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An inertia supergame is one in which changing strategies over time is not merely costly, but the cost incurred by any player in changing strategies is greater than any gains made in a single period. Define $V^*$, a payoff vector in the convex hull of the set of payoff vectors of the one-shot game, to be an I-sustainable payoff if for all $i \in N$ and $x^i \in X^i$ there exists $x^{N\setminus\{i\}} \in N\setminus\{i\}$ such that for any finite index set $L$,

$$\sum_{\ell \in L} p(\ell) U^i(x^i, x^{N\setminus\{i\}}) \leq v^i.$$ 

Note: Here $\Delta(L) = \{p: L \rightarrow (0, 1) | \sum_{\ell \in L} p(\ell) = 1\}$, where $L$ is a finite index set.

We show that the set of payoff vectors of the strong, perfect equilibrium points of the inertia supergame are exactly the I-sustainable payoffs of the one-shot game.

We also find that if one allows for a correlating device that induces the Borel sigma algebra on the strategy space of the one-shot game, then the correlated $\alpha$-core is the topological closure of the set of payoffs of the strong, perfect equilibrium points of the inertia supergame.

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