



KATEDRA HOSPODÁRSKEJ POLITIKY



CENTRUM PRE EKONOMIU A FINANČIE



NÁRODNÁ BANKA SLOVENSKA
EUROSYSTEM



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E Pluribus Unum: Macroeconomic Modelling for Multi-agent Economies

Abstract

From the macroeconomist's viewpoint, agent based modelling has an obvious drawback: It makes impossible to think in aggregate terms. The modeller, in fact, can reconstruct aggregate variables only "from the bottom up" by summing the levels of a myriad of individual variables. We propose a modelling strategy which reduces the dimensionality of an agent based framework by replacing the actual distribution 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 in which firms' heterogeneous degrees of financial robustness affect investment in a Greenwald-Stiglitz setting.

Venue: Faculty of Mathematics, Physics and Informatics, Comenius University,
Lecture room C, Mlynská dolina, 84248 Bratislava

Date: 18 December 2013

Program: 15:00 Domenico Delli Gatti: E Pluribus Unum: Macroeconomic Modelling
for Multi-agent Economies

16:30 coffee