ENDOGENOUS MARKET FORMATION AND MONETARY TRADE: AN EXPERIMENT

Gabriele Camera
Chapman University
and University of Bologna

Dror Goldberg
The Open University of Israel

Avi Weiss
Bar-Ilan University and Taub Center for
Social Policy Studies in Israel

Abstract
The theory of money assumes decentralized bilateral exchange and excludes centralized multilateral exchange. However, endogenizing the exchange process is critical for understanding the conditions that support the use of money. We develop a "travelling game" to study the emergence of decentralized and centralized exchange, theoretically and experimentally. Players located on separate islands can either trade locally, or pay a cost to trade elsewhere, so decentralized and centralized markets can both emerge in equilibrium. The former minimize trade costs through monetary exchange; the latter maximizes overall surplus through non-monetary exchange. Monetary trade emerges when coordination is problematic, while centralized trade emerges otherwise. This shows that to understand the emergence of money it is important to amend standard theory such that the market structure is endogenized. (JEL: E4, E5, C9, C92)

The editor in charge of this paper was Imran Rasul.

Acknowledgments: We thank Co-Editor Imran Rasul and four anonymous referees for many helpful suggestions and comments that substantially improved this study from an earlier version. We also thank A. Baron, A. Chachmon, I. Feder, U. Rochev, O. Stegmann and, especially, I. Dekel, for research and programming assistance, as well as seminar participants at the Technical University of Berlin, GATE-Lyon, and participants at the 2013 and 2015 SAET Meetings, the 2015 and 2018 ESA International Meetings, and the 8th International Workshop on Theoretical and Experimental Macroeconomics for comments. D. Goldberg and A. Weiss gratefully acknowledge research support from the Israel Science Foundation (grant No. 1004/11). Weiss is a Research Fellow at IZA.

E-mail: camera@chapman.edu (Camera); dg@drorgoldberg.com (Goldberg); Avi.Weiss@biu.ac.il (Weiss)