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## International environmental cooperation with risk aversion

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**Abstract:** This paper models global environmental policy in a stochastic setting: reducing pollution not only reduces expected environmental damage but also its spread. The national incentives to cooperate are analysed under adverse conditions: expected payoffs are taken to have the structure of a (static) prisoners' dilemma. It is shown that, even then, incentives to cooperate unilaterally or even bilaterally may exist. They actually do if countries are sufficiently risk averse. Following the traditional economic approach we take national risk preferences to be given. Still, the finding sketched above turns out to be relevant for the design of global environmental policy. We define *critical* thresholds that *actual* risk aversion must exceed to induce cooperation. It is shown that risk management may push these thresholds down. Thereby, appropriate policy design may improve the chances for stable and effective international environmental agreements.

**Keywords:** 'cooperative push', environmental policy assessment, international environmental agreements, risk preferences.

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