Resource Allocation in Couples - A Collective Model with Prior Information

Alexander Wolf∗1

1European Center for Advanced Research in Economics and Statistics (ECARES) – Belgium

Abstract

This paper approaches, for the first time, the estimation of a collective household demand system from a Bayesian perspective. Using prior information on equivalence scales, as well as restrictions implied by theory, tight credible intervals are found for resource shares, a measure of the distribution of economic well-being in a household. A modern MCMC sampling method provides a complete picture of the high-dimensional parameter vector’s posterior distribution and allows for reliable inference.

The share of household earnings generated by a household member is estimated to have a positive effect on her share of household resources in a sample of couples from the US Consumer Expenditure survey. An increase in the earnings share of one percentage point is estimated to result in a shift of between 0.05% and 0.14% of household resources in the same direction, meaning that spouses partially insure one another against such shifts. The estimates imply an expected shift of 0.71% of household resources from the average man to the average woman in the same sample between 2008 and 2012, when men lost jobs at a greater rate than women.

Keywords: both

∗Speaker