COMMUNICATION IN GLOBAL GAMES: THEORY AND EXPERIMENT*

ALA AVOYAN†

Latest version at www.alaavoyan.com

OCTOBER 23, 2017

Abstract

This paper introduces communication as a strategic choice in global games. I characterize the resulting equilibria and test the theoretical predictions in a laboratory setting. Introducing simultaneous two-sided cheap-talk communication induces an informative equilibrium in which individuals share their intended actions. Cheap-talk communication studied in this paper improves welfare by reducing two types of inefficiencies present in global games: (i) the payoff-dominant equilibrium is selected instead of the risk-dominant one, yielding substantial gains in efficiency; and (ii) miscoordination is reduced because players' actions are more correlated. The experimental results provide support for qualitative features of the informative equilibrium. All communication protocols significantly reduce miscoordination. Despite the decrease in miscoordination, one-stage communication protocols have mixed effects on welfare, while multi-stage cheap-talk provides significantly higher welfare.

JEL Classification: C71, C73, C92, D74;

Keywords: communication, global games, cheap-talk, coordination, experiment.

*I thank Andrew Schotter for his continuous support and his invaluable input on this project. I am grateful to Miguel A. Ballester, Andrew Caplin, Guillaume Fréchette, Frank Heinemann, Alessandro Lizzeri, Erik Madsen, Laurent Mathevet, Keith O'Hara, David Pearce, João Ramos, Debraj Ray, Isabel Trevino, Séverine Toussaert, Nikhil Vellodi, and Basil Williams for their helpful comments. I gratefully acknowledge financial support from the Center for Experimental Social Science (CESS) at New York University.

†Department of Economics, New York University. E-mail: a.avoyan@nyu.edu