Coordinating by Not Committing: Efficiency as the Unique Outcome[*]

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Abstract

Coordinating on the efficient outcome in the presence of multiple equilibria is known to require some asynchronicity in moves. The ability of players to unilaterally restrict the set of actions available to them before simultaneously playing the resulting game is known to increase the set of equilibrium outcomes.

For a given initial simultaneous move 2 player game we allow the two players a) to simultaneously, unilaterally and irreversibly restrict their own choice sets and to do so gradually over multiple periods, b) with such commitments entailing an arbitrarily small cost and c) with each player having the ability to credibly rule out future commitments on their part. When no player wishes to make further commitments (or can) the players simultaneously choose from the remaining actions.

If the initial game is one of pure coordination then in equilibrium the players end up coordinating on the Pareto efficient outcome. Further, not only does avoiding inefficient equilibria not involve the use of asynchronous moves, it does not *necessarily* involve the use of commitments on the equilibrium path. The option alone is shown to suffice.

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