

Abstract

This study aims to analyze and obtain empirical evidence regarding the influence of Green Intellectual Capital (GIC) and its dimensions Green Human Capital (GHC), Green Structural Capital (GSC), and Green Relational Capital (GRC) on the effectiveness of risk management in mining and energy sector companies in Indonesia, which are characterized by high risk exposure. Utilizing the Resource-Based View (RBV) as a theoretical framework, this study employs a quantitative approach using secondary data from annual and sustainability reports for the 2022–2024 period. Through purposive sampling, a sample of 42 companies with a total of 126 observations was obtained. Risk management effectiveness was measured using the Modified Enterprise Risk Management Index (MERMi) based on the COSO 2017 framework, and data analysis was conducted using panel data regression with the Fixed Effect Model (FEM). The results indicate that Green Intellectual Capital significantly influences risk management effectiveness simultaneously. Partially, Green Structural Capital and Green Relational Capital proved to have a positive and significant effect, indicating that green organizational structures and strong external relationships serve as strategic assets in strengthening risk management systems. However, Green Human Capital was found to have no significant effect, suggesting that individual employee competencies have not been optimally integrated into corporate risk control systems, thereby implying that companies should focus investments on system infrastructure and stakeholder relations to enhance organizational resilience.

Keywords: *Green Intellectual Capital, Green Human Capital, Green Structural Capital, Green Relational Capital, Risk Management Effectiveness.*

Abstrak

Penelitian ini bertujuan untuk menganalisis dan memperoleh bukti empiris mengenai pengaruh *Green Intellectual Capital* (GIC) beserta dimensinya, yaitu *Green Human Capital* (GHC), *Green Structural Capital* (GSC), dan *Green Relational Capital* (GRC), terhadap efektivitas manajemen risiko pada perusahaan sektor pertambangan dan energi di Indonesia yang memiliki eksposur risiko tinggi. Dengan menggunakan landasan teori *Resource-Based View* (RBV), penelitian ini menerapkan pendekatan kuantitatif dengan data sekunder dari laporan tahunan dan laporan keberlanjutan periode 2022–2024. Melalui metode *purposive sampling*, diperoleh sampel sebanyak 42 perusahaan dengan total 126 observasi. Efektivitas manajemen risiko diukur menggunakan *Modified Enterprise Risk Management Index* (MERMi) berbasis COSO 2017, sedangkan analisis data dilakukan menggunakan regresi data panel dengan model terpilih *Fixed Effect Model* (FEM). Hasil penelitian menunjukkan bahwa secara simultan *Green Intellectual Capital* berpengaruh signifikan terhadap efektivitas manajemen risiko. Secara parsial, *Green Structural Capital* dan *Green Relational Capital* terbukti berpengaruh positif dan signifikan, yang mengindikasikan bahwa struktur organisasi hijau dan hubungan eksternal yang baik merupakan aset strategis dalam memperkuat sistem manajemen risiko. Namun, *Green Human Capital* ditemukan tidak berpengaruh signifikan, yang menunjukkan bahwa kompetensi individu karyawan belum terintegrasi optimal dalam sistem pengendalian risiko perusahaan, sehingga implikasinya menuntut perusahaan untuk lebih memfokuskan investasi pada infrastruktur sistem dan relasi pemangku kepentingan untuk meningkatkan resiliensi organisasi.

Kata kunci: *Green Intellectual Capital*, *Green Human Capital*, *Green Structural Capital*, *Green Relational Capital*, Efektivitas Manajemen Risiko.