ABSTRACT

This study aims to analyze the effect of carbon emission intensity (CEI) on the *cost of debt* and to examine the moderating role of Sharia-compliant company status among energy-sector companies listed on the Indonesia Stock Exchange during the 2021–2024 period. CEI is measured using the ratio of Scope 1 and Scope 2 greenhouse gas emissions to total revenue, while the *cost of debt* is measured using the ratio of interest expense to average interest-bearing debt. The sample was selected using a *purposive sampling* method. The analysis employed a *random-effects model* with *cluster-robust standard errors* and *Moderated Regression Analysis*.

The results show that carbon emission intensity has a positive but statistically insignificant effect on the *cost of debt*. Sharia-compliant company status is also not found to moderate the effect of carbon emission intensity on the *cost of debt*, with relatively similar effects of CEI between Sharia-compliant and non-Sharia-compliant companies. Additional tests generally show a consistent direction of findings, although some sensitivity to certain data treatments remains. Overall, this study does not find sufficiently strong and stable empirical evidence regarding the effect of carbon emission intensity on the *cost of debt* or the moderating role of Sharia-compliant company status. These findings should be interpreted by considering the relatively short observation period, sample limitations, and differences in the comparability of emissions data across companies.

Keywords: carbon emission intensity, *cost of debt*, transition risk, Sharia Securities List, energy sector.