

# Matching with Externalities

[Abstract] \*

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## ABSTRACT

We incorporate externalities into the stable matching theory of two-sided markets. Extending the classical substitutes condition to allow for externalities, we establish that stable matchings exist when agent choices satisfy substitutability. In addition, we show that the standard insights of matching theory, like the existence of side-optimal stable matchings and the deferred acceptance algorithm, remain valid despite the presence of externalities even though the standard fixed-point techniques do not apply. Furthermore, we establish novel comparative statics on externalities.

Richter, Tayfun Sonmez, Alex Teytelboym, Simpson Zhang, and audiences of presentations at UCLA, Carnegie Mellon University, and University of Pennsylvania Workshop on Multiunit Allocation. Yenmez gratefully acknowledges financial support from National Science Foundation grant SES-1326584.

## Categories and Subject Descriptors

C78 [**Bargaining Theory; Matching Theory**]: issues related to matching theory; D44 [**Auctions**]: theoretical studies related to auctions; C63 [**Computational Techniques; Simulation Modeling**]: issues related to computational techniques applicable to economic models; C62 [**Existence and Stability Conditions of Equilibrium**]: issues related to methods of proving the existence of equilibrium.

## General Terms

Matching, Auctions, Externalities, Deferred Acceptance

## Keywords

matching, auctions, externalities, deferred acceptance

## 1. ACKNOWLEDGMENTS

We would like to thank Peter Chen and Michael Egedal for stimulating conversations early in the project. For their comments, we would also like to thank Omer Ali, Andrew Atkeson, James Fisher, George Mailath, Preston McAfee, SangMok Lee, Michael Ostrovsky, David Reiley, Michael

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\*This is the abstract of the paper *Matching with Externalities* available at <http://pycia.bol.ucla.edu/pycia-yenmez-externalities.pdf>