ON THE POSSIBILITY OF INFORMATIVE EQUILIBRIA IN FUTURES MARKETS WITH FEEDBACK

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Abstract
We study the existence of equilibria and the information content of prices in futures markets where the probability of future payoffs can be altered by an intervening agent who acts in response to the market price, hence creating a feedback effect. We focus on the market with the simplest possible structure: traders betting on the occurrence of a future event by buying or selling Arrow-Debreu securities (one dollar claims contingent on a binary outcome). We find that in the presence of feedback: (i) a rational expectations equilibrium may not exist; (ii) the market price may decline in response to information that is ex-ante more favorable to the occurrence of the underlying event; (iii) an equilibrium that reveals no information may obtain. Thus, feedback from an intervening agent materially alters the way in which price responds to information, and potentially undermines the viability of the market itself. (JEL: D53, D82, G13, G14)

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