RISK SHARING WITH LIMITED COMMITMENT AND PREFERENCE HETEROGENEITY: STRUCTURAL ESTIMATION AND TESTING

Sarolta Laczó
Institut d’Anàlisi Econòmica (IAE-CSIC) and Barcelona GSE

Abstract
In order to analyze the role of limited commitment and preference heterogeneity in explaining the consumption allocation, I propose a theoretical and empirical framework to estimate and evaluate a risk sharing model where insurance transfers have to be self-enforcing and the coefficient of relative risk aversion may depend on observable household characteristics. I compare this model to benchmark models with full commitment and/or without preference heterogeneity using data from three Indian villages. I find that the limited commitment model with heterogenous preferences outperforms the benchmark models in a statistical sense and in terms of (i) explaining the dynamic response of consumption to idiosyncratic income shocks, (ii) accounting for the variation of consumption unexplained by household and time effects, and (iii) capturing the variation of inequality across time and villages and predicting changes in inequality. I also use the estimated models to predict the effects of a counterfactual tax and transfer policy on the consumption allocation. The limited commitment model with preference heterogeneity predicts larger benefits to the poor than its homogenous counterpart. (JEL: C52, D10, D52)

The editor in charge of this paper was Fabio Canova.

Acknowledgments: This paper is based on a chapter of my doctoral thesis at the Toulouse School of Economics. I also benefitted from the hospitality of the European University Institute and the University of California, Los Angeles while advancing this project. I am especially indebted to Thierry Magnac for his guidance at the early stages of this project and to Raffaele Rossi for his help with revising this paper. I also thank the co-editor Fabio Canova, three anonymous referees, Árpád Ábrahám, Orazio Attanasio, Russell Cooper, Pierre Dubois, Johannes Gierlinger, Jinyong Hahn, Ethan Ligon, Albert Marcet, Ramon Marimon, Maurizio Mazzocco, Alessandro Mennuni, participants of the Panel Data Conference in Bonn, the Summer Workshop in Budapest, ESEM in Barcelona, SED in Montreal, Normac in Mustio, ESWC in Shanghai, the Macroeconomic Dynamics workshop at EIEF, and ICEEE in Pisa, and seminar participants at EUI, TSE, Queen Mary, University of Alicante, UCLA, Universitat Autònoma de Barcelona, and University of Bonn for useful comments and suggestions. All errors are mine. Generous funding from Agence Nationale de la Recherche (ANR-06-BLAN-0104) is gratefully acknowledged.

E-mail: sarolta.laczo@iae.csic.es

Journal of the European Economic Association
Preprint prepared on 24 June 2014 using jeea.cls v1.0.