

# **Speculative behavior and the dynamics of interacting stock markets**

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## **Abstract**

We develop a simple agent-based financial market model in which speculators, who apply technical and fundamental analysis to determine their orders, can trade in two different stock markets. In each time step, a speculator selects a strategy/market combination and this decision depends on predisposition effects, herding behavior and market circumstances. Simulations reveal that our model is able to replicate some important stylized facts of stock markets. We observe, for instance, bubbles and crashes, fat-tailed return distributions and volatility clustering. Remarkably, the speculators' behavior creates also realistic stock market interactions, including coevolving stock prices and cross-correlated volatilities.

**Keywords:** Stock markets; stylized facts; technical and fundamental analysis; agent-based modeling; bounded rationality; simulation analysis.

**JEL classification:** C63; D84; G12.