Time Flies: Cooperation in Repeated Finite Time-Horizon Games

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Abstract

In infinitely repeated games the Folk Theorem implies that any feasible and individually rational payoff can be sustained as a Nash equilibrium. With a finite time horizon this is no longer true. In particular, if the stage-game has a unique Nash equilibrium, then this is also the unique subgame perfect Nash equilibrium of the finitely repeated game. We show theoretically that if players do mistakes because time moves "too fast", then the set of Nash equilibria expands. Interestingly, Pareto-superior payoffs that are not equilibria of the stage game may be equilibria in the game where "time flies".

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