

Survival in Speculative Markets

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Resumo/Abstract:

This paper studies the problem of updating the super-replication prices of an arbitrage-free market in a multiperiod setting. We introduce a set of standard axioms and a (weak) version of Dynamic Consistency to characterize the updated pricing. In a stochastic exchange economy where, due to beliefs heterogeneity, agents engage in speculative trade, I investigate the Market Selection Hypothesis that speculation rewards the agent with the most accurate beliefs. Assuming that agents have Epstein-Zin preferences and that markets are complete, I derive sufficient conditions for agents survival in terms of saving and portfolio decisions, and show that the Market Selection Hypothesis fails generically. Beliefs heterogeneity may persist in the long-run or speculation may cause the agent with the most accurate beliefs to vanish. Failures occur because agents portfolio returns depend not only on beliefs accuracy but also on risk preferences, through the comparison with the optimal growth portfolio. The latter plays no role in CRRA economies because, due to the interdependence of relative risk aversion and intertemporal elasticity of substitution, portfolio returns not related to beliefs accuracy are compensated by the component of saving induced by speculation.