

THE EFFECT OF GREEN INNOVATION, GREEN INVESTMENT, ENVIRONMENTAL PERFORMANCE, FINANCIAL PERFORMANCE, AND COMPANY AGE ON COMPANY VALUE

Fitriyati Arlyta DEWI¹, Titik ARYATI²

^{1,2}Trisakti University, Indonesia

Corresponding author: Titik Aryati

E-mail: titik_aryati@trisakti.ac.id

Volume: 6

Number: 4

Page: 647 - 657

Article History:

Received: 2025-04-08

Revised: 2025-05-10

Accepted: 2025-07-15

Abstract:

This study aims to analyze the influence of green innovation, green investment, environmental performance, financial performance, and company age on the value of companies listed on the Indonesia Stock Exchange during the 2021-2023 period. The study sample consisted of energy sector companies listed on the Indonesia Stock Exchange during that period and that had published audited annual reports. Using a purposive sampling method, 29 companies were selected as samples, resulting in a total of 87 observational data points. The data analysis method used in this study was panel data regression with data obtained from annual reports, audited financial statements, and sustainability reports. The results showed that only financial performance had a positive effect. Meanwhile, green innovation, green investment, environmental performance, and company age do not have a significant effect on company value. Furthermore, company size, as a control variable, did not affect company value. This study has several limitations that may impact the results and accuracy of the analysis.

Keywords: Green Innovation, Green Investment, Firm Performance, Firm Age, and Firm Value.

INTRODUCTION

Companies in the global energy sector now face increasing pressure to increase their corporate value through improved environmental performance as part of their commitment to environmental impact management (Ruangenergi.com). According to Erlangga et al. (2021), companies that care about the environment can gain a competitive advantage and a positive image, which ultimately influences the assessment of the company's risks and prospects by investors and financial institutions. Corporate value is a crucial indicator in the financial world because it influences investment decisions, business strategies, and resource allocation (Nuurhasanah & Haq, 2024). However, as explained by Putri & Agustin (2023), many business actors still ignore environmental aspects in pursuit of short-term economic gain, resulting in environmental damage that has widespread impacts on society.

The transition to green energy is now a key direction in the transformation of the global energy sector. Indonesia has also targeted achieving Net Zero Emissions (NZE) by 2060 (techinasia.com). This transformation not only addresses climate change but also strengthens national energy security. Liu et al. (2024) stated that green innovation not only addresses social and environmental issues but also serves as a strategy for sustainable economic growth. The commitment of companies like Medco Energi to implementing sustainable business practices demonstrates that environmental efforts can increase company value. The improvement in ESG scores and the success in maintaining transparent



emissions reporting demonstrate that a green strategy is not merely an obligation, but also a tool to strengthen competitiveness and attract investors.

Indonesia's efforts to encourage the energy transition are supported by regulations such as the National Energy General Plan (RUEN) and fiscal incentives for companies investing in the green sector (Ministry of Energy and Mineral Resources, 2020). These policies create a supportive investment climate and encourage the widespread implementation of green accounting, green innovation, and green investment. Data from *Bisnis.com* shows that in 2022, realized investment in renewable energy reached US\$1.6 billion, although still below that of the oil, gas, mineral and coal sectors. A report from the UNFCCC (2020) also confirms that Indonesia is transforming towards a low-carbon economy. Global studies even show that regulatory support, community participation, and corporate initiatives play a critical role in fostering a sustainable and competitive green ecosystem.

With increasing energy demand and global pressure to reduce emissions, companies face challenges in balancing business growth with environmental responsibility. Zhang & Zhang (2023) emphasize that strict environmental regulations are a key driver in increasing company value. However, obstacles such as limited funding and inconsistent reporting standards remain (GRI, 2021). Furthermore, previous research on the influence of green innovation, green investment, and environmental performance on company value has shown varying results, depending on the sector, company size, and national policies. Therefore, further studies are needed that consider additional variables and a more comprehensive methodological approach.

Based on the background and phenomena described, and considering the differences in previous research results, the authors are motivated to conduct further research. This study aims to examine and analyze "the influence of green innovation, green investment, environmental performance, financial performance, and company age on company value."

The legitimacy theory proposed by Dowling and Pfeffer (1975) states that a company's existence depends on the extent to which its operational activities align with prevailing social norms and values. Companies are likened to having an unwritten social contract with society, requiring them to act ethically and responsibly towards the environment. When companies fail to meet these social expectations, their legitimacy can be threatened, impacting the sustainability of their operations and their reputation.

In this context, implementing environmentally friendly practices such as green innovation and green investment is one way for companies to gain and maintain public legitimacy. For example, green innovations focused on energy efficiency, recycling, and the use of environmentally friendly materials reflect a company's concern for sustainability (Cahyaningtyas et al., 2022). Similarly, investment in clean technology or renewable energy demonstrates a company's commitment to environmental protection (Zhang & Berhe, 2022). Good environmental performance, such as achieving a high PROPER rating, provides tangible evidence that a company operates according to environmental standards (Rahmanita, 2020).

Furthermore, company age also influences perceptions of legitimacy. Companies with a long history of operation are perceived as having greater stability, experience, and market trust (Tanasya & Handayani, 2020), ultimately increasing company value.

Stakeholder theory, introduced by Freeman (1984), emphasizes that corporate success depends not only on shareholder satisfaction but also on the company's ability to meet the expectations of various stakeholders, including consumers, employees, communities, governments, and the environment.



Practices such as green innovation and green investment represent concrete forms of corporate responsibility towards stakeholders. For example, product innovations using renewable fuels or eco-friendly packaging aim not only to comply with regulations but also to address consumer and global community concerns about environmental issues (M. Lestari, 2023). Green investments, in the form of allocating funds to sustainable projects, also send a positive signal to investors that the company cares about sustainability and long-term value (Sukmawati, 2023).

Furthermore, transparency in disclosing environmental performance through sustainability reports strengthens stakeholder trust (Rahellia Melinda & Handoko, 2024). When companies actively meet stakeholder expectations, they can gain social support, customer loyalty, and enhance the company's reputation and value (Wijayanti & Budi N, 2024).

Corporate value represents the market's perception of a company's overall performance, growth prospects, and sustainability. According to Brigham and Houston (2014), corporate value reflects total assets valued through a combination of debt and equity. This value is an important indicator for investors in decision-making. Corporate value can be measured using Tobin's Q. Tobin's Q measures the efficiency of asset utilization (Damodaran, 2012). Legitimacy and stakeholder theory explain that corporate value is influenced not only by financial performance but also by the extent to which a company gains public and stakeholder support through environmentally friendly practices and social responsibility.

Green innovation refers to the development and implementation of environmentally friendly technologies, processes, or products with the aim of reducing negative impacts on the environment (Agustia et al., 2019). These practices include energy efficiency, the use of recycled materials, eco-friendly packaging, and sustainable product design. This innovation not only demonstrates a company's adaptation to environmental issues but also serves as a competitive strategy to strengthen social legitimacy and relationships with stakeholders. The development of products with low carbon emissions and the use of clean technologies also increase opportunities for collaboration and incentives from governments and international markets. In this study, green innovation indicators are measured based on the availability of information in annual reports or sustainability reports, including the use of environmentally friendly technologies, safe raw materials, green packaging, and recycled materials.

Green investment refers to the allocation of funds to projects or activities that support environmental conservation, such as clean technology, renewable energy, and waste management (Pardede et al., 2024). The goal of green investment is to create a balance between economic benefits and environmental sustainability. Green investment has a significant impact on environmental, social, and economic aspects. It contributes to reducing carbon emissions, increasing energy efficiency, and creating new jobs in sustainable sectors (Siedschlag & Yan, 2020). Commitment to green investment also enhances reputation and investor confidence, strengthening the company's long-term value (Paramita & Ali, 2023).

The measurement of green investment in this study uses the ratio of total environmental activity costs to total company assets (Maharani et al., 2024) as an indicator of a company's commitment to environmental sustainability.

Environmental performance reflects the extent to which a company successfully manages the impact of its activities on the environment (Hidayat et al., 2023). This performance is a crucial indicator for gaining social legitimacy, as public perception is heavily influenced by how well a company maintains environmental sustainability. In the Indonesian context, environmental performance is assessed through the Ministry of Environment's PROPER program. This program provides assessments in the form of color ratings: gold, green, blue, red, and black, indicating a

company's level of compliance with environmental management standards (Aini & Faisal, 2021). The PROPER rating is a credible indicator of a company's environmental commitment and is often used as a reference in research to gauge the impact of environmental performance on company value.

Financial performance illustrates the extent to which a company is able to generate profits, utilize assets, and manage its finances efficiently. Profitability is the primary measure used to assess a company's financial performance (Mayasari et al., 2024). This study used ROA, a key indicator, to measure asset utilization efficiency (Hulu et al., 2021). Good financial performance strengthens stakeholder trust and increases the likelihood of funding, while simultaneously increasing company value.

Company age is an indicator of organizational maturity and experience in managing operational activities. Firm age theory states that the longer a company has been operating, the greater its ability to face business challenges and maintain sustainability (Serolin, 2023). Company age is also viewed as a positive signal to investors regarding the company's reputation, stability, and adaptability (Hamdani, 2020). In this study, company age is measured based on the difference between the observation year and the year the company was listed on the Indonesia Stock Exchange.

Firm size indicates the scale of a company's operations, typically measured by total assets, sales, or number of employees. Larger companies generally have easier access to resources, technology, and funding, thus tending to have more stable performance and higher value. In the context of this study, company size is considered a control variable that can influence the relationship between green innovation, green investment, environmental performance, financial performance, and firm value. Company size is often a fundamental consideration in risk analysis and investor decision-making.

Hypothesis Development: Green innovation aims to reduce negative environmental impacts through the development of environmentally friendly technologies and processes. In addition to improving operational efficiency, this innovation also strengthens the company's public image, thereby increasing its value. Octavianingrum et al. (2024) stated that green innovation has a positive effect on company value. Kurniawati & Widiyana (2024) similarly stated that green innovation can increase company competitiveness through efficiency and investor interest. H1: Green Innovation has a positive effect on company value.

Green investment is a form of company support for sustainable projects, such as renewable energy and environmentally friendly technology. A commitment to green investment demonstrates a company's concern for sustainability, which can enhance the company's reputation and value. Yusnia et al. (2024) revealed that green investment positively contributes to company value. Furthermore, Mentari & Dewi (2023) stated that green investment can increase a company's attractiveness in the global market. H2: Green Investment berpengaruh positif terhadap nilai perusahaan.

Environmental performance is an important indicator of a company's responsibility for the ecological impacts of its operational activities. Companies with good environmental performance are considered more responsible and attractive to investors concerned with sustainability issues. Liu et al. (2025) found that companies actively involved in environmental management receive higher market valuations. Yusnia et al. (2024) also stated that companies with superior environmental performance tend to have higher market value. H3: Environmental performance has a positive effect on firm value.

Financial performance indicates a company's efficiency in generating profits from its assets. One frequently used indicator is Return on Assets (ROA), which reflects the effectiveness of resource





management. Kumala & Priantilianingtiasari (2024) state that ROA has a positive relationship with firm value. Furthermore, Lubis et al. (2025) emphasize that investors tend to consider financial performance as a primary indicator in assessing firm value. H4: Financial performance has a positive effect on firm value.

Company age indicates its experience and level of operational stability. Companies that have been operating for a long time tend to command higher levels of trust from investors because they are perceived as more reliable. Lambey (2021) states that older companies have higher profitability than newer companies. Hariyanto & Juniarti (2014) also explain that the longer a company is established, the greater its ability to develop efficiency and competitive advantages, which positively impacts its value. H5: Company age has a positive effect on firm value.

METHODS

This study aims to examine the effect of green innovation, green investment, environmental performance, financial performance, and company age on firm value, with firm size as a control variable. This study uses a quantitative method with a panel data regression approach that combines time series and cross-sectional data, using secondary data obtained from annual reports and sustainability reports of energy sector companies listed on the Indonesia Stock Exchange (IDX) during the period 2021 to 2023. The sample was selected using a purposive sampling technique, with the criteria of companies operating in the energy sector, listed on the IDX, and consistently publishing financial and sustainability reports during that period. Data were collected through the company's official website and the IDX website (www.idx.co.id), then analyzed using EViews software to test the relationship between variables through a panel data regression model. This approach is expected to provide a comprehensive understanding of the factors that influence firm value.

Table 1. Green Innovation Indicators

No.	Category	Indicator
1.	Green Product Innovation	Products are produced using non-polluting or non-hazardous materials (environmentally friendly materials). (GPI-1) Using environmentally friendly product packaging. (GPI-2)
2.	Green Process Innovation	The production process utilizes innovative technologies to reduce energy, water, and waste consumption. (GPR-1) Components or materials used in the production process can be recycled. (GPR-2)





Table 2. Operational Measurement of Variables

No.	Variables	Measurement Indicators	Scale
Dependent Variable			
1.	Company Values	$Tobin's Q = \frac{MVE + Total Liabilities}{Total Assets}$	Rasio
Independent Variables			
1.	Green Innovation	$GIN = \frac{\sum X_j}{N_j}$	Rasio
2.	Green Investment	$GIV = \frac{total\ expenditure\ on\ the\ environment,}{Total Assets}$ PROPER rating is divided into 5 colors, namely: Gold: Skor 5 Green: Skor 4 Blue: Skor 3 Red: Skor 2 Black: Skor 1 Based on the Regulation of the Minister of Environment No. 1 of 2021	Rasio
3.	Environmental Performance		Ordinal
4.	Financial performance	$ROA = \frac{Net Profit}{Total Assets} \times 100\%$	Rasio
5.	Company Age	$Age = Age\ Th\ t - Age\ Th\ n$	Rasio
Control Variables			
1.	Company Size	$Size = (Ln) Total Asset$	Rasio

RESULT AND DISCUSSION

A summary of descriptive statistics based on the variables used in this study is presented in Table 3. Where N is the number of data points studied, the Mean is the average of all data points, and the Standard Deviation is the distribution of the data used in the study to describe whether the data is homogeneous or heterogeneous and fluctuating.

Table 3. Results of Descriptive Statistical Analysis Test

	N	Minimum	Maximum	Mean	Std. Deviation
Tobin's Q	87	0.5455	4.5670	1.2713	0.6897
GIN	87	0.25	0.75	0.36	0.15
GIV	87	0.00001	0.06295	0.00529	0.01082
EP	87	3.00	5.00	3.63	0.76
FP	87	-0.1170	0.6163	0.1386	0.1507
AGE	87	13.00	63.00	35.68	13.92
SIZE	87	27.6200	32.7578	30.2510	1.3548

Source: Data processed by the author using EViews

Based on Table 3, the total observations is 87. The company's value (Tobin's Q) has an average of 1.2713 with a standard deviation of 0.6897, indicating variation between companies. Green innovation has an average of 0.36, indicating its implementation is still low, with a standard





deviation of 0.15. Green investment has a very small average of 0.00529, indicating it is not yet a priority. Environmental performance shows an average of 3.63 with a standard deviation of 0.76, reflecting sufficient attention to environmental issues but with variation between companies. Financial performance has an average of 0.1386 with a standard deviation of 0.1507, indicating generally positive performance, although some companies are losing money. The average company age is 35.68 years, with quite large age variations among companies in the sample. The average company size is 30.2510 with a standard deviation of 1.3548, indicating that most companies are large-scale but still show moderate size differences between companies..

Table 4. t-Test Results

Variables	Prediction	Coefficient	Sig.	Decision
C		1.701	0.282	
GIN	(+)	-0.483	0.245	H1 Ditolak
GIV	(+)	-6.063	0.341	H2 Ditolak
EP	(+)	0.020	0.847	H3 Ditolak
FP	(+)	2.662	0.000	H4 Diterima
AGE	(+)	0.001	0.830	H5 Ditolak
SIZE		-0.023	0.689	

Source: Data processed by the author using EViews.

Based on the calculations in Table 4 above, the regression analysis results are as follows:

$$\text{Tobins } Q_{it} = 1.701 - 0.483 \text{GIN}_{it} - 6.063 \text{GIV}_{it} + 0.020 \text{EP}_{it} + 2.662 \text{FP}_{it} + 0.001 \text{AGE}_{it} - 0.023 \text{SIZE}_{it}$$

The partial effect of the independent variables on the dependent variable is as follows:

1. The calculated t-probability value for the Green Innovation variable is 0.122 (0.245/2) > 0.05, and the coefficient is negative (-0.483). Therefore, H1 is rejected, meaning Green Innovation does not have a positive effect on Firm Value.
2. The calculated t-probability value for the Green Investment variable is 0.170 (0.341/2) > 0.05, and the coefficient is negative (-6.063). Therefore, H2 is rejected, meaning Green Investment does not have a positive effect on Firm Value.
3. The calculated t-probability value for the Environmental Performance variable is 0.423 (0.847/2) > 0.05, and the coefficient is positive (0.020). Therefore, H3 is rejected, meaning Environmental Performance does not have a positive effect on Firm Value.
4. The calculated t-probability value for the Financial Performance variable is 0.000 (0.000/2) < 0.05, and the coefficient value is positive at 2.662. Therefore, H4 is accepted, meaning that Financial Performance has a positive effect on Firm Value.
5. The calculated t-probability value for the Firm Age variable is 0.415 (0.830/2) > 0.05, and the coefficient value is positive at 0.001. Therefore, H5 is rejected, meaning that Firm Age does not have a positive effect on Firm Value.

CONCLUSION

This study aims to examine the influence of green innovation, green investment, environmental performance, financial performance, and company age on firm value, with company size as a control variable. The study sample consisted of energy sector companies listed on the



Indonesia Stock Exchange (IDX) during the 2021–2023 period. Based on the analysis, the following conclusions were drawn:

1. Green innovation does not significantly influence firm value due to the negative and statistically insignificant regression coefficient. This indicates that the high costs and lack of short-term benefits from green innovation prevent investors from considering it as a primary consideration.
2. Green investment also does not significantly influence firm value. Although the regression line is positive, suboptimal implementation of green investment and a lack of investor attention to sustainability issues are the primary causes of this insignificant effect.
3. Environmental performance has a positive but insignificant effect on firm value. Despite efforts to protect the environment, these results indicate that the market still dominates valuations based on financial aspects, rather than environmental aspects.
4. Financial performance has a significant positive effect on firm value. This confirms that financial performance remains a primary factor considered by investors in determining firm value.
5. Company age does not significantly influence firm value. Although longer-established companies are assumed to be more stable, this does not guarantee higher company value, as investors tend to be more interested in factors such as efficiency, innovation, and adaptability to change.

This study has several limitations that may impact the results and accuracy of the analysis. First, not all companies publish sustainability reports annually, resulting in incomplete data and limiting the completeness of observations. Second, the use of balanced panel data resulted in only companies that obtained a complete PROPER rating during 2021–2023 being analyzed, thus limiting the sample size. Third, green innovation was measured as a whole without distinguishing between different types or categories of innovation, preventing the contribution of each aspect from being specifically evaluated. Therefore, future research is recommended to expand the research object to other sectors such as finance or consumer goods, and to add new variables such as corporate governance or environmental risk. Furthermore, the use of a longer period and a qualitative or mixed methods approach is expected to produce more in-depth analysis and stronger generalizations.

REFERENCES

- Agatha, H. T., & Aryati, T. (2024). Pengaruh Pengungkapan Emisi Karbon, Green Investment Dan Tata Kelola Perusahaan Terhadap Nilai Perusahaan. *Innovative*, 4.
- Agustia, D., Sawarjuwono, T., & Dianawati, W. (2019). The Mediating Effect Of Environmental Management Accounting On Green Innovation - Firm Value Relationship. *International Journal Of Energy Economics And Policy*, 9(2), 299–306. <https://doi.org/10.32479/Ijeep.7438>
- Aini, N., & Faisal, N. T. (2021). The Effect Of Environmental Performance On Firm Value Using Financial Performance As a Mediator Variable. *International Journal Of Entrepreneurship And Business Development*, 04.
- Dewi, C., & Susanto, L. (2022). Pengaruh Profitabilitas, Solvabilitas, Kepemilikan Institusional, Dan Umur Perusahaan Terhadap Nilai Perusahaan Manufaktur. *Jurnal Multiparadigma Akuntansi*.
- Dianti, A. C., & Puspitasari, W. (2024). Pengaruh Pengungkapan Emisi Karbon, Kinerja Lingkungan, Eco-Efficiency, Dan Green Innovation Terhadap Nilai Perusahaan. *Innovative*, 4.
- Diantini, N. N. A., Darmayanti, N. P. A., & Candraningrat, I. R. (2023). Green Investing, Environmental Performance, And Firm Valuation: Evidence From Indonesia. *Indonesian*



Journal Of Sustainability Accounting And Management, 7(2), 329-343.
<https://doi.org/10.28992/Ijsam.V7i2.724>

- Effendi, B. (2021). *The Impact Of Environmental Performance On Firm Value: Evidence From Indonesia*. Erlangga, C. M., Fauzi, A., & Sumiati, A. (2021). Penerapan Green Accounting Dan Corporate Social Responsibility Disclosure Terhadap Nilai Perusahaan Melalui Profitabilitas. *Akuntabilitas*, 14(1), 61-78. <https://doi.org/10.15408/Akt.V14i1.20749>
- Hamdani, M. (2020). Pengaruh Kinerja Keuangan, Kebijakan Dividen Dan Umur Perusahaan Terhadap Nilai Perusahaan Di Moderasi Ukuran Perusahaan. *Jurnal Akuntansi Dan Ekonomika*, 10(2), 188-197. <https://doi.org/10.37859/Jae.V10i2.2042>
- Hariyanto, L., & Juniarti. (2014). *Pengaruh Family Control, Firm Risk, Firm Size Dan Firm Age Terhadap Profitabilitas Dan Nilai Perusahaan Pada Sektor Keuangan*.
- Hasan, J., & Meidiyustiani, R. (2023). Pengaruh Profitabilitas, Struktur Aktiva, Umur Perusahaan, Dan Ukuran Perusahaan Terhadap Nilai Perusahaan (Studi Empiris Pada Perusahaan Sektor Properti Dan Real Estate Yang Terdaftar Di Bursa Efek Indonesia Periode 2017-2022). *Jurnal Mutiara Ilmu Akuntansi*, 1(4), 324-339. <https://doi.org/10.55606/Jumia.V1i4.2056>
- Hasanah, F. N., & Meidiyustiani, R. (2024). Pengaruh Perencanaan Pajak, Likuiditas, Green Innovation Dan Ukuran Perusahaan Terhadap Nilai Perusahaan (Studi Empiris Pada Perusahaan Yang Terdaftar Pada Indeks Idx30 Periode 2019-2023). *Jurnal Manajemen Dan Akuntansi*, 2.
- Hidayat, I., Ismail, T., Taqi, M., & Yulianto, A. S. (2023). The Effects Of Environmental Cost, Environmental Disclosure And Environmental Performance On Company Value With An Independent Board Of Commissioners As Moderation. *International Journal Of Energy Economics And Policy*, 13(3), 367-373. <https://doi.org/10.32479/Ijeep.14159>
- Husnaini, W., & Tjahjadi, B. (2021). Quality Management, Green Innovation And Firm Value: Evidence From Indonesia. *International Journal Of Energy Economics And Policy*, 11(1), 255-262. <https://doi.org/10.32479/Ijeep.10282>
- Kumala, N., & Priantilianingtiarsari, R. (2024). Pegaaruh Green Accounting, Csr Dan Kinerja Keuangan Terhadap Nilai Perusahaan Pertambangan Yang Terdaftar Di Bei Tahun 2016-2022. *El-Mal*, 5, 863.
- Lambey, R. (2021). The Effect Of Profitability, Firm Size, Equity Ownership And Firm Age On Firm Value (Leverage Basis): Evidence From The Indonesian Manufacturer Companies. *Archives Of Business Research*, 9(1), 128-139. <https://doi.org/10.14738/Abr.91.9649>
- Larasati, A. R., Arimuljarto, N., & Azhar, Z. (2024). *Pengaruh Green Investment Dan Kinerja Keuangan Terhadap Nilai Perusahaan Pada Perusahaan Industri Pertambangan Yang Terdaftar Di Bursa Efek Indonesia Tahun 2017-2022*. www.idx.co.id
- Lestari, A. D., & Khomsiyah. (2023). Pengaruh Kinerja Lingkungan, Penerapan Green Accounting, Dan Pengungkapan Sustainability Report Terhadap Nilai Perusahaan. *Jurnal Ekonomi Bisnis, Manajemen Dan Akuntansi*, 3. <https://www.globalreporting.org/>
- Liu, M., Liu, L., & Feng, A. (2024). The Impact Of Green Innovation On Corporate Performance: An Analysis Based On Substantive And Strategic Green Innovations. *Sustainability (Switzerland)*, 16(6). <https://doi.org/10.3390/Su16062588>
- Liu, R., Rahman, M. R. C. A., & Jamil, A. H. (2025). Leveraging Environmental Regulation: How Green Innovation Moderates The Relationship Between Carbon Information Disclosure And Firm Value. *Sustainability (Switzerland)*, 17(6). <https://doi.org/10.3390/Su17062597>
- Lubis, T. A., Eka Putra, W., Masriani, I., Roza, S., Ningsih, M., & Akira, K. (2025). Moderating Role Of Sustainable Investment In The Relationship Between Profitability, Eco-Efficiency, And

- Firm Value. *Accounting And Finance Studies*, 5(2), 138–159.
<https://doi.org/10.47153/Afs52.15762025>
- Maharani, A., Agustia, D., & Qomariyah, A. (2024). *The Impacts Of Green Investment And Firm Value: Exploring the Mediation Role Of Sustainability Performance*.
<https://doi.org/10.21203/Rs.3.Rs-5243226/V1>
- Mayasari, F., Budiyanto, & Asyik, N. F. (2024). The Impact Of Capital Structure, Company Size, And Good Corporate Governance On Financial Performance And Company Value. *International Journal Of Finance & Banking Studies* (2147-4486), 13(4), 38–47.
<https://doi.org/10.20525/Ijfb.V13i4.3757>
- Mentari, N. M. I., & Dewi, K. I. K. (2023). Moderasi Csr Disclosure Terhadap Pengaruh Green Investment Pada Nilai Perusahaan. *Jurnal Ilmiah Akuntansi Dan Bisnis*, 8(1), 60–71.
<https://doi.org/10.38043/Jiab.V8i1.4663>
- Mubarok, D. S., Hikmah, M., & Oktaviani, Y. (2024). *Influence Of Green Investment And Firm Size On the Firm Value Of Sector Energy Firms Listed On IDX 2018-2022*.
<https://iqtishaduna.com/proceedings/index.php/licp>
- Murwaningsari, E., & Rachmawati, S. (2023). The Effect Of Green Banking And Green Investment On Firm Value With Eco-Efficiency As Moderation. In *International Journal Of Social And Management Studies (IJSMAS)* (Vol. 4, Issue 2). <http://www.ijosmas.org>
- Muslichah. (2020). The Effect Of Environmental, Social Disclosure, And Financial Performance On Firm Value. *Jurnal Akuntansi Dan Auditing Indonesia*, 24(1).
<https://doi.org/10.20885/Jaai.Vol24.Is>
- Muzayin, M. H. T., & Trisnawati, R. (2020). *Pengaruh Struktur Modal, Ukuran Perusahaan, Umur Perusahaan Dan Profitabilitas Terhadap Nilai Perusahaan*.
- Nur Aeni, N. A. N., & Murwaningsari, E. (2023). Pengaruh Pengungkapan Emisi Karbon Dan Investasi Hijau Terhadap Nilai Perusahaan. *Jurnal Ekonomi Trisakti*, 3(2), 3135–3148.
<https://doi.org/10.25105/Jet.V3i2.17890>
- Nuurhasanah, A. P., & Haq, A. (2024). Pengaruh Pengungkapan Emisi Karbon, Inovasi Hijau, Dan Investasi Hijau Terhadap Nilai Perusahaan. *Ekoma*, 3.
- Octavianingrum, S. I., Widyastuti, T., Maidani, & Sari, P. N. (2024). Pengaruh Pengungkapan Integrated Reporting Dan Green Innovation Terhadap Nilai Perusahaan Pada Perusahaan Pertambangan. *Sentri*, 3.
- Paramita, V. S., & Ali, A. (2023). Can Profitability Moderate The Impact Of Green Investment, Corporate Social Responsibility, And Good Corporate Governance On Company Value On The Sri-Kehati Index? *International Journal Of Finance Research*, 4(4), 320–338.
<https://doi.org/10.47747/Ijfr.V4i4.1604>
- Pardede, S. A. A. A., Rahmawati, C. H. T., & Yuniarto, A. Y. (2024). *Green Investment On Firm Value: Mediation Of Profitability*.
- Rahelliamelinda, L., & Handoko, J. (2024). Profitabilitas Sebagai Moderating Pengaruh Kinerja Esg, Green Innovation, Eco-Efficiency Terhadap Nilai Perusahaan. *Jurnal Informasi, Perpajakan, Akuntansi, Dan Keuangan Publik*, 19(1), 145–170.
<https://doi.org/10.25105/Jipak.V19i1.19191>
- Ren, F. R., Wu, T. F., Ren, Y. J., Liu, X. Y., & Yuan, X. (2024). The Impact Of Environmental Regulation On Green Investment Efficiency Of Thermal Power Enterprises In China: Based on A Three-Stage Exogenous Variable Model. *Scientific Reports*, 14(1). <https://doi.org/10.1038/S41598-024-58396-X>

- Salsabila, A., & Widiatmoko, J. (2022). Pengaruh Green Accounting Terhadap Nilai Perusahaan Dengan Kinerja Keuangan Sebagai Variabel Mediasi Pada Perusahaan Manufaktur Yang Terdaftar Di Bei Tahun 2018-2021. In *Jurnal Mirai Manajemen* (Vol. 7, Issue 1).
- Sapulette, S. G., & Limba, F. B. (2021). Pengaruh Penerapan Green Accounting Dan Kinerja Lingkungan Terhadap Nilai Perusahaan Manufaktur Yang Terdaftar Di Bei Tahun 2018-2020. *Kupna Jurnal*, 2. [Http://Ppid.Menlhk.Go.Id/Siaran_Pers/Browse/2337](http://Ppid.Menlhk.Go.Id/Siaran_Pers/Browse/2337)
- Sari, R., Rifan, D. F., & Selvina, M. (2025). Pengaruh Pengungkapan Sustainability Report, Kinerja Lingkungan, Dan Struktur Modal Terhadap Nilai Perusahaan Dengan Ukuran Perusahaan Sebagai Variabel Moderasi. *Jurnal Keuangan Dan Manajemen Terapan*.
- Serolin, A. (2023). Effect Of Corporate Social Responsibility, Leverage, Firm Age And Size On Firm Value. *Research Of Economics And Business*, 1(2), 95-104. [Https://Doi.Org/10.58777/Reb.V1i2.81](https://doi.org/10.58777/Reb.V1i2.81)
- Snae, A. Y. E., & Setyowati, S. M. (2024). Efek Moderasi Tipe Strategi Prospector Pada Pengaruh Praktik Green Innovation Terhadap Nilai Perusahaan. *Jimea*, 8(2).
- Sukmawati, R. A. (2023). *Pengaruh Green Innovation Dan Environmental Responsibility Terhadap Nilai Perusahaan*.
- Wijayanti, A., & Budi N., Y. A. B. (2024). Dampak Green Governance, Green Investment, Dan Green Innovation Terhadap Nilai Perusahaan. *Jurnal Ekonomi Trisakti*, 4(1), 535-544. [Https://Doi.Org/10.25105/Jet.V4i1.19373](https://doi.org/10.25105/Jet.V4i1.19373)
- Yasya, N., & Muchlis. (2024). Pengaruh Green Innovation Dan Kinerja Keuangan Terhadap Nilai Perusahaan Pada Perusahaan Sub Sektor Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia Periode 2017-2021. *Journal Of Accounting, Management, And Islamic Economics*, 2.
- Yuniarti, R., Soewarni, N., & Isnalita. (2022). Green Innovation On Firm Value With Financial Performance As Mediating Variable. *Asian Academy Of Management Journal*, 27, 41-58.
- Yusnia, W., Hidayah, N., & Siska Utami, P. (2024). Efektivitas Implementasi Green Finance, Green Investment, Dan Environment Cost Dalam Meningkatkan Nilai Perusahaan Sektor Pertambangan. *Distribusi - Journal Of Management And Business*, 12(2), 323-338. [Https://Doi.Org/10.29303/Distribusi.V12i2.549](https://doi.org/10.29303/Distribusi.V12i2.549)
- Zhang, F., Qin, X., & Liu, L. (2020). The Interaction Effect Between ESG and Green Innovation And Its Impact On Firm Value From The Perspective Of Information Disclosure. *Sustainability (Switzerland)*, 12(6). [Https://Doi.Org/10.3390/Su12051866](https://doi.org/10.3390/Su12051866)
- Zhang, J., & Zhang, W. (2023). Green Innovation Efficiency Measurement Based On Sensor Data: Evidence From China. *Discrete Dynamics In Nature And Society*, 2023. [Https://Doi.Org/10.1155/2023/6650913](https://doi.org/10.1155/2023/6650913)