

# Framing Matters: Sanctioning in Public Good Games with Parallel Bilateral Relationships

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## Abstract

Public good games are used to study whether and how people can achieve cooperative behavior in the face of immediate incentives to behave more selfishly. Specifically, they are often used to study emissions reductions, where there can be incentives to keep emitting and free-ride on others' reductions. Decisions about reducing greenhouse gas emissions are often modeled as a *public good game*, in which everyone benefits when everyone reduces emissions, but individual countries have an incentive to free-ride on others' reductions. In reality, these decisions do not occur in a vacuum: a country that refuses to cooperate may, for example, pay a price in its bilateral trade relationships. We extend public good games with such bilateral relationships. In our experiments with human subjects, the actual ability to use pairwise relationships to sanction defectors does not matter nearly as much as how the situation is presented, and emphasizing the possibility of such sanctioning in fact leads to less cooperation.

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