Price Discovery with Fallible Choice
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Summary "Price discovery with fallible choice" by Aad Ruiter

General equilibrium theory can state conditions for the existence, uniqueness and optimality of the Walrasian equilibrium. However, it cannot satisfactorily explain how this equilibrium comes about. Experimental economists, on the other hand, claim that it takes a few uninformed traders and a Continuous Double Auction to achieve results that closely resemble the Walrasian equilibrium. This suggests that we can learn something profound about price discovery from experimental trading.

This thesis seeks behavioral explanations of price formation, which acknowledge that the economy is out of equilibrium and that human choice is fallible. It analyzes experimental trading in the Scarf examples by means of simulation techniques. Among other things, it finds that rules of thumb better explain human trading behavior than do monopolistic competition, prospect theory or entropy-sensitive preferences.

This thesis also proposes a new price adjustment process in which an auctioneer assumes that all traders have Cobb-Douglas utility functions. This price adjustment process globally converges in exchange economies in which agents have CES utility functions, ranging from Leontief to Cobb-Douglas utility functions. In the unstable Scarf economies, for instance, prices spiral towards their equilibrium values in a direction that is consistent with the predictions of tâtonnement theory. The new price process shows that an auctioneer needs substantially less information than is implied by the Saari-Simon result.