

E Pluribus Unum: Macroeconomic modelling for multi-agent economies

Tiziana Assenza
Catholic University of Milan and
CeNDEF University of Amsterdam

Domenico Delli Gatti
Catholic University of Milan

Abstract

From the macroeconomist's viewpoint, agent based modeling has an obvious drawback: it makes impossible to think in aggregate terms. We propose a modeling strategy which reduces the dimensionality of an agent based framework by replacing the actual distribution of agents' characteristics with the first and higher moments of the distribution itself. We put this strategy at work in a Macroeconomic and Agent Based Model (M&ABM) of the financial accelerator.