

Repeated Games and Reputation

t = given time period

T = total # of periods

Each t game is a static **stage game**

A two-period repeated game

$T=2$ total payoff = $t_1 + t_2$

		2	1	2
		x	y	z
1	A	4, 3	0, 0	1, 4
	B	0, 0	2, 1	0, 0

Players must select NE in the second period

Preferences in subgames are the same as in t_n

In any repeated game, any sequence of stage Nash profiles can be supported as the outcome of a subgame perfect NE

Dewey says that so long as end game has multi NE, players have history to agree on end game

An Infinitely Repeated Game

δ = discount factor

$$V \equiv 1 + \delta V \rightarrow V = 1/(1 - \delta) = a/(1 - \delta)$$

Trigger Strategy \rightarrow cooperative and Punishment Profiles

Punishment is a stage NE profile

If a player deviates from cooperative, the others punish them

grim-trigger strategy

one-deviation property

The Equilibrium Payoff Set w/ Low Discounting

Cooperation is always eventually possible