

Chapter 22

Repeated Games: Cheating, Punishment, and Outsourcing

In business or personal relationships, promises and threats of good and bad behavior tomorrow may provide good incentives for good behavior today, but, to work, these promises and threats must be credible. In particular, they must come from equilibrium behavior tomorrow, and hence form part of a subgame perfect equilibrium today. We find that the grim strategy forms such an equilibrium provided that we are patient and the game has a high probability of continuing. We discuss what this means for the personal relationships of seniors in the class. Then we discuss less draconian punishments, and find there is a trade off between the severity of punishments and the required probability that relationships will endure. We apply this idea to a moral-hazard problem that arises with outsourcing, and find that the high wage premiums found in foreign sectors of emerging markets may be reduced as these relationships become more stable.

Gain if I cheat today \leq value of my relationship after cooperating (promise) - value of my relationship after cheating (threat).

Credibility - Subgame perfect Nash equilibrium.

Lesson: We can get cooperation in the prisoner's dilemma using the grim trigger as a subgame perfect equilibrium provided the probability of continuation is bigger than $\frac{1}{3}$.

Lesson: For an ongoing relationship, to provide incentives for good behavior today, it helps for there to be a high probability that the relationship will continue.

Trade off: Shorter punishment need a more weight on the future.