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ACCEPTED MANUSCRIPT

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 heterogeneous speculators apply technical and fundamental analysis to trade in two different stock markets. Speculators' strategy/market selections are repeated at each time step and depend on predisposition effects, herding behavior and market circumstances. Simulations reveal that our model is able to explain a number of nontrivial statistical properties of and between international stock markets, including bubbles and crashes, fat-tailed return distributions, volatility clustering, persistent trading volume, coevolving stock prices and cross-correlated volatilities. Against this background, our model may be deemed to have been validated.

Keywords

Stock markets; comovements; cross-correlations; technical

and fundamental analysis; agent-based modeling; simulation analysis.

JEL classification

C63; D84; G12.

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