A Difficulty in Implementing Correlated Equilibrium Distributions

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Abstract

We view achieving a particular correlated equilibrium distribution for a normal form game as an implementation problem. We show, using a parametric version of the two-person Chicken game, that a social choice function that chooses any particular correlated equilibrium distribution does not satisfy Maskin monotonicity and therefore cannot be fully implemented in Nash equilibrium. Thus, no mechanism that aims to understand a correlated distribution as the unique outcome of Nash equilibrium play can be found. JEL Classification Numbers: C72. Keywords: Correlated Equilibrium Distribution, Implementation, Monotonicity.

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