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THE 2ND INTERNATIONAL CONFERENCE
ACCOUNTING, MANAGEMENT, ECONOMICS, UNISKA
E-ISSN 3089-1566
Proceeding Accounting, Management, Economics Uniska **Volume 2, 2025, pp 524-533**
"The Role of Research in Economics, Management, Accounting to Realizing Sustainable Development"

Analyzing the Impact of ESG Disclosure on the Cost of Capital

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ABSTRACT

This study examines the influence of Environmental, Social, and Governance (ESG) disclosure on the cost of capital among energy sector companies listed on the Indonesia Stock Exchange during 2021–2024. The research is grounded in stakeholder and legitimacy theories, emphasizing that transparent ESG practices enhance investor confidence and reduce perceived risk. Employing a quantitative approach with secondary data, the study utilizes panel data regression through STATA 17, with model selection based on the Chow and Lagrange Multiplier tests. The findings reveal that social disclosure significantly reduces the cost of capital, indicating that enhanced transparency in social responsibility strengthens stakeholder trust and financing efficiency. Conversely, environmental and governance disclosures exhibit statistically insignificant effects, suggesting that these dimensions require integration with broader sustainability strategies to yield measurable financial benefits. The study contributes to the growing discourse on sustainability finance in emerging markets by providing empirical evidence from Indonesia's energy sector. The results underscore the importance for corporations and regulators to prioritize social disclosure while improving environmental and governance reporting standards aligned with international frameworks to enhance capital cost efficiency and long-term financial resilience.

INTRODUCTION

The cost of capital is a key indicator that reflects investors' and creditors' perceptions of a company's risk, thus serving as a critical determinant in strategic decisions related to investment and financing structures (Brealey et al., 2023) . In the context of Indonesia's energy sector, the cost of capital plays an increasingly strategic role, as this sector faces specific challenges such as commodity price volatility, environmental regulatory risks, and energy transition pressures that influence investor risk perceptions (Franc-Dabrowska et al., 2021).

The cost of capital is measured using the Weighted Average Cost of Capital (WACC), which combines the cost of debt and the cost of equity based on the proportion of each financing source within the company's capital structure (Gholami et al., 2023). Efficiency in managing the cost of capital is an indicator of an energy company's ability to access financing sources optimally, particularly in the face of large investment needs for energy infrastructure projects and sustainability initiatives, which are increasingly becoming capital market priorities (Priem et al., 2024).

In the context of ESG disclosure, the cost of capital becomes particularly relevant because effective disclosure tends to reduce investors' and creditors' perceived risk. Investors now consider sustainability as an integral component of the risks and opportunities faced by companies. Consequently, firms that demonstrate high ESG transparency tend to experience a lower cost of capital, as risks are perceived to be more controlled and management quality is viewed as superior (Kiran et al., 2024). This is because ESG disclosure helps mitigate uncertainty related to environmental, social, and governance

E-ISSN 3089-1566
Proceeding Accounting, Management, Economics Uniska **Volume 2, 2025, pp 524-533**

risks that are not directly reflected in traditional financial statements, thus affecting investor return expectations and the cost of funds (Dwomor et al., 2024) . Therefore, a thorough understanding of the cost of capital in relation to ESG disclosure will provide a comprehensive picture of how sustainability practices can contribute to financing efficiency and company competitiveness in the capital market (Tawfiq et al., 2024).

Data on ESG disclosure trends among energy companies in Indonesia show a consistent increase during the 2021–2024 period. In 2021, only 45 companies published sustainability reports, with environmental disclosure reaching 50%, social disclosure at 42%, and governance disclosure at 30% (Climate Transparency, 2024). In 2022, the proportion of published reports rose to 57%, followed by environmental disclosure at 63%, social disclosure at 48%, and governance disclosure at 46%. 2023 recorded a further jump to 68% for published reports, with environmental disclosure at 75%, social disclosure at 55%, and governance disclosure at 60% (Otoritas Jasa Keuangan (OJK), 2023) . In 2024, overall disclosure reached 80%, with environmental disclosure at 85%, social disclosure at 68%, and governance disclosure at 72% (Institute for Essential Services Reform (IESR), 2024) . This increase reflects regulatory pressure from the Financial Services Authority (OJK) and the Indonesian Stock Exchange (IDX) for corporate transparency, as well as increasing institutional investor interest in sustainable portfolios (World Bank – Energy Sector Management Assistance Program (ESMAP), 2023).

However, in practice, energy companies in Indonesia often face unique challenges. From an environmental perspective, the measurement of greenhouse gas emissions and energy consumption is still not standardized, resulting in varied methodologies between companies that complicate comparisons of environmental performance (Wijaya et al., 2024). On the social side, corporate social responsibility (CSR) programs tend to be ad hoc with limited coverage of local communities, thus not reflecting a holistic approach to stakeholders (Rakhmawati et al., 2024) . Meanwhile, governance disclosures often focus primarily on regulatory compliance without detailing ESG risk management mechanisms, such as sustainability-linked remuneration policies or the composition of independent boards (Nanda et al., 2025) . This situation demands a uniform reporting framework in accordance with global standards (SASB or GRI) and regulatory support from the Otoritas Jasa Keuangan (OJK) to improve the quality and consistency of ESG data in the Indonesian energy sector (Wijaya et al., 2024).

A review of global literature and the Indonesian context reveals a significant research gap concerning the impact of ESG disclosure on the cost of capital in the national energy sector. Most international studies focus on multinational companies with established reporting infrastructure, while domestic studies are still limited to small-scale descriptive analyses and have not utilized longitudinal quantitative data. In Indonesia, only a few empirical studies have evaluated the relationship between ESG disclosure and financial variables such as WACC or bond yields of energy companies, despite the sector facing unique environmental regulatory risks and commodity price fluctuations (Kunaifi et al., 2025) . Furthermore, most local studies still use the 2016 GRI framework without considering the 2021 GRI Standards update, which emphasizes thematic materiality and risk integration in reporting, thus failing to capture the materiality characteristics of the energy sector (Global Reporting Initiative, 2021) . Therefore, this study attempts to fill this gap by conducting an empirical analysis focused on the energy sector on the IDX, exploring how

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Proceeding Accounting, Management, Economics Uniska **Volume 2, 2025, pp 524-533**
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ESG disclosure affects the cost of capital and the extent to which financial performance and regulations strengthen this relationship (Koutoupis et al., 2025).

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Stakeholder Theory

Stakeholder theory, developed by Freeman (1984) , posits that companies must account for the interests of multiple stakeholder groups rather than focusing solely on shareholders. These stakeholders include investors, creditors, employees, communities, and the broader environment. Within the ESG context, firms are expected to disclose information transparently to align with stakeholder expectations and mitigate perceived risks among investors and creditors (Gholami et al., 2023; Zhang et al., 2023).

Legitimacy Theory

Legitimacy theory highlights the importance of achieving and maintaining social legitimacy, which organizations obtain through alignment with prevailing societal norms, values, and expectations (Suchman, 1995) . ESG disclosure functions as a strategic mechanism to demonstrate such alignment, thereby enhancing stakeholder trust and mitigating uncertainty associated with risk perceptions (Amarna et al., 2024) . Firms that sustain legitimacy are likely to experience reduced costs of capital and improved financing access (Jedidyah et al., 2025).

Empirical Study

Empirical research across various countries has produced mixed findings but generally supports that higher-quality ESG disclosure is associated with lower cost of capital. Gholami et al. (2023) reported a significant negative relationship between ESG disclosure scores and both cost of capital and idiosyncratic risk, indicating that enhanced ESG transparency strengthens risk management efficiency. These findings highlight the strategic role of ESG in shaping investor confidence and financing efficiency. Priem et al. (2024) stated that companies with high ESG scores tend to have lower cost of capital, especially in countries with weak legal environments. In Indonesia, Franc-Dabrowska et al. (2021) showed the importance of the energy sector, which has high exposure to environmental and social risks, making ESG disclosure a critical factor influencing a company's cost of capital.

Environmental Disclosure and Cost of Capital

The environmental disclosure captures how firms manage ecological impacts, including energy consumption, emissions, and waste reduction (Jafar et al., 2024) . Transparent environmental disclosure reporting enhances investor confidence and reduces the cost of capital (Kiran et al., 2024) . Flammer (2021) further found that such disclosure mitigates risks associated with climate change and environmental regulation, reinforcing its role in improving financing conditions.

H1: Environmental disclosure has a negative impact on the cost of capital.

Social Disclosure and Cost of Capital

The social disclosure encompasses employee welfare, workplace safety, human rights, and community engagement (Mohammad et al., 2021). Transparent social reporting signals

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ethical and responsible practices, fostering investor confidence and reducing financing costs (Aich et al., 2021). Studies in ASEAN show that clear social disclosure can reduce investor uncertainty and lower a company's cost of capital. Therefore, social disclosure has the potential to lower the cost of capital by increasing credibility and stakeholder confidence.

H2: Social disclosure has a negative effect on the cost of capital.

Governance Disclosure and Cost of Capital

The governance component of ESG disclosure focuses on transparency in management structure, board oversight, and shareholder relations. Strong governance disclosure demonstrates ethical leadership and accountability, which reduce perceived risk and support lower capital costs. According to (Khanchel et al., 2022), transparent governance practices enhance investor trust and financial stability.

H3: Governance disclosure has a negative effect on the cost of capital.

METHODS

This study adopts a quantitative research design utilizing secondary data analysis. The sample was selected through a purposive sampling technique, focusing on energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2024 period. The data were obtained from publicly available financial statements and sustainability reports (Koutoupis et al., 2025). All data were analyzed using quantitative statistical methods with the support of STATA 17 software.

To empirically assess the influence of ESG disclosure dimensions on the cost of capital, this study employs a multiple panel data regression model. The model aims to estimate the extent to which each ESG dimension environmental, social, and governance—affects variations in the cost of capital. The general form of the regression equation is expressed as follows:

$$\mathrm{COC}_{it} = \alpha + \beta_1 \mathrm{ENV}_{it} + \beta_2 \mathrm{SOC}_{it} + \beta_3 \mathrm{GOV}_{it} + \varepsilon_{it}$$

Explanation of Variables:

COC_{it} = Cost of Capital of firm *i* at time *t*
ENV_{it} = Environmental disclosure score
SOC_{it} = Social disclosure score
GOV_{it} = Governance disclosure score
α = Constant term
β_1, β_2, β_3 = Regression coefficients representing the influence of each disclosure dimension
ε_{it} = Error term

The research variables constitute the core analytical framework of this study, designed to examine the relationship between Environmental, Social, and Governance (ESG) disclosure and the cost of capital among energy sector companies .

1. Cost of Capital
   WACC=(E/V×Re)+(D/V×Rd×(1−T))
   The cost of capital represents the rate a company must pay to acquire financing from debt and equity sources, reflecting the minimum return required by investors as compensation for risk (Arditiyan et al., 2025). It consists of two primary components—

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cost of debt and cost of equity—which are proportionally weighted to derive the Weighted Average Cost of Capital (WACC), serving as a comprehensive measure of a firm's average financing cost. Cost of capital is a crucial factor in investment and financing decision-making, as companies that are able to reduce capital costs will have a competitive advantage in access to funding and company value.

2. Environmental

   $$\text{Environmental Score} = \frac{\text{Number of Environmental items disclosed}}{\text{Total Environmental items}} \times 100\%$$

   The environmental disclosure dimension represents a critical aspect of sustainability reporting, designed to enhance transparency regarding the environmental consequences of corporate operations. Based on the Global Reporting Initiative (2021) , this disclosure includes information on greenhouse gas emissions, waste management, energy consumption, and resource conservation. Previous research in Indonesia's energy sector indicates that higher levels of environmental disclosure are associated with lower perceived risk among investors and creditors, ultimately leading to a reduction in the company's cost of capital. Complete and transparent disclosure not only helps companies comply with increasingly stringent environmental regulations but also enhances the company's image among stakeholders, positively impacting sustainability and funding efficiency.

3. Social

   $$\text{Social Score} = \frac{\text{Number of Social items disclosed}}{\text{Total Social items}} \times 100\%$$

   The social disclosure component of sustainability reporting highlights a company's transparency in fulfilling its social responsibilities toward employees, communities, and broader stakeholder groups. This includes reporting on employee welfare, human rights protection, workforce development, social inclusion, and community engagement (Kanchana et al., 2023) . In the context of Indonesia's energy sector, comprehensive social disclosure can enhance investor confidence by signaling the company's commitment to responsible business conduct and stakeholder welfare (Mohammad et al., 2021; Pratiwi et al., 2024) . Therefore, holistic management and reporting of social aspects are key to an effective sustainability strategy to support a company's competitiveness and sustainability.

4. Governance

   $$\text{Governance Score} = \frac{\text{Number of Governance items disclosed}}{\text{Total Governance items}} \times 100\%$$

   The governance disclosure aspect plays a vital role in sustainability reporting as a mechanism for demonstrating management integrity, transparency, and accountability. Effective disclosure of governance policies—such as board structure, executive remuneration, and anti-corruption commitments—can reduce perceived managerial risks and build investor trust. According to (Khalid et al., 2022) firms with transparent governance practices tend to exhibit a lower cost of capital, reflecting stronger investor confidence and better risk control. Disclosure of anti-corruption commitments, board structures, and clear internal oversight mechanisms contribute to reducing uncertainty faced by companies, thereby increasing funding efficiency and reducing the overall cost of capital.

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The empirical analysis utilized panel data regression, with model specification determined through the Chow test, Hausman test, and Lagrange Multiplier test to identify the most suitable model. The chosen model was applied to analyze the relationship between ESG disclosure and the cost of capital. Subsequently, hypothesis testing was performed to evaluate the direction and significance of the independent variables' effects on the dependent variable (Dwomor et al., 2024; Priem et al., 2024).

RESULTS

The analytical process was conducted through several systematic stages. The results of these stages are comprehensively presented in the subsequent tables, each accompanied by detailed interpretations and explanations to provide a clearer understanding of the study's findings.

Table 1. Model Test Result

Testing	Probability	Hipothesis Result	Conclusion
Chow Test	0.6597 > 0,05	H0 accepted	Common Effect Model
Larange Multiplier Test	1.0000 > 0,05	H0 accepted	Common Effect Model

Source: *Table developed by author*

As presented in Table 1, the Chow and Lagrange Multiplier (LM) tests were employed to identify the most appropriate panel data model for this study. The Chow Test produced a probability value of 0.6597, and the LM Test yielded 1.0000—both exceeding the 0.05 significance threshold. Consequently, the null hypothesis (H_o) is accepted, confirming that the Common Effect Model (CEM) is the most suitable model for this analysis.

Table 2. Correlation Test Result

Variable	(1)	(2)	(3)
(1)Environmental	1.0000		
(2)Social	0.7679	1.0000	
(3)Governance	0.5222	0.5401	1.0000

Source: *Table developed by author*

Table 2 presents the correlation results among the independent variables. The Social variable shows a strong correlation with the Environmental variable (0.7679), whereas the Governance variable demonstrates moderate correlations with both Environmental (0.5222) and Social (0.5401) dimensions. Since all correlation coefficients remain below the 0.80 threshold, it can be concluded that multicollinearity does not exist among the independent variables, ensuring the reliability of the regression model.

Table 3. Multiple Regression Result

Variable	Coefficient	Prob.	Conclusion
Environmental	.0355074 > 0,05	0.622	Negative Effect
Social	-.1641224 > 0,05	0.033	No Effect
Governance	-.0058572 > 0,05	0.918	No Effect

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Source: *Table developed by author*

The results of the multiple regression analysis (Table 3) reveal that the Environmental variable exhibits a coefficient of 0.0355 with a p-value of 0.622, indicating an insignificant relationship with the cost of capital. The Social variable shows a coefficient of -0.1641 with a p-value of 0.033, signifying a statistically significant but negative effect on the cost of capital. Conversely, the Governance variable's coefficient (-0.0058) and p-value (0.918) suggest no significant impact. Overall, these findings imply that among the three ESG dimensions, only the Social disclosure significantly affects the cost of capital, whereas Environmental and Governance disclosures do not exhibit a meaningful influence in this model.

DISCUSSION

Prior research demonstrates that environmental disclosure is closely linked to corporate initiatives in managing ecological impacts, including energy efficiency, greenhouse gas emissions, and waste management (Jafar et al., 2024). Empirical findings further indicate that firms with transparent environmental disclosures often experience a reduced cost of capital, primarily due to lower levels of uncertainty and perceived risk among investors and creditors (Flammer, 2021; Kiran et al., 2024) . Nevertheless, the insignificant relationship observed in this study suggests that environmental disclosure alone may be insufficient to influence capital costs meaningfully. This implies that its effectiveness likely depends on complementary factors such as regulatory support, stakeholder engagement, and long-term environmental performance (Dwomor et al., 2024).

Social disclosure also represents a critical determinant in reducing the cost of capital. Transparent and well-structured social reporting enhances stakeholder confidence and minimizes perceived risks, allowing firms to access financing under more favorable conditions (Mohammad et al., 2021) . Supporting evidence suggests that effective communication of social responsibility strengthens investor relations and corporate reputation, thereby contributing to lower capital costs (Pratiwi et al., 2024) . Hence, improving the depth and credibility of social disclosures can serve as an essential strategic approach to achieving greater cost efficiency and sustainable financing.

Governance disclosure also constitutes a fundamental component in mitigating the cost of capital. Transparency in governance practices—such as board independence, ethical oversight, and effective internal control systems—plays a vital role in reducing managerial risk and enhancing investor confidence (Ghazali et al., 2020). Although this study reveals a statistically insignificant effect of governance disclosure, such findings may reflect firm-specific heterogeneity in governance quality. This outcome highlights the need to further institutionalize sustainable governance frameworks that ensure accountability, transparency, and long-term investor trust (Johnson, 2020).

CONCLUSION

This study concludes that social disclosure exerts a significant influence in reducing the cost of capital among energy sector companies listed on the Indonesia Stock Exchange during the 2021–2024 period. This result highlights the pivotal role of transparency and corporate social responsibility in enhancing investors' and creditors' perceptions of risk. In contrast, environmental and governance disclosures demonstrate statistically insignificant

effects, suggesting that their impact may depend on integration with additional contextual factors or a more holistic disclosure framework to generate a measurable reduction in the cost of capital.

This research acknowledges several limitations. First, the study focuses solely on energy sector firms within a specific time horizon, which may constrain the generalizability of the findings. Second, the ESG measurement framework employed relies on disclosure indices that might not comprehensively capture all material sustainability dimensions. Accordingly, future research should consider expanding the scope across multiple industrial sectors, extending the observation period, and integrating additional moderating or control variables such as financial performance and market volatility to enhance analytical robustness and provide broader insights.

The implications of these findings emphasize that both corporations and regulatory authorities should place strategic emphasis on strengthening social disclosure as a fundamental component of sustainability-driven financial management to optimize capital cost efficiency. Moreover, advancing the quality and consistency of environmental and governance disclosures—through alignment with international frameworks such as the GRI or SASB—can enhance corporate risk management, foster investor confidence, and facilitate sustained access to capital markets in the long term.

REFERENCES

Aich, S., Thakur, A., Nanda, D., Tripathy, S., & Kim, H.-C. (2021). Factors Affecting ESG towards Impact on Investment: A Structural Approach. *Sustainability*, *13*(19), 10868. https://doi.org/10.3390/su131910868

Amarna, K., Garde Sánchez, R., López-Pérez, M. V., & Marzouk, M. (2024). The effect of environmental, social, and governance disclosure and real earning management on the cost of financing. *Corporate Social Responsibility and Environmental Management*, *31*(4), 3181–3193. https://doi.org/10.1002/csr.2740

Aneta Rakhmawati, & Oktria Fani Rahmasari. (2024). The Disclosure of Sustainability Report in Energy and Financial Sector Companies of Indonesia and Malaysia Sharia Securities List. *Indonesian Journal of Applied Accounting and Finance*, *4*(1), 1–16. https://doi.org/10.31961/ijaaf.v4i1.14456

Arditiyan, A. K., & Purwanto, A. (2025). Pengaruh ESG terhadap Cost of Capital selama Pandemi Covid-19 dengan Kinerja Keuangan sebagai Variabel Moderasi (Studi pada Perusahaan SRI-KEHATI Tahun 2020-2023). *Owner*, *9*(2), 1304–1317. https://doi.org/10.33395/owner.v9i2.2670

Brealey, R. A. ., Myers, S. C. ., Allen, Franklin., & Edmans, Alex. (2023). *Principles of corporate finance*. McGraw Hill.

Climate Transparency. (2024). *Renewable Energy Development in Indonesia's Power Sector*. https://www.climate-transparency.org/wp-content/uploads/2024/01/Implementation-Check-Renewable-Energy-Development-in-Indonesia-2024.pdf

Dwomor, E., & Mensah, E. (2024). THE ROLE OF COST OF CAPITAL IN THE LINK BETWEEN ESG REPORTING AND FIRM PERFORMANCE. *Jurnal Akuntansi Dan Keuangan Indonesia*, *21*(2), 241–259. https://doi.org/10.21002/jaki.2024.11

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Volume 2, 2025, pp 524-533

Flammer, C. (2021). Corporate green bonds. *Journal of Financial Economics*, *142*(2), 499–516. https://doi.org/10.1016/j.jfineco.2021.01.010

Franc-Dabrowska, J., Madra-Sawicka, M., & Milewska, A. (2021). Energy sector risk and cost of capital assessment—companies and investors perspective. *Energies*, *14*(6). https://doi.org/10.3390/en14061613

Freeman, R. Edward. (1984). *Strategic management : a stakeholder approach*. Pitman.

Ghazali, A., Studi Manajemen Keuangan, P., Negeri Jakarta, P., & Studi Manajemen Keuangan Politeknik Negeri Jakarta Jl GA Siwabessy, P. D. (2020). *Pengaruh Pengungkapan Environmental, Social, and Governance (ESG) Terhadap Tingkat Profitabilitas Perusahaan (Studi pada Perusahaan Sektor Infrastruktur yang Terdaftar di Bursa Efek Indonesia)*.

Gholami, A., Sands, J., & Shams, S. (2023). Corporates' sustainability disclosures impact on cost of capital and idiosyncratic risk. *Meditari Accountancy Research*, *31*(4), 861–886. https://doi.org/10.1108/MEDAR-06-2020-0926

Global Reporting Initiative. (2021). *The Consolidated Set of GRI Sustainability Reporting Standards 2021*. https://www.globalreporting.org/standards/download-standards/

Institute for Essential Services Reform (IESR). (2024). *Indonesia Energy Transition Outlook 2024*. https://iesr.or.id/wp-content/uploads/2024/03/Indonesia-Energy-Transition-Outlook-2024-1.pdf

Jafar, R., Basuki, B., Windijarto, W., Setiawan, R., & Yaacob, Z. (2024). Environmental, social and governance (ESG) disclosure and cost of equity: the moderating effects of board structures. *Cogent Business & Management*, *11*(1). https://doi.org/10.1080/23311975.2024.2429794

Jedidyah Johan, J., & Susanto, A. (2025). *PENGUNGKAPAN ESG: APAKAH BERDAMPAK KE COST OF DEBT? ESG DISCLOSURE: DOES IT AFFECT THE COST OF DEBT? 19*(1), 1–021. https://doi.org/10.25170/jak.v19i1.5929

Johnson, R. (2020). The link between environmental, social and corporate governance disclosure and the cost of capital in South Africa. *Journal of Economic and Financial Sciences*, *13*(1). https://doi.org/10.4102/jef.v13i1.543

Kanchana, L., & Jayathilaka, R. (2023). Factors impacting employee turnover intentions among professionals in Sri Lankan startups. *PLOS ONE*, *18*(2), e0281729. https://doi.org/10.1371/journal.pone.0281729

Khalid, F., Razzaq, A., Ming, J., & Razi, U. (2022). Firm characteristics, governance mechanisms, and ESG disclosure: how caring about sustainable concerns? *Environmental Science and Pollution Research*, *29*(54), 82064–82077. https://doi.org/10.1007/s11356-022-21489-z

Khanchel, I., & Lassoued, N. (2022). ESG Disclosure and the Cost of Capital: Is There a Ratcheting Effect over Time? *Sustainability (Switzerland)*, *14*(15). https://doi.org/10.3390/su14159237

Kiran, M., Chughtai, S., Rabbani, M. R., & Aysan, A. F. (2024). ESG disclosure and cost of finance: the moderating role of managerial ownership. *Journal of Financial Reporting and Accounting*. https://doi.org/10.1108/JFRA-05-2024-0251

Koutoupis, A., Fassas, A., Nerantzidis, M., Persakis, A., & Tzeremes, P. (2025). ESG and cost of capital components: Does the legal system matter? *Journal of Accounting and Organizational Change*. https://doi.org/10.1108/JAOC-03-2024-0090

Kunaifi, A., Oktari, V., & Soewarno, N. (2025). ESG disclosure and firm sustainable growth nexus in Indonesia's emerging markets: does working capital management matter? *Asian Review of Accounting*, 1–16. https://doi.org/10.1108/ARA-03-2025-0068

Mohammad, W. M. W., & Wasiuzzaman, S. (2021). Environmental, Social and Governance (ESG) disclosure, competitive advantage and performance of firms in Malaysia. *Cleaner Environmental Systems*, *2*, 100015. https://doi.org/10.1016/j.cesys.2021.100015

Nanda, P. S., & Yandari, A. D. (2025). ANALYSIS ENVIRONMENTAL SOCIAL GOVERNANCE DISCLOSURE ON FINANCIAL PERFORMANCE IN INDONESIA. *Journal of Accounting and Financial Issue (JAFIS)*, *6*(1), 28–40. https://doi.org/10.24929/jafis.v6i1.4309

Otoritas Jasa Keuangan (OJK). (2023). *Indonesia Sustainable Finance Roadmap*. https://ojk.go.id/id/kanal/iknb/regulasi/Documents/Pages/Indonesia-Sustainable-Finance-Roadmap-2023/OJK_SustainableFinanceRoadmap_2023.pdf

Pratiwi, A. P., & Edeh, F. O. (2024). The Role of ESG Disclosure in Corporate Performance and Investment Decision-Making. *Sinergi International Journal of Accounting and Taxation*, *2*(1), 1–14. https://doi.org/10.61194/ijat.v2i1.476

Priem, R., & Gabellone, A. (2024). The impact of a firm's ESG score on its cost of capital: can a high ESG score serve as a substitute for a weaker legal environment. *Sustainability Accounting, Management and Policy Journal*, *15*(3), 676–703. https://doi.org/10.1108/SAMPJ-05-2023-0254

Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review*, *20*(3), 571–610. https://doi.org/10.5465/amr.1995.9508080331

Tawfiq, T. T., Tawaha, H., Tahtamouni, A., & Almasria, N. A. (2024). The Influence of Environmental, Social, and Governance Disclosure on Capital Structure: An Investigation of Leverage and WACC. *Journal of Risk and Financial Management*, *17*(12). https://doi.org/10.3390/jrfm17120570

Wijaya, J. R. T., & Herwiyanti, E. (2024). Extent of ESG disclosure for energy sector companies: ESG reporting guide 2.0 Nasdaq. *Jurnal Akademi Akuntansi*, *7*(4), 523–536. https://doi.org/10.22219/jaa.v7i4.30345

World Bank – Energy Sector Management Assistance Program (ESMAP). (2023). *ESMAP Annual Report 2023*. https://documents1.worldbank.org/curated/en/099509106042411301/pdf/IDU18023d7cf16c75144dc1a7431726127817933.pdf

Zhang, Q., Ding, R., Chen, D., & Zhang, X. (2023). The effects of mandatory ESG disclosure on price discovery efficiency around the world. *International Review of Financial Analysis*, *89*. https://doi.org/10.1016/j.irfa.2023.102811