

Market Design Approaches to Inequality

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Lecture Topics

Pre-Reading/Introduction.

Alvin E. Roth. The economist as engineer: Game theory, experimentation, and computation as tools for design economics. *Econometrica*, 70:1341–1378, 2002.

Parag A. Pathak and Tayfun Sönmez. Leveling the playing field: Sincere and sophisticated players in the Boston mechanism. *American Economic Review*, 98:1636–1652, 2008.

Part 1: Balancing Fairness, Efficiency, and Incentives.

Parag A. Pathak and Tayfun Sönmez. School admissions reform in Chicago and England: Comparing mechanisms by their vulnerability to manipulation. *American Economic Review*, 103:80–106, 2013.

John William Hatfield, Fuhito Kojima, and Yusuke Narita. Promoting school competition through school choice: A market design approach. Stanford Graduate School of Business Working Paper, 2012.

Eduardo M. Azevedo and Jacob Leshno. A supply and demand framework for two-sided matching markets. Wharton School Working Paper, 2013.

Caterina Calsamiglia and Antonio Miralles. All about priorities? less school choice with bad schools. Universitat Autònoma de Barcelona Working Paper, 2013.

Tayfun Sönmez. Bidding for army career specialties: Improving the ROTC branching mechanism. *Journal of Political Economy*, 121:186–219, 2013.

Scott Duke Kominers and E. Glen Weyl. Holdout in the assembly of complements: A problem for market design. *American Economic Review Papers & Proceedings*, 102:360–365, 2012.

Part 2: Design of Affirmative Action Policies.

Fuhito Kojima. School choice: Impossibilities for affirmative action. *Games and Economic Behavior*, 75:685–693, 2012.

Isa Emin Hafalir, M. Bumin Yenmez, and Muhammed Ali Yildirim. Effective affirmative action in school choice. *Theoretical Economics*, 8:325–363, 2013.

Scott Duke Kominers and Tayfun Sönmez. Designing for diversity in matching. University of Chicago Working Paper, 2013.

Federico Echenique and M. Bumin Yenmez. How to control controlled school choice. Tepper Business School Working Paper, 2013.

Further Reading

Survey.

- Alvin E. Roth. The art of designing markets. *Harvard Business Review*, 85, 2007.
- Alvin E. Roth. Deferred acceptance algorithms: History, theory, practice, and open questions. *International Journal of Game Theory*, 36:537–569, 2008.

Matching Theory.

- David Gale and Lloyd S. Shapley. College admissions and the stability of marriage. *American Mathematical Monthly*, 69:9–15, 1962.
- L. E. Dubins and D. A. Freedman. Machiavelli and the Gale-Shapley algorithm. *American Mathematical Monthly*, 88:485–494, 1981.
- Alvin E. Roth and Marilda Sotomayor. *Two-Sided Matching: A Study in Game-Theoretic Modeling and Analysis*. Cambridge University Press, 1990.
- John William Hatfield and Paul Milgrom. Matching with contracts. *American Economic Review*, 95:913–935, 2005.
- Tayfun Sönmez and M. Utku Ünver. Matching, allocation, and exchange of discrete resources. *Handbook of Social Economics*, 1:781–852, 2009.

School Choice.

- Michel Balinski and Tayfun Sönmez. A tale of two mechanisms: Student placement. *Journal of Economic Theory*, 84:73–94, 1999.
- Atila Abdulkadiroğlu and Tayfun Sönmez. School choice: A mechanism design approach. *American Economic Review*, 93:729–747, 2003.
- Atila Abdulkadiroğlu, Parag A. Pathak, and Alvin E. Roth. The New York City high school match. *American Economic Review*, 95:364–367, 2005.
- Atila Abdulkadiroğlu, Parag A. Pathak, Alvin E. Roth, and Tayfun Sönmez. The Boston public school match. *American Economic Review*, 95:368–371, 2005.
- Atila Abdulkadiroğlu, Parag A. Pathak, Alvin E. Roth, and Tayfun Sönmez. Changing the Boston school choice mechanism: Strategy-proofness as equal access. Massachusetts Institute of Technology Working Paper, 2006.
- Atila Abdulkadiroğlu, Parag A. Pathak, and Alvin E. Roth. Strategyproofness versus efficiency in matching with indifference: Redesigning the NYC high school match. *American Economic Review*, 99(5):1954–1978, 2009.
- Onur Kesten. School choice with consent. *Quarterly Journal of Economics*, 125:1297–1348, 2010.
- Atila Abdulkadiroğlu, Yeon-Koo Che, and Yosuke Yasuda. Resolving conflicting preferences in school choice: The Boston mechanism reconsidered. *American Economic Review*, 101:399–410, 2011.
- Surendrakumar Bagde, Dennis Epple, and Lowell J. Taylor. Dismantling the legacy of caste: Affirmative action in Indian higher education. Tepper Business School Working Paper, 2011.
- Lars Ehlers, Isa E. Hafalir, M. Bumin Yenmez, and Muhammed A. Yildirim. School choice with controlled choice constraints: Hard bounds versus soft bounds. Tepper Business School Working Paper, 2011.
- Parag A. Pathak. The mechanism design approach to student assignment. *Annual Review of Economics*, 3:513–536, 2011.
- Umut Dur, Scott Duke Kominers, Parag A. Pathak, and Tayfun Sönmez. The demise of walk zones in Boston: Priorities vs. precedence in school choice. Boston College Working Paper, 2013.

Cadet–Branch Matching.

Tayfun Sönmez and Tobias B. Switzer. Matching with (branch-of-choice) contracts at United States Military Academy. *Econometrica*, 81:451–488, 2013.

Combinatorial Assignment.

Eric Budish. The combinatorial assignment problem: Approximate competitive equilibrium from equal incomes. *Journal of Political Economy*, 119:1061–1103, 2011.

Eric Budish and Estelle Cantillon. The multi-unit assignment problem: Theory and evidence from course allocation at harvard. *American Economic Review*, 102:2237–2271, 2012.

Eric Budish, Yeon-Koo Che, Fuhito Kojima, and Paul Milgrom. Designing random allocation mechanisms: Theory and applications. *American Economic Review*, 103:585–623, 2013.

Eminent Domain.

Scott Duke Kominers and E. Glen Weyl. Concordance among holdouts. Harvard Institute of Economic Research Discussion Paper, 2012.