OIL PRICES

Risky business

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Geopolitical turmoil has been known to have a direct impact on oil supply and therefore prices. However, because of the difficulty of quantifying and predicting geopolitical risk, incorporation of risk into oil price forecast models has been difficult. Feng Ma and colleagues in China now show that incorporating a measure of geopolitical risk into a macroeconomic model of oil price can predict some of the volatility in the market induced by major geopolitical shocks.

The researchers use a geopolitical risk index calculated by enumerating the recurrence of words indicating turmoil or violence in key newspapers from around the world. They take a subset of index values above a threshold to obtain a series containing only serious geopolitical risk. They then include this serious geopolitical risk index as an explanatory variable in a model that uses data from the US Energy Information Administration to predict monthly oil prices. The researchers find that their model including the serious geopolitical risk index provides a better prediction for oil prices compared to other models in the literature. They report that significant improvements in forecasts are not observed when the entire, unfiltered time series of geopolitical risk index is included. This suggests that the market may ignore small uncertainties but reacts to critical events.

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