

# **Crude Climate Economics: Oil Shocks, Climate Risk Exposure, and the Responsive Behaviour of Stock Markets**

## **Abstract**

This study investigates the interplay between oil price fluctuations, corporate climate risk exposure, and stock market reactions. Employing a novel classification system, it segregates firms into 'brown' (high emissions) and 'green' (low emissions), exploring the intensified market response to oil price changes given climate risks. 'Brown firms' show varying impacts. The study further examines the influence of geopolitical tensions and extreme weather events revealing a noticeable but limited effect on the market. However, climate risk consistently amplifies market volatility, influencing investor strategies to protect against such volatility. This research contributes to understanding the complex connections between environmental issues, energy economics, and financial markets, emphasizing the systemic nature of climate risk in market stability. Our findings highlight the importance of integrating environmental factors into financial analysis and decision-making, providing empirical evidence of the financial implications of climate risks. Our results remain consistent following numerous robustness tests.

**Keywords:** firm-level climate risk exposures; oil price changes; stock markets; war sentiment; geopolitical uncertainty.

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