

# Self-enforcing stable sets\*

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## Abstract

We analyze a coalition-formation game with externalities in which participation is voluntary and non-binding. A prime example is the formation of climate change agreements; a context in which the literature usually predicts bleak outcomes. Our solution concept combines the common approach to such self-enforcing agreements with stability concepts emphasizing the role of rational foresight. Limiting the role of myopic free riding, our self-enforcing stable equilibria give rise to Pareto efficient coalitions (“constrained” Pareto efficient outcomes). The results emphasize the crucial role of rational foresight for Coase’s Theorem in self-enforcing environments. Applied to climate change agreements, our framework agrees with observation in predicting substantially larger coalition sizes than those predicted by the “standard model” of this literature.

**Keywords:** coalition formation, self-enforcing agreements, public goods, climate change.

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