

Turf Wars

Helios Herrera and Michael M. Ting

Abstract

Turf wars occur in environments where competition undermines the ability of agents to collaborate. We develop a model of competition and collaboration between government agencies. In the game, one agent possesses property rights over jurisdiction to an issue. This agent can decide whether to share jurisdiction with other agents. Sharing increases joint productivity but also increases competition over a fixed prize. Each agent's productivity is private information, and so the sharing decision is possibly a signal of the originating agent's productivity. We derive conditions under which agents will voluntarily share information, and also discuss possible remedies to failures of collaboration.