Bocconi

Università Commerciale Luigi Bocconi

Department of Decision Sciences **Department of Economics**

Economic Theory, Decision Theory and Experimental Economics Seminar

An Externality-Robust Auction – Theory and Experimental Evidence

Nick Netzer

University of Zurich

Tuesday, 19th November 2013
12:30pm Room 3-E4-SR03 Via Rontgen 1 Milano

Abstract

An auction is said to be externality-robust if unilateral deviations from equilibrium leave the remaining bidders' payoffs unaffected. The equilibrium and its outcome will then persist even if externalities between bidders arise from certain types of interdependent preferences. One important example are externalities due to spiteful preferences, which are frequently used to explain overbidding in auctions. Another important example is cross-shareholding between firms that compete in an auction. For the independent private values model, we derive an auction that coincides with the second-price auction (SPA) in terms of efficiency and expected revenue, and, in contrast to the second-price auction, is also externality-robust. The externality-robust auction (ERA) is a first-price auction in which truthful bidding is encouraged by bonus payments. We test the robustness property experimentally by comparing the outcomes of the SPA and the ERA. We replicate the earlier finding of significant average overbidding in the SPA, while we find no overbidding on average in the ERA. We also conduct additional treatments where bidders play against the computer, and we use controls for cognitive skills and joy of winning to further pin down the reasons behind the subjects' bidding behavior and to understand the sources of individual heterogeneity.
Jointly with Björn Bartling

Department of Decision Sciences
Department of Economics

Via Röntgen 1 - 20136Milano

Tel. 02 5836.5632
Fax 02 5836.5630

With the financial support of ERC advanced Grant BRSCDP-TEA, GA n.230367