Market Emergence and Learning

Diego Corredor^{*} Department of Economics Universidad del Rosario Calle 14 # 4 - 69 Bogotá, Colombia

Type of Presentation: Oral Presentation

Abstract

This paper studies the role played by learning processes as a possible determinant of market emergence in a decentralized society. In particular, an agent-based computational version of the Overlapping Generations model is implemented in order to capture the coordination problems behind markets' existence and also to analyze how social and individual learning can help to overcome them. The model, programmed in the Swarm platform, considers an artificial society with two types of agents: individuals and firms. Individuals live for two periods and own firms. At each period of time, individuals supply their labor force and savings holdings in order to finance their two-period consumption. At the same time, firms use individuals' labor force and savings holdings to produce a consumption good. All agents interact inside three decentralized institutions called rounds where labor force, savings holdings and the consumption good are negotiated and, if successful, buyed/sold and traded. Because each round is entirely decentralized, a perfect coordination among agents cannot be assured and so market existence cannot be priorly assumed. A preliminary simulation analysis suggests that learning processes ease coordination among agents, assuring the emergence and the persistence of economic markets and the convergence in market prices.

^{*}dacorredorq@gmail.com , diego.corredor46@urosario.edu.co