A Simple Model to Test the Role of Sentiments in Expected Wealth

Pedro J. Gutiérrez*

Abstract

The *market selection* hypothesis asserts that markets favor agents with correct beliefs over agents with incorrect beliefs. In this respect, the most robust results are the prevalence of the market selection hypothesis in an Arrow-Debreu general equilibrium economy with complete markets, and the properness of the entropy of agents' beliefs concept to determine the dominant agents in such economies. Nevertheless, the analyses on this question are far from conclusive. For instance, in the literature there exist authors showing that agents with incorrect beliefs may earn higher expected returns than agents with correct beliefs as well as the opposite. This paper throws some light on this subject showing that even in an Arrow-Debreu general equilibrium economy with complete markets, moderate optimistic traders with incorrect beliefs can earn higher expected wealth than agents with rational expectations. Interestingly, nevertheless, extreme optimistic traders tend to disappear as predicted by the entropy criterion, suggesting the need to extend the concept of agent's entropy incorporating sentiments, their sign and their degree to grasp all the relevant factors determining agent's survival.

JEL classification: D51, D84, D90.
Keywords: Arrow-Debreu General Equilibrium Model; Arrow-Debreu Securities; Complete Markets; Market Selection; Entropy.

In *Global Business and Economics Anthology*, Vol. I, March 2010, B&ESI ed., Worcester MA, USA.

* *E-mail address:* pedrojos@fae.uva.es (P.J. Gutiérrez). *Postal address:* Dpto. de Fundamentos del Análisis Económico e Historia e Instituciones Económicas, Facultad de CC.EE. y EE., Universidad de Valladolid, Avda. Valle Esgueva, 6, 47011 Valladolid, SPAIN. Financial support from Education and Science Department, Spanish Government, research project SEJ2005-08709/ECON, and from Education Department, Castilla and León Autonomous Government, research project VA081A07, is gratefully acknowledged.