

# The Influence of Intellectual Capital, Good Corporate Governance, Green Accounting, Business Risk, and Audit Quality on the Value of Energy Sector Companies

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## Abstract

The research results indicate that: (1) intellectual capital does not have a significant effect on firm value, with a t-statistic of 1.952160 and a probability value of 0.0666 ( $> 0.05$ ); (2) Good Corporate Governance does not have a significant effect on firm value, with a t-statistic of 1.143517 and a probability value of 0.06 ( $> 0.05$ ); (3) Green Accounting has a significant effect on firm value, with a t-statistic of 1.974321 and a probability value of 0.0323 ( $< 0.05$ ); (4) business risk does not have a significant effect on firm value, with a t-statistic of -0.623606 and a probability value of 1.14 ( $> 0.05$ ); and (5) audit quality has a significant effect on firm value, with a t-statistic of 1.032861 and a probability value of 0.0053 ( $< 0.05$ ). Thus, of the five independent variables tested, only intellectual capital, green accounting, and audit quality were proven to have a significant effect on firm value.

## Keywords

Keywords: Intellectual Capital, Good Corporate Governance, Green Accounting, Business Risk, Audit Quality, Firm Value



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## INTRODUCTION

According to Emar and Ayem (2020), firm value represents investors' perception of a company's condition, as reflected in its market share price. A higher firm value signifies greater investor confidence in the company's prospects, thereby enhancing shareholder wealth. Consequently, companies are expected to boost their value through effective resource management, corporate governance, and the provision of high-quality information to investors.

The energy sector plays a pivotal role in the Indonesian economy by contributing to the national energy supply and attracting capital market investors. However, data from the Indonesia Stock Exchange (IDX) reveals that firm value within the energy sector fluctuated between 2020 and 2024: standing at 40.27% in

2020, dropping to 21.58% in 2021, rising to 32.54% in 2022, falling again to 26.58% in 2023, and increasing to 47.89% in 2024. These trends indicate that firm value in the energy sector has not experienced stable growth, necessitating an analysis of the factors influencing it.

According to Candra and Zubaidah, firm value is of great importance because the level of shareholder wealth is reflected in a company's high value. Rahmawati (2023) notes that intellectual capital is a knowledge-based resource capable of creating competitive advantage and enhancing firm value when managed optimally. Furthermore, Fitriyani (2025) explains that Good Corporate Governance is a management system based on the principles of transparency, accountability, responsibility, independence, and fairness, thereby boosting investor confidence. Meanwhile, Melianis Yuli Purmalita and Fauzan (2024) state that Green Accounting involves the application of environmental accounting practices aimed at supporting sustainable development and improving the company's image. On the other hand, Sari (2024) defines business risk as the level of uncertainty a company faces in its operational activities—which can impact profits and firm value—while Astuti (2024) asserts that high audit quality enhances the credibility of financial statements, thereby increasing investor confidence in the company.

Observational data indicates that Intellectual Capital, Good Corporate Governance, Green Accounting, Business Risk, and Audit Quality within energy sector companies fluctuated throughout the study period. Intellectual Capital values ranged from 0.8234 to 1.2547. The adoption of Good Corporate Governance increased in 2022 but subsequently declined during 2023–2024. Meanwhile, Green Accounting implementation remained dominated by companies with a "Blue" PROPER rating, with only three companies achieving a "Gold" rating in 2024. Business risk showed a downward trend, whereas audit quality improved, particularly in 2022. A key issue identified in this study is the persistent discrepancy between theory and empirical conditions. Some companies experienced an increase in Intellectual Capital yet saw a decline in firm value; conversely, other companies experienced a decline in Intellectual Capital but saw an increase in firm value. Similar phenomena were observed regarding Good Corporate Governance, Green Accounting, Business Risk, and Audit Quality, where changes in these variables did not always align with theoretical expectations regarding changes in firm value. Furthermore, findings from previous studies on the impact of these five variables on firm value remain inconsistent (a research gap). These conditions suggest a need for further examination of the factors influencing firm value in the energy sector. Consequently,

this study aims to analyze the impact of Intellectual Capital, Good Corporate Governance, Green Accounting, Business Risk, and Audit Quality on the firm value of energy sector companies listed on the Indonesia Stock Exchange during the 2020–2024 period.

## METHOD

Based on the research methodology, this study is classified as quantitative research. According to Wijayanti (2023), the quantitative research method involves numerical data and statistical analysis aimed at testing predetermined hypotheses. The study focuses on the energy sector; the population consists of all 91 energy sector companies listed on the Indonesia Stock Exchange, with a sample of 12 companies and a total of 60 data points collected over a five-year observation period. The dependent variable in this study is firm value, while the independent variables are intellectual capital, good corporate governance, green accounting, business risk, and audit quality. Data analysis was conducted using panel data regression with the aid of EViews 9 software.

## FINDINGS AND DISCUSSION

The results of the partial hypothesis testing (t-test) regarding the influence of Intellectual Capital, Good Corporate Governance, Green Accounting, Business Risk, and Audit Quality on Firm Value for energy sector companies listed on the Indonesia Stock Exchange during the 2020–2024 period are as follows:

| Variabel             | Coefisiensi | Std.Error | t-Statistic | Prob   |
|----------------------|-------------|-----------|-------------|--------|
| Firm Value           | -1.640006   | 0.611663  | -0.101759   | 0.9192 |
| Intellectual Capital | 0.422584    | 0.065408  | 1.952160    | 0.0666 |
| GCG                  | 0.460008    | 0.525308  | -0.623606   | 0.8237 |
| Green Accounting     | 0.303499    | 0.218108  | 1.974321    | 0.0323 |
| Business Accounting  | 0.206486    | 0.324578  | 1.143517    | 0.8863 |
| Audit Quality        | 0.580009    | 0.400909  | 1.032861    | 0.0053 |

Based on the table above, the Intellectual Capital variable yielded a t-statistic of 1.952160 with a probability value of 0.0666; since this probability value exceeds the

0.05 significance level, Intellectual Capital does not have a significant effect on firm value. Similarly, the Good Corporate Governance variable recorded a t-statistic of 1.143517 and a probability value of 0.0600, indicating no significant effect on firm value. In contrast, the Green Accounting variable showed a t-statistic of 1.974321 with a probability value of 0.0323—which is below 0.05—demonstrating that Green Accounting has a significant effect on firm value. The Business Risk variable had a t-statistic of -0.623606 and a probability value of 0.1140, indicating no significant effect on firm value. Finally, the Audit Quality variable yielded a t-statistic of 1.032861 with a probability value of 0.0053, signifying a significant effect on firm value. Overall, the research findings indicate that only Green Accounting and Audit Quality have a significant effect on firm value, whereas Intellectual Capital, Good Corporate Governance, and Business Risk do not show a significant effect.

The research results indicate that intellectual capital does not have a significant effect on firm value. This suggests that the company's ability to manage intangible assets—such as knowledge, human resource competencies, innovation, and organizational systems—has not yet succeeded in enhancing investor perceptions of firm value. In the energy sector, investors tend to prioritize a company's ability to generate profit, maintain financial stability, and withstand commodity price fluctuations over the magnitude of its intellectual capital. Consequently, an increase in intellectual capital is not fully interpreted by the market as a factor capable of boosting firm value. These findings align with the study by Maharani and Wahidahwati (2023), which concluded that intellectual capital has no impact on firm value.

The research findings also indicate that Good Corporate Governance does not have a significant impact on firm value. Although companies have adopted good corporate governance principles, this implementation has not yet succeeded in directly boosting firm value. This suggests that investors in the energy sector do not prioritize corporate governance mechanisms as a primary factor in their investment decision-making. Instead, investors place greater weight on fundamental factors such as profitability, business prospects, and conditions within the energy industry. Therefore, the implementation of Good Corporate Governance needs to be further enhanced to effectively convey a stronger positive signal to the market.

In contrast to the other two variables, Green Accounting has been shown to have a significant impact on firm value. These results indicate that the more

effectively a company implements green accounting, the higher its value becomes. The implementation of green accounting reflects a company's commitment to environmental responsibility and sustainable development, thereby enhancing its image in the eyes of both investors and the public. Companies with strong environmental performance tend to garner greater trust from stakeholders, which in turn leads to increased firm value. These findings support legitimacy theory, which posits that companies gain public support when they conduct activities that align with social and environmental expectations.

Furthermore, business risk does not have a significant impact on firm value. This result indicates that the magnitude of operational risk faced by energy sector companies is not yet a primary consideration for investors when determining firm value. Investors understand that the energy industry is characterized by relatively high risk due to factors such as commodity price fluctuations, global economic conditions, and government policies. Consequently, as long as companies can effectively manage these risks and maintain their financial performance, changes in business risk do not exert a significant influence on firm value.

Meanwhile, audit quality was found to have a significant impact on firm value. These results indicate that the higher the quality of a company's audit, the greater the investor confidence in its financial statements. Audits conducted by high-quality auditors enhance the credibility of financial statements by providing assurance that the information presented complies with accounting standards and is free from material misstatement. This high level of investor confidence drives increased investment interest, ultimately resulting in higher firm value.

Overall, the research findings indicate that Green Accounting and Audit Quality are the factors most capable of enhancing firm value in the energy sector. Both variables send positive signals to investors regarding a company's commitment to environmental sustainability and the quality of its financial statement presentation. Conversely, Intellectual Capital, Good Corporate Governance, and Business Risk did not exert a significant influence on firm value during the 2020–2024 study period. This suggests that investors in the energy sector prioritize aspects of sustainability and the credibility of financial information over other internal factors.

## CENCLUSION

This study aims to examine the impact of Intellectual Capital, Good Corporate Governance, Green Accounting, Business Risk, and Audit Quality on the firm value of energy sector companies listed on the Indonesia Stock Exchange during the 2020–2024 period. Based on the research findings, the following conclusions can be drawn:

1. Intellectual Capital was found to have a significant effect on firm value in the energy sector during 2020–2024. Intellectual Capital yielded a coefficient of 0.422584 and a probability value of 0.0660, which is lower than the significance level (alpha) of 0.05.
2. Good corporate governance was found to have no significant effect on firm value in the energy sector during 2020–2024. Good corporate governance yielded a coefficient of 0.460008 and a probability value of 0.8237, which is higher than the significance level (alpha) of 0.05.
3. Green accounting was found to have a significant effect on firm value in the energy sector during 2020–2024. Green accounting yielded a coefficient of 0.303499 and a probability value of 0.0323, which is lower than the significance level (alpha) of 0.05.
4. Business risk was found to have no significant effect on firm value in the energy sector during 2020–2024. Business risk yielded a coefficient of 0.206486 and a probability value of 0.8863, which is higher than the significance level (alpha) of 0.05.
5. Audit quality was found to have a significant effect on firm value in the energy sector during 2020–2024. Audit quality yielded a coefficient of 0.580009 and a probability value of 0.0053, which is lower than the significance level (alpha) of 0.05.
6. The impact of Intellectual Capital, Good Corporate Governance, Green Accounting, Business Risk, and Audit Quality on Firm Value in the energy sector companies listed on the Indonesia Stock Exchange (2020–2024). The F-test results indicate that the variables—Intellectual Capital, Good Corporate Governance, Green Accounting, Business Risk, and Audit Quality—produced an F-statistic of 1.999269 and a probability value of 0.056229, which is higher than the significance level (alpha) of 0.05.

## REFERENCES

- Andriyani, K. (2024). Corporate Performance and Corporate Value. *JIEF Journal of Islamic Economics and Finance*, 4(1), 14–26.
- Anggraini, A. D., Nugroho, W. S., & Susanto, B. (2024). The Influence of Intellectual Capital Disclosure, Good Corporate Governance, and Green Accounting on Corporate Value with Profitability as a Moderating Variable. *UMMagelang Conference Series*, 10–24. <https://doi.org/10.31603/conference.11862>
- Bangun, Mitra, A., Astuti, Tri, & Satria, I. (2024). The Influence of Green Intellectual Capital, Green Accounting, and Firm Size on Financial Performance with Good Corporate Governance as a Moderating Variable. *Jurnal Riset Bisnis*, 7(2), 314–335. <http://journal.univpancasila.ac.id/index.php/jrb>
- Emar, A. E. S., & Ayem, S. (2020). The Influence of Enterprise Risk Management Disclosure and Intellectual Capital Disclosure on Corporate Value with Good Corporate Governance as a Moderating Variable. *WACANA EKONOMI (Jurnal Ekonomi, Bisnis Dan Akuntansi)*, 19(2), 79–90. <https://doi.org/10.22225/we.19.2.1956.79-90>
- Erfani, M., & Nena, Y. (2022). The Influence of Intellectual Capital (IC), Good Corporate Governance (GCG), and Islamic Corporate Social Responsibility (ICSR) on Corporate Value with Profitability as an Intervening Variable. *BURSA Jurnal Ekonomi Dan Bisnis*, 1(2), 23–37.
- Ermanda, M., & Puspa, D. F. (2022). The Influence of Institutional Ownership, Sustainability Reports, and Intellectual Capital on Corporate Value. 17(2), 135–147.
- Felita Aileen, Amelia Setiawan, & Hamfri Djajadikerta. (2024). Enhancing Firm Value: The Role of Good Corporate Governance, Corporate Social Responsibility, and Intellectual Capital in the Food & Beverage Industry on the IDX (2018–2022). *Journal of Social and Economics Research*, 6(1), 871–883. <https://doi.org/10.54783/jser.v6i1.382>
- Firdaus, H. N., & Budiantara, M. (2024). The Effect of Intellectual Capital and Good Corporate Governance on Company Value. *IDX30 Journal of Informatics Media [JUMIN]*. *Journal of Informatics Media (JUMIN)*, 6(2), 581–588.
- Hafidh Ahmad Rizqi Pratama, & Vera Maria. (2023). The Effect of Intellectual Capital, Good Corporate Governance, and Corporate Social Responsibility on Company Value, Mediated by Profitability. *Journal of Scientific Horizons*, 2(6), 2373–2388. <https://doi.org/10.53625/jcijurnalcakrawalailmiah.v2i6.4905>

- Hanun, N. R., Hanif, A., & Ningrum, S. (2023). Optimizing Company Value Through the Moderating Role of Good Corporate Governance. *Journal of Accounting and Finance Review*, 13(3), 655–673. <https://doi.org/10.22219/jrak.v13i3.28029>
- Kurniawan, N., & Mawardi, W. (2017). Analysis of the influence of profitability, investment decisions, financing decisions, and dividend policy on firm value. *Diponegoro Journal of Management*, 6(2), 1–11.
- Kusuma, T. (2016). The Effect of Financial Reporting Quality, Institutional Ownership, and Firm Size on Information Asymmetry in Banking Companies Listed on the Indonesian Stock Exchange (IDX) 2008–2012. *Экономика Региона*, 32.
- Melianis Yuli Purmalita, & Fauzan. (2024). Analysis of the Influence of Audit Quality, Capital Structure, and Firm Size on Firm Value. *Journal of Trends Economics and Accounting Research*, 4(3), 610–618. <https://doi.org/10.47065/jtear.v4i3.1185>
- Ningrum, O. W. S., & Sapari. (2021). The Influence of Intellectual Capital, Financial Performance, and Good Corporate Governance on Firm Value. *Jurnal Ilmu Dan Riset Akuntansi*, 10(8), 2–23.
- Oktaviana, A., & Achyani, F. (2024). The Influence of Intellectual Capital, Enterprise Risk Management, and Corporate Social Responsibility on Firm Value with Good Corporate Governance as a Moderating Variable. *SEIKO: Journal of Management & Business*, 7(1), 1257–1272.
- Oktaviani, N. K. R., Sinarwati, N. K., & Sujana, E. (2024). Analysis of the Influence of Intellectual Capital, Good Corporate Governance Mechanisms, and Environmental Performance on Firm Value. *Syntax Literate: Indonesian Scientific Journal*, 15(4), 2242–2260. <https://doi.org/10.36418/syntax-literate.v9i4.15343>
- Pramestya, M. V., Atma Jaya Catholic University. (2024). Keywords: profitability, company size, green accounting, firm value. 16(02), 149–166.
- Rahmadani, O., & Panggabean, R. R. (2024). The Influence of Intellectual Capital and Good Corporate Governance on Profitability. *Jurnal Proaksi*, 3(4), 319–334. <https://doi.org/10.24034/jiaku.v3i4.7083>
- Rahmawati, D. (2023). The Influence of Corporate Social Responsibility, Intellectual Capital, and Profitability on Firm Value in Food and Beverage Companies Listed on the Indonesia Stock Exchange (2017–2021 Period). *E-Journal Universitas Batam*, 13(1).

- Rukmana, D., Management Study Program, Universitas Mercu Buana. (2022). The Influence of Good Corporate Governance. 7, 32–47.
- Sajida, Y. A., & Purwanto, A. (2021). Analysis of the Influence of Enterprise Risk Management (ERM) and Good Corporate Governance (GCG) on the Value of Banking Companies Listed on the Indonesia Stock Exchange (IDX) (2017–2019 Period). *Diponegoro Journal of Accounting*, 10(4), 1–14. <http://ejournal-s1.undip.ac.id/index.php/accounting>
- Sari, N., Manurung, A. H., Widjanarko, W., Khan, M. A., & Fikri, A. (2024). Determinants of Enterprise Risk Management, Intellectual Capital, and Good Corporate Governance on Firm Value. *Jurnal Economina*, 3(2), 288–302. <https://doi.org/10.55681/economina.v3i2.1200>
- Vashti, D. A., & Nugraheni, R. (2024). The Influence of Good Corporate Governance Mechanisms on Firm Value. *Accounting Student Research Journal*, 3(1), 22–37. <https://doi.org/10.62108/asrj.v3i1.7379>
- Virliandita, B., & Sulistyowati, E. (2024). The Influence of Good Corporate Governance on Firm Value with Financial Performance as an Intervening Variable. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 6(4), 4657–4673. <https://doi.org/10.47467/alkharaj.v6i4.1029>
- Widhiastuti, N. L. P. (2022). Audit Delay in Manufacturing Companies on the Indonesia Stock Exchange. *Solusi*, 20(3), 267. <https://doi.org/10.26623/slsi.v20i3.5293>