to total assets during the same period (Nurwulandari & Wibowo, 2021). This measure reflects the extent to which a company relies on debt financing in its capital structure.

The second control variable is firm age, measured by calculating the number of years a company has operated from its establishment until the year of observation (Abdi et al., 2022). Firm age was included to account for the potential influence of corporate maturity and accumulated business experience on firm value.

Variable Measurement

Table 1. Operational Definitions and Measurement of Research Variables

Variabel	Symbol	Measurement
Firm Value	TOBINSQ	$\frac{Market\ Value\ Equity}{Book\ Value}$
ESG Score	ESG	$\frac{Total\ Disclosure}{Total\ GRI\ Index\ (93\ item)}$
Size	SIZE	Ln(Total Aset)
Profitability	ROA	$\frac{Net\ Income}{Total\ Asset}$
Leverage	DAR	$\frac{Total\ Debt}{Total\ Asset}$
Age	AGE	Age of Companies' listed

Regression Model

A regression model is an econometric equation used to examine and understand the relationship between independent variables and a dependent variable. In this study, the proposed regression model is specified as follows:

$$FV = \beta_0 + \beta_1 ESG + \beta_2 SIZE + \beta_3 ESG \times ROA + \beta_4 SIZE \times ROA + \beta_5 DAR + \beta_6 AGE + e$$

Where:

FV = Firm Value (Tobin's Q)

ESG = Environmental, Social, and Governance Score

SIZE = Firm Size
ROA = Profitability (Return on Assets)
DAR = Debt-to-Asset Ratio (Leverage)
AGE = Firm Age
ε = Error term
i = Cross-sectional unit (company)
t = Time period

The regression equation above reflects the relationship between firm value and ESG, firm size, the interaction effects of profitability as a moderating variable, and the control variables. The estimation was conducted using panel data models, namely the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The most appropriate model was selected based on the results of the Chow test, Hausman test, and Lagrange Multiplier (LM) test.

Furthermore, the model accommodates differences in firm-specific characteristics and enables valid estimation despite the unbalanced structure of the panel dataset.

RESULTS AND DISCUSSION

This section presents the empirical findings based on data from 91 energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2024 period. The selected period and sample were determined based on data availability and their relevance to the objectives of the study. The resulting panel dataset was employed to examine the effects of ESG and firm size on firm value, as well as the moderating role of profitability, while incorporating control variables to improve the robustness of the estimation model.

Descriptive Statistics

Table 2. Descriptive Statistics of ESG, Firm Value, Profitability, and Control Variables

Variables	*Observations*	*Mean*	*Maximum*	*Minimum*	*Std. Dev.*
TOBINSQ	212	1.688	48.676	0.028	4.858
ESG	212	0.391	0.871	0.000	0.217
SIZE	212	28.892	32.765	22.077	1.924
ROA	212	0.064	0.603	-3.540	0.282
DAR	212	0.485	2.418	0.021	0.335
AGE	212	11.778	34.000	-1.000	9.602

Source: EViews Output (2025)

Based on the descriptive statistics presented above, this study utilized 212 observations from energy sector companies in Indonesia. Firm value, proxied by Tobin's Q, recorded an average value of 1.688, indicating that, on average, energy companies exhibit market valuations exceeding their book values. However, the substantial difference between the

maximum value (48.676), minimum value (0.028), and the relatively high standard deviation (4.858) suggests considerable variation in market valuation across firms, reflecting heterogeneity in corporate performance and growth prospects within the energy sector.

The ESG variable reported an average score of 0.391, indicating a moderate level of ESG disclosure among energy companies. The minimum value of 0.000 and maximum value of 0.871 demonstrate varying levels of corporate commitment to sustainability practices, while the standard deviation of 0.217 suggests sufficient variability in ESG disclosure to justify further examination of its influence on firm value.

Firm size (SIZE) exhibited an average value of 28.892, indicating the predominance of medium- to large-sized firms within the energy sector. The relatively narrow range of values and standard deviation of 1.924 imply that firm size is relatively homogeneous across the sample, consistent with the capital-intensive characteristics of the energy industry.

Profitability, proxied by Return on Assets (ROA), had an average value of 0.064, reflecting firms' ability to generate profits from their assets. The maximum value of 0.603, minimum value of −3.540, and standard deviation of 0.282 indicate substantial variation in profitability among firms, supporting its relevance as a moderating variable in the relationship between ESG, firm size, and firm value.

As control variables, the Debt-to-Asset Ratio (DAR) recorded an average value of 0.485, indicating that nearly half of firms' assets were financed through debt, with considerable variation in leverage across companies. Meanwhile, firm age (AGE) showed an average value of 11.778 years, suggesting that most energy firms in the sample are relatively mature companies, although substantial variation in firm age remains evident.

Overall, the descriptive statistics demonstrate adequate variability across all research variables, indicating that the dataset is appropriate for examining the effects of ESG and firm size on firm value, as well as the moderating role of profitability, while controlling for leverage and firm age.

Empirical Results

Based on the panel model selection tests, including the Chow test, Hausman test, and Lagrange Multiplier (LM) test, the Common Effect Model (CEM) was identified as the most appropriate estimation model. Accordingly, the empirical interpretation is based on the CEM estimation results presented in the Common Effect Model Estimation Table. Nevertheless, Fixed Effect Model (FEM) and Random Effect Model (REM) estimations were also conducted as robustness checks to assess the consistency of the empirical findings across alternative panel specifications. The estimation results generally demonstrated consistent coefficient directions, thereby supporting the robustness of the findings. The model was employed to examine the effects of ESG and firm size on firm value, proxied by Tobin's Q, with profitability serving as a moderating variable and leverage (DAR) and firm age (AGE) included as control variables.

Common Effect Model (CEM) Estimation Results

Table 3. Common Effect Model (CEM) Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.	one-tailed	Desicion
C	-6.206332	6.049420	-1.025938	0.3061		
ESG	-6.275526	2.144877	-2.925822	0.0038	0.0001	H_1 not supported

Variable	Coefficient	Std. Error	t-Statistic	Prob.	one-tailed	Desicion
SIZE	0.409935	0.232488	1.763251	0.0794	0.0397	H_2 supported
ESG*ROA	42.93939	8.819018	4.868953	0.0000	0.0000	H_3 supported
SIZE*ROA	-0.882822	0.110285	-8.004918	0.0000	0.0000	H_4 not supported
DAR	-1.681336	0.868554	-1.935787	0.0543		
AGE	-0.027667	0.032323	-0.855951	0.3930		
R-squared	0.346742	Mean dependent variable		1.700967		
Adjusted R-squared	0.327434	S.D. dependent variable		4.879484		
S.E. of regression	4.001670	Akaike info criterion		5.644066		
Sum squared residual	3250.713	Schwarz criterion		5.755636		
Log likelihood	-585.6269	Hannan-Quinn criterion		5.689169		
F-statistic	17.95838	Durbin-Watson statistics		1.949251		
Prob(F-statistic)	0.000000					

Source: EViews Output (2025)

Model Goodness-of-Fit

From the perspective of model adequacy, the R-squared value of 0.346742 indicates that approximately 34.67% of the variation in firm value can be explained by the variables included in the model, which may be considered moderate for panel data research. Meanwhile, the Adjusted R-squared value of 0.327434 suggests that the model remains relatively stable after accounting for the number of explanatory variables.

Furthermore, the F-statistic value of 17.95838 with a probability value of 0.0000 indicates that the model is statistically significant as a whole. The Durbin–Watson statistic of 1.949251 further suggests the absence of serious autocorrelation issues, indicating that the model satisfies an important assumption of regression analysis.

The Effect of ESG on Firm Value

The estimation results indicate that ESG has a negative coefficient of −6.275526 and is statistically significant at the 5% significance level (one-tailed *p*-value = 0.0001). Therefore, H_1 is not supported, indicating that higher ESG disclosure is negatively associated with firm value. Empirically, this finding suggests that ESG disclosure among energy sector firms in Indonesia has not yet contributed to enhancing firm value, contrary to the expectations of Stakeholder Theory and Signalling Theory.

This finding is consistent with the studies of Sukaryono (2025) and Abdi et al. (2022), which reported that ESG may exert either a negative or insignificant effect on firm value, particularly in industries characterized by high asset intensity and substantial environmental compliance costs. Within the energy sector, ESG implementation frequently requires significant capital expenditures and may exert downward pressure on short-term profitability. As a result, investors may perceive ESG initiatives more as a cost burden than a value driver.

Consequently, the Indonesian capital market appears not to have fully incorporated ESG disclosure into firm valuation premiums within the energy sector.

The Effect of Firm Size on Firm Value

The firm size (SIZE) variable exhibits a positive coefficient of 0.409935 and is statistically significant at the 5% significance level (one-tailed *p*-value = 0.0397). Accordingly, H_2 is supported, indicating that firm size positively affects firm value. This finding suggests that larger energy companies tend to possess higher market valuations than smaller firms.

The result is consistent with the Resource-Based View and the empirical findings of Handini and Susilo (2025), which argue that larger firms benefit from superior access to financing, greater risk diversification, and stronger market visibility. In the capital-intensive energy sector, asset scale serves as an important signal of financial strength and operational stability, which is positively valued by investors and reflected in higher Tobin's Q values.

The Moderating Role of Profitability in the Relationship Between ESG and Firm Value

The estimation results indicate that the interaction variable between profitability and ESG exhibits a positive and statistically significant coefficient (coefficient = 42.939390, *p*-value = 0.0000). Accordingly, H_3 is supported, suggesting that profitability strengthens the effect of ESG on firm value.

This finding supports Slack Resources Theory and Stakeholder Theory, which posit that firms with stronger financial performance possess greater capacity to implement and communicate ESG practices effectively. In profitable energy firms, ESG initiatives are no longer perceived merely as a cost burden but rather as signals of managerial quality, long-term sustainability, and effective corporate governance, thereby generating more favorable market responses. This finding is consistent with Aydoğmuş et al. (2022) and Sudiyatno et al. (2021), who argue that ESG becomes more valuable when supported by strong financial performance.

These results further suggest that profitability serves as an important enabling mechanism through which ESG practices are translated into firm value. In the context of Indonesia's energy sector, firms with stronger profitability appear to be better positioned to absorb the costs associated with ESG implementation, thereby reducing investor concerns regarding short-term financial trade-offs.

The Moderating Role of Profitability in the Relationship Between Firm Size and Firm Value

The estimation results reveal that the interaction term between firm size and profitability (SIZE × ROA) has a negative and statistically significant coefficient of −0.882822 (*p*-value = 0.0000). Therefore, H_4 is not supported, indicating that profitability weakens, rather than strengthens, the relationship between firm size and firm value.

This finding suggests that among large and highly profitable energy firms, increases in asset scale are not necessarily translated into higher market valuation. Such a condition may arise due to operational complexity, potential inefficiencies, and overinvestment risks commonly associated with larger firms. Although larger companies generally possess greater resources and market visibility, investors may perceive excessive scale expansion as reducing managerial flexibility and operational efficiency.

This finding is consistent with Abdi et al. (2022), who reported that the positive effect of firm size on firm value may diminish when firms become excessively large and complex,

particularly when market participants perceive declining efficiency and flexibility in managerial decision-making.

Discussion Summary

Overall, the findings suggest that ESG has not yet contributed directly to enhancing firm value among energy companies in Indonesia. However, ESG becomes value-enhancing when supported by strong profitability. While firm size is shown to positively influence firm value, this effect weakens among firms characterized by exceptionally large scale and high profitability.

These findings reinforce the notion that ESG should not be viewed merely as a reputational instrument but rather as a strategic mechanism whose effectiveness depends on a firm's financial capacity and industry characteristics. In capital-intensive sectors such as energy, where sustainability-related costs and operational risks are substantial, the market appears to value ESG more positively when accompanied by strong financial performance.

CONCLUSION

The empirical findings reveal that ESG has a negative and statistically significant effect on firm value, leading to the rejection of the first hypothesis. This result suggests that the Indonesian capital market, particularly within the energy sector, has not yet fully perceived ESG disclosure as a value-creating mechanism, but rather as a cost burden that may suppress short-term financial performance. Conversely, firm size is found to have a positive effect on firm value, indicating that the scale of assets and operational capacity of energy companies are positively valued by investors. Furthermore, profitability significantly strengthens the relationship between ESG and firm value, implying that ESG becomes value-enhancing when supported by strong financial performance. However, profitability weakens the relationship between firm size and firm value, suggesting that large and highly profitable firms do not necessarily receive additional valuation premiums from further expansion in asset scale. Overall, these findings highlight that ESG should not be viewed as an independent determinant of firm value, but rather as a mechanism whose effectiveness depends on financial performance and the industry-specific characteristics of Indonesia's energy sector.

Future research should address several directions. First, studies should extend the observation period and broaden industry coverage to capture ESG dynamics and firm value more comprehensively. Second, future research may disaggregate ESG into its environmental, social, and governance dimensions to identify which pillar exerts the greatest influence on firm value. Third, alternative firm value proxies, such as price-to-book value (PBV) or the market-to-book ratio, may be employed as robustness tests. Fourth, further studies may incorporate institutional variables, corporate governance quality, or institutional ownership as moderating or mediating variables to enrich understanding of the mechanisms through which ESG influences firm value in emerging markets. Additionally, future research should examine the long-term effects of ESG implementation on firm value, particularly in the context of Indonesia's energy transition and the growing emphasis on sustainable development. Finally, comparative studies with other emerging and developed economies would provide valuable insights into the contextual factors that shape the relationship between ESG and firm value.

REFERENCE

Abdelmoneim, Z., & El-Deeb, M. S. (2024). BOD characteristics and their impact on the link between ESG disclosure and integrated reporting disclosure quality: a study of Egyptian non-financial firms. *Future Business Journal*, *10*(1), 18.

Abdi, Y., Li, X., & Càmara, X. (2022). Exploring the impact of sustainability (ESG) disclosure on firm value and financial performance in the airline industry: The moderating role of size and age. Environment, Development and Sustainability, 24(4), 5052–5079. https://doi.org/10.1007/s10668-021-01649-w

Aydoğmuş, M., Gülay, G., & Ergun, K. (2022). Impact of ESG performance on firm value and profitability. Borsa Istanbul Review, 22(2), 119–127. https://doi.org/10.1016/j.bir.2022.11.006

Bani-Khaled, S., Azevedo, G., & Oliveira, J. (2025). Environmental, social, and governance (ESG) factors and firm value: A systematic literature review of theories and empirical evidence. *AMS Review*, *15*(1), 228–260.

Carnini Pulino, S., Ciaburri, M., Magnanelli, B. S., & Nasta, L. (2022). Does ESG disclosure influence firm performance? *Sustainability*, *14*(13), 7595.

Danila, N. (2026). Do ESG factors matter? An analysis of abnormal stock returns in ASEAN-5 countries. *Asian Journal of Accounting Research*, 1–17.

Del Gesso, C., & Lodhi, R. N. (2025). Theories underlying environmental, social and governance (ESG) disclosure: a systematic review of accounting studies. *Journal of Accounting Literature*, *47*(2), 433–461.

Handini, E. D., & Susilo, D. E. (2025). Analyzing profitability, firm size, and capital structure's impact on firm value. Journal of Accounting Science, 9(1). https://doi.org/10.21070/jas.v9i1.1953

Hossain, M. Z., Hasan, L., & Hasan, M. H. (2024). Corporate governance as a global phenomenon: evolution, theoretical foundations, and practical implications. *Journal of Financial Risk Management*, *13*(2), 342–375.

Huang, D. Z. (2022). Environmental, social and governance factors and assessing firm value: Valuation, signalling and stakeholder perspectives. *Accounting & Finance*, *62*, 1983–2010.

Indonesia Stock Exchange. (2024). IDX ESG Leaders Index methodology. Indonesia Stock Exchange.

Moharram, A. H., Alahdal, W. M., Adnan, S. M., Hussainey, K., & Hashim, H. A. (2026). The effect of ESG disclosure on firm performance: Does earnings management matter? *Business Strategy and the Environment*.

Moridu, I. (2023). The role corporate governance in managing financial risk: a qualitative study on listed companies. *The ES Accounting And Finance*, *1*(03), 176–183.

Nurwulandari, A., & Wibowo, Y. (2021). Effect of liquidity, profitability, firm size on firm value with capital structure as intervening variable. ATESTASI: Jurnal Ilmiah Akuntansi, 4(2), 257–271.

Pu, G. (2023). A non-linear assessment of ESG and firm performance relationship: evidence from China. *Economic Research-Ekonomska Istraživanja*, *36*(1).

Salas-Paramo, J., & Escandon-Barbosa, D. (2025). Balancing growth and risk: how family firms shape value creation and avoid value loss over time. *Journal of Family Business Management*, *15*(4), 978–999.

Setiani, E. P., Dewanti, P. W., & Cortez, E. (2024). ESG scores, financial performance, and carbon emissions: evidence from Southeast Asian companies. *Nominal: Barometer Riset Akuntansi Dan Manajemen*, *13*(2), 227–238.

Sudiyatno, B., Puspitasari, E., Nurhayati, I., & Rijanti, T. (2021). The relationship between profitability and firm value: Evidence from manufacturing industry in Indonesia.

International Journal of Financial Research, 12(3). https://doi.org/10.5430/ijfr.v12n3p466

Sukaryono, B., & Tasrim. (2023). ESG disclosure dan implikasinya terhadap ROA, ROE, dan Tobin's Q: Studi perusahaan terdaftar di BEI. Jurnal Akuntansi, Ekonomi dan Manajemen Bisnis, 5(1), 269–276. https://doi.org/10.55606/jaemb.v5i1.607

Syahputri, A., Asyitiyani, M. K., & Nurmayanti, R. (2025). ESG Reporting and Market Capitalization in Asia: The Role Of National Cultural Values. *Jurnal Akuntansi Dan Keuangan Indonesia*, *22*(2), 3.

Tan, W., Guo, B., & Zhang, Q. (2025). Cybersecurity governance and corporate market value: Perspectives from investor trust and supply chain trust. *Pacific-Basin Finance Journal*, *90*, 102646.

Tulya, S. C., Wijaya, L. A., & Angelus, M. (2025). Shaping Sustainability in Southeast Asia: How ESG Scores, Supply Chain Practices, and Gender-Diverse Boards Drive Investment Decisions. *International Journal of Sustainable Development & Planning*, *20*(3).

Zakaria, N. B., Ahmad, R. A. R., Sarman, S. R., Aminurrashid, W. I. D., & Bakar, Z. A. (2025). Comparative Analysis of ESG Performance among ASEAN Firms: Evidence from Malaysia, Singapore, Thailand, and Indonesia. *International Journal of Research and Innovation in Social Science (IJRISS)*, *9*(10).

박주현. (2025). *Strategic Necessity of ESG implementation in Southeast Asia*. 서울대학교 대학원.