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Mikhail Anufriev, Aleksei Chernulich, Jan Tuinstra

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A laboratory experiment on the heuristic switching model*

Mikhail Anufriev [a,†] Aleksei Chernulich [a,‡] Jan Tuinstra [b,§]

[a] *University of Technology Sydney, Business School, Economics Discipline Group*
[b] *CeNDEF, Amsterdam School of Economics, University of Amsterdam*

Abstract

We present results from the first laboratory experiment on the seminal heuristic switching model introduced by Brock and Hommes (1997, 1998). Subjects choose between two alternatives, a sophisticated and stabilizing, but costly, heuristic, and a destabilizing, but cheap, heuristic, and are paid according to the performance of the chosen heuristic. Aggregate choices determine the evolution of a state variable and, consequently, the performance of both heuristics. Theoretically, an increase in the costs for the stabilizing heuristic generates instability and leads to endogenous fluctuations in both the state variable and the fraction of agents using that heuristic.

We vary the costs of the stabilizing heuristic in the experiment and find that the predictions of the heuristic switching model are partially confirmed. For low costs the dynamics are stable. For high costs, the dynamics initially are unstable and exhibit the type of bubbles and crashes emblematic for the heuristic switching model. However, over time the pattern of bubbles and crashes disappears and the dynamics become more stable. We estimate a standard discrete choice model on aggregate choice data and observe that

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†*E-mail:* Mikhail.Anufriev@uts.edu.au.
‡*E-mail:* Aleksei.Chernulich@uts.edu.au.
§*E-mail:* J.Tuinstra@uva.nl.