Trading Institutions in Experimental Asset Markets: Theory and Evidence

Sascha Baghestanian, Volodymyr Lugovskyy, Daniela Puzzello & Steven Tucker

Abstract

We report the results of an experiment designed to study the role of institutional structure in the formation of bubbles and crashes in laboratory asset markets. In this study, in addition to Call Market and Double Auction, we employ the Tatonnement trading institution, which has not been previously explored in laboratory asset markets, despite its historical and contemporary relevance. The results show that bubbles are significantly smaller in Tatonnement than in Double Auction, suggesting that the trading institution plays a crucial role in the formation of bubbles. We provide a heterogeneous agent model with speculators, fundamental and noise traders to better understand these results. For each trading institution, we provide structural estimates of the parameters of the model using experimental data. The model allows us to identify the different types of traders empirically. We find that speculation is more prominent in Double Auction than in other trading institutions. Furthermore, Tatonnement produces more accurate and less dispersed (among traders) price forecasts towards the end of the experiment, which indicates that Tatonnement favors.