Inácio Bó

Presentation Title

Pick-an-object mechanisms
(with Rustamdjan Hakimov)

Abstract

We introduce a new family of mechanisms for one-sided matching markets, denoted pick-an-object (PAO) mechanisms. When implementing an allocation rule via PAO, agents are asked to pick an object from individualized menus. These choices may be rejected later on, and these agents are presented with new menus. When the procedure ends, agents are assigned the last object they picked. We characterize the allocation rules that can be sequentialized by PAO mechanisms, as well as the ones that can be implemented in a robust truthful equilibrium. We justify the use of PAO as opposed to direct mechanisms by showing that its equilibrium behavior is closely related to the one in obviously strategy-proof (OSP) mechanisms, while expanding the domain of rules that can be implemented to include commonly used ones, such as Gale-Shapley DA and Top Trading Cycles. We run laboratory experiments comparing truthful behavior when using PAO, OSP, and direct mechanisms to implement different rules. These indicate that individuals are more likely to behave in line with the theoretical prediction under PAO and OSP implementations than their direct counterparts.

Keywords

Market Design; Matching; Sequential Mechanisms; Experiments; obvious strategy-proofness

Affiliation

University of York