

Charting the Market: Fundamental and Chartist Strategies in a Participatory Stock Market Experiment

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Abstract

Agent-based finance is a novel branch of computational economics, seeking to understand the complex social system of stock markets. A prominent model of the field is the Santa Fe Institute Artificial Stock Market (SFI ASM). This paper continues a line of research that explores the effect of human traders in the early version of the SFI-ASM model. To achieve this, the methodology of participatory agent-based simulation is applied, where human subjects control a certain number of agents in a simulation.

The focus of the experiments reported here is on the effect and evolution of fundamental and chartist strategies. According to rational expectations theory, only fundamental strategies that relate price to fundamental value by using dividend information will yield success. Real-world market deviations are then ascribed to *market psychology*. This paper explores how extreme market deviations affect the strategies adopted by inexperienced traders. Furthermore, it studies what effect these adopted strategies, in turn, have on aggregate market behavior.