Natural implementation with partially honest agents^{*}

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Abstract

The paper proposes necessary and sufficient conditions for the natural implementation of (efficient) social choice correspondences (SCCs) in pure finite exchange economies when some of the agents are partially honest. A partially honest agent is an agent who *strictly* prefers to tell the truth when lying has no better material consequences for her. Firstly, it is shown that if there is even one partially honest agent in the economy (and the planner does not know her identity), then *any* SCC is Nash implementable by a natural price-allocation mechanism. Secondly, and in sharp contrast with the results of conventional models of natural implementation, it is shown that the equivalence relationship between natural price-allocation mechanisms and natural price-quantity² mechanisms no longer holds. Finally, and even more strikingly, the paper reports that the class of implementable SCCs by natural price-quantity mechanisms is significantly enlarged.

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Key-words: Natural implementation, Nash equilibrium, exchange economies, intrinsic preferences for honesty.

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