M. Utku Ünver

Working Papers and Publications by Topic

October 2026

Legend: ○: current WP; ▲: publication (*: contributed); ▷: dormant WP;
Each paper is listed once, under its main topic, with "See also" notes for related topics.
Almost all titles are clickable. For gated papers, a PDF is likely available at sites.bc.edu/utku-unver. For chronological listing, see my full CV. Publications in medicine and health policy are listed last within a topic.

Methodology, Theory, and Policy of Market Design and Matching

Handbook surveys of matching theory and its applications.

▲ * "Matching under Non-Transferable Utility: Theory." In Y.-K. Che, P.-A. Chiappori, and B. Salanié (Editors): **Handbook of the Economics of Matching, Volume 2**, Elsevier, November 2025, Chapter 1, 1-118 (with Tayfun Sönmez).

▲ * "Matching under Non-Transferable Utility: Applications." In Y.-K. Che, P.-A. Chiappori, and B. Salanié (Editors): **Handbook of the Economics of Matching, Volume 2**, Elsevier, November 2025, Chapter 3, 177-306 (with Tayfun Sönmez).

▲ * "Matching, Allocation, and Exchange of Discrete Resources." In J. Benhabib, A. Bisin, and M.O. Jackson (Editors): **Handbook of Social Economics, Volume 1**, North-Holland, 2011, Chapter 17, 781-852 (with Tayfun Sönmez).

Exchange of Paired Living Kidney Donors: Theory and Application

Theory and design of kidney exchange for incompatible living donor-patient pairs; algorithms used by the New England Program for Kidney Exchange and the Alliance for Paired Kidney Donation.

See also "Influencing Policy and Transforming Institutions: Lessons from Kidney/Liver Exchange" and "Market Design for Living-Donor Organ Exchanges: An Economic Policy Perspective" under *Exchange of Paired Living Liver Donors: Theory and Application*.

○ "Optimal Dynamic Matching under Local Compatibility: An Application to Kidney Exchange." July 2025 (with Ömer Faruk Şahin, Duygu Sili, and Özgür Yılmaz).

▲ "Incentivized Kidney Exchange." ***American Economic Review***, July 2020, 110 (7), 2198-2224 (with Tayfun Sönmez and M. Bumin Yenmez).

▲ "How (Not) to Integrate Blood Subtyping Technology to Kidney Exchange." ***Journal of Economic Theory***, July 2018, 176, 193-231 (with Tayfun Sönmez and Özgür Yılmaz).

▲ "Kidney Exchange and the Alliance for Paired Donation: Operations Research Changes the Way Kidneys are Transplanted." ***Interfaces*** (renamed as ***INFORMS Journal on Applied Analytics***), January–February 2015, 45 (1), 26-42 (with Ross Anderson, Itai Ashlagi, David Gamarnik, Michael Rees, Alvin E. Roth, and Tayfun Sönmez).

▲ "Altruistically Unbalanced Kidney Exchange." ***Journal of Economic Theory***, July 2014, 152, 105-129 (with Tayfun Sönmez).

▲ * "Market Design for Kidney Exchange." In N. Vulkan, A.E. Roth, and Z. Neeman (Editors): **The Handbook of Market Design**, Oxford University Press, 2013, Chapter 4, 91-137 (with Tayfun Sönmez).

▲ "Dynamic Kidney Exchange." ***Review of Economic Studies***, January 2010, 77 (1), 372-414.

▲ "Efficient Kidney Exchange: Coincidence of Wants in Markets with Compatibility Based Preferences." ***American Economic Review***, June 2007, 97 (3), 828-851 (with Alvin E. Roth and Tayfun Sönmez).

▲ "Pairwise Kidney Exchange." ***Journal of Economic Theory***, December 2005, 125 (2), 151-188 (with

Alvin E. Roth and Tayfun Sönmez).

▲ * "A Kidney Exchange Clearinghouse in New England." ***American Economic Review Papers and Proceedings***, (renamed as ***AEA: Papers and Proceedings***), May 2005, 95 (2), 376-380 (with Alvin E. Roth and Tayfun Sönmez).

▲ "Kidney Exchange." ***Quarterly Journal of Economics***, May 2004, 119 (2), 457-488 (with Alvin E. Roth and Tayfun Sönmez).

▷ "Valuing Prearranged Paired Kidney Exchanges: A Stochastic Game Approach." Latest: October 2011, Final status: Revise-and-Resubmit, *Operations Research* (with Murat Kurt, Mark Roberts, and Andrew Schaefer).

▷ "Transplant Center Incentives in Kidney Exchange." March 2005 (with Alvin E. Roth and Tayfun Sönmez).

Publications in Medicine and Health Policy:

▲ * "Nierentausch in Deutschland: Analysen und Empfehlungen." ("Kidney Exchange in Germany: Analyses and Recommendations.") ***Medizinrecht***, 2024, 42 (8), 567-572 (with Axel Ockenfels and Tayfun Sönmez).

An English version appeared as "Crossover Kidney Donation in Germany." ***Wirtschaftsdienst: Economic Policy Journal***, 2024, 104 (8), 513.

▲ * "New Sources in Living Kidney Donation." In D. B. McKay and S. M. Steinberg (Editors): **Kidney Transplantation: A Guide to the Care of Kidney Transplant Recipients**, Springer, 2010, Chapter 8, 103-117 (with Ruthanne Hanto, Alvin E. Roth, and Francis Delmonico).

▲ "A Non-simultaneous Extended Altruistic Donor Chain." ***The New England Journal of Medicine***, March 12, 2009, 360 (11), 1096-1101 (with M.A. Rees, J.E. Kopke, R.P. Pelletier, D.L. Segev, M.E. Rutter, A.J. Fabrega, J. Rogers, O.G. Pankewycz, J. Hiller, A.E. Roth, T. Sandholm, and R.A. Montgomery).

▲ * "Kidney Paired Donation with Compatible Pairs." ***American Journal of Transplantation***, February 2008, 8 (2), 463 (with Alvin E. Roth and Tayfun Sönmez).

▲ "Utilizing List Exchange and Non-directed Donation through 'Chain' Paired Kidney Donations." ***American Journal of Transplantation***, November 2006, 6 (11), 2694-2705 (with Alvin E. Roth, Tayfun Sönmez, Francis L. Delmonico, and Susan L. Saidman).

▲ "Increasing the Opportunity of Live Kidney Donation By Matching for Two and Three Way Exchanges." ***Transplantation***, March 15, 2006, 81 (5), 773-782 (with Susan L. Saidman, Alvin E. Roth, Tayfun Sönmez, and Francis L. Delmonico).

Exchange of Paired Living Liver Donors: Theory and Application

Theory and design of liver exchange; algorithm used by the Banu Bedestenci Sönmez Liver-Paired Exchange System at İnönü University.

▲ * "Influencing Policy and Transforming Institutions: Lessons from Kidney/Liver Exchange." In I. Lo, M. Ostrovsky, and P. A. Pathak (Editors): **New Directions in Market Design**, NBER Conference Report Series, University of Chicago Press, January 2026, Chapter 8 (with Tayfun Sönmez).

▲ "Efficient and Incentive-Compatible Liver Exchange." ***Econometrica***, May 2020, 88 (3), 965-1005 (with Haluk Ergin and Tayfun Sönmez).

▲ "Market Design for Living-Donor Organ Exchanges: An Economic Policy Perspective." ***Oxford Review of Economic Policy***, Winter 2017, 33 (4), 676-704 (with Tayfun Sönmez).

▲ "Dual-Donor Organ Exchange." ***Econometrica***, September 2017, 85 (5), 1645-1671 (with Haluk Ergin and Tayfun Sönmez).

Publications in Medicine and Health Policy:

- ▲ "Enhanced Role of Multi-Pair Donor Swaps in Response to Size Incompatibility: The First Two 5-Way and the First 6-Way Liver Paired Exchanges." ***American Journal of Transplantation***, October 2024, 24 (10), 1881-1895 (with Sezai Yılmaz, Tayfun Sönmez, Volkan İnce, Sami Akbulut, Kemal Barış Sarıcı, and Burak Işık).
- ▲ * "Liver Paired Exchange." In R. W. G. Gruessner and E. Benedetti (Editors): **Living Donor Organ Transplantation, 2nd Edition, Volume 2**, Academic Press, Elsevier, 2024, Chapter 34, 1278-1283 (with Sezai Yılmaz, Tayfun Sönmez, Veysel Umman, Volkan İnce, Sami Akbulut, Murat Zeytunlu, Burak Işık, and Şükrü Emre).
- ▲ "The First 4-Way Liver Paired Exchange from an Interdisciplinary Collaboration between Healthcare Professionals and Design Economists." ***American Journal of Transplantation***, October 2023, 23 (10), 1612-1621 (with Sezai Yılmaz, Tayfun Sönmez, Volkan İnce, Sami Akbulut, Burak Işık, and Şükrü Emre).
- ▲ * "Leverbytesprogram - framtid för Sverige?" ("Liver Exchange - A future for Sweden?"), ***Läkartidningen (The Journal of the Swedish Medical Association)***, 2018, 115, E9YL (with Tommy Andersson and Tayfun Sönmez).

Reserve Systems

Reserve and category-based priority systems for allocating scarce resources; pandemic medical rationing and overlapping reservations in India.

- ○ "Informed Neutrality in Minimalist Market Design: A Case Study on a Constitutional Crisis in India." Revised: June 2024, Initial: October 2022, Revise-and-Resubmit, ***Games and Economic Behavior*** (with Tayfun Sönmez).
- ▲ "Fair Allocation of Vaccines, Ventilators and Antiviral Treatments: Leaving No Ethical Value Behind in Health Care Rationing." ***Management Science***, June 2024, 70 (6), 3999-4036 (with Parag A. Pathak, Tayfun Sönmez, and M. Bumin Yenmez).
- ▲ "Reserve System Design for Allocation of Scarce Medical Resources in a Pandemic: Some Perspectives from the Field." ***Oxford Review of Economic Policy***, Winter 2022, 38 (4), 924-940 (with Parag A. Pathak, Govind Persad, and Tayfun Sönmez).
- ▲ Extended Abstract for "Fair Allocation of Vaccines, Ventilators and Antiviral Treatments: Leaving No Ethical Value Behind in Health Care Rationing." In ***Proceedings of the 22nd ACM Conference on Economics and Computation (EC'21)***, July 2021, 785-786 (with Parag A. Pathak, Tayfun Sönmez, M. Bumin Yenmez).
- ▷ "The Trade-off Between Prioritization and Vaccination Speed Depends on Mitigation Measures." March 2021, NBER Working Paper (with Nikhil Agarwal, Andrew Komo, Chetan Patel, and Parag A. Pathak).
- ▷ "Paying It Backward and Forward: Expanding Access to Convalescent Plasma Therapy Through Market Design." Revised: October 2020, Initial: May 2020, NBER Working Paper (with Scott Duke Kominers, Parag A. Pathak, and Tayfun Sönmez).

Publications in Medicine and Health Policy:

- ▲ "Weighted Lottery to Equitably Allocate Scarce Supply of COVID-19 Monoclonal Antibody." ***JAMA Health Forum***, September 2023, 4 (9), e232774 (with Erin K. McCreary, Utibe R. Essien, Chung-Chou H. Chang, Rachel A. Butler, Parag Pathak, Tayfun Sönmez, Ashley Steiner, Maddie Chrisman, Derek C. Angus, and Douglas B. White).
- ▲ "A Multi-center Weighted Lottery to Equitably Allocate Scarce COVID-19 Therapeutics." ***American Journal of Respiratory and Critical Care Medicine***, August 2022, 206 (4), 503-506 (with Douglas

B. White, Erin K. McCreary, Chung-Chou H. Chang, Mark Schmidhofer, Ryan Bariola, Naudia N. Jonaissant, Govind Persad, Robert D. Truog, Parag Pathak, and Tayfun Sönmez).

- ▲ * "Fair Access to Scarce Medical Capacity for Non-COVID-19 Patients: A Role for Reserves." ***The British Medical Journal***, February 1, 2022, 376, o276 (with Govind Persad, Parag A. Pathak, and Tayfun Sönmez).
- ▲ "A Novel Approach to Equitable Distribution of Scarce Therapeutics: Institutional Experience Implementing a Reserve System for Allocation of COVID-19 Monoclonal Antibodies." ***Chest***, December 2021, 160 (6), 2324-2331 (with Emily Rubin, Scott L. Dryden-Peterson, Sarah P. Hammond, Parag Pathak, and Tayfun Sönmez).
- ▲ "Reserve Systems for Allocation of Scarce Medical Resources During the COVID-19 Pandemic: The Path From April 2020 to April 2021." ***Chest***, October 2021, 160 (4), 1572-1575 (with Parag A. Pathak and Tayfun Sönmez).
- ▲ "Categorized Priority Systems: A New Tool for Fairly Allocating Scarce Medical Resources in the Face of Profound Social Inequities." ***Chest***, March 2021, 159 (3), 1294-1299 (with Tayfun Sönmez, Parag A. Pathak, Govind Persad, Robert D. Truog, and Douglas White).
- ▲ "COVID-19: How To Prioritize Worse-off Populations in Allocating Safe and Effective Vaccines." ***The British Medical Journal***, October 5, 2020, 371, m3795 (with Harald Schmidt, Parag Pathak, and Tayfun Sönmez).
- ▲ * "Improving Ventilator Rationing Through Collaboration With Experts on Resource Allocation." ***JAMA Network Open***, June 2020, 3 (6), e2012838 (with Parag A. Pathak and Tayfun Sönmez).

Other Pandemic Resource Allocation:

- ▷ "Rationing Safe and Effective COVID-19 Vaccines: Allocating to States Proportionate to Population May Undermine Commitments to Mitigating Health Disparities." November 2020 (with Harald Schmidt, Parag A. Pathak, Michelle Williams, Tayfun Sönmez, and Lawrence Gostin).
- ▷ "What Prioritizing Worse-Off Minority Groups for COVID-19 Vaccines Means Quantitatively: Practical, Legal and Ethical Implications." November 2020 (with Harald Schmidt, Michelle Williams, Parag A. Pathak, Tayfun Sönmez, and Lawrence Gostin).
- ▷ "Do Black and Indigenous Communities Receive their Fair Share of Vaccines Under the 2018 CDC Guidelines?" September 2020, NBER Working Paper (with Parag A. Pathak, Harald Schmidt, Adam Solomon, Edwin Song, and Tayfun Sönmez).

Management of Child Welfare Platforms

Search and matching in adoption from foster care; recommendation system for Pennsylvania's Statewide Adoption and Permanency Network.

- ○ "Search and Matching for Adoption from Foster Care." Revised: April 2026, Initial: March 2021, Revise-and-Resubmit, ***Operations Research*** (with Ludwig Dierks, Nils Olberg, Sven Seuken, and Vincent W. Slaugh).
- ○ "When Family Incentives Meet Caseworker Scarcity: Improving Adoption Outcomes for Children with Disabilities." Revised: March 2026, Initial: September 2022 (with Ludwig Dierks and Vincent W. Slaugh).
- ▲ Abstract for "Search and Matching for Adoption from Foster Care." In ***Proceedings of the 6th ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO'26)***, 2026, forthcoming (with Ludwig Dierks, Nils Olberg, Sven Seuken, and Vincent W. Slaugh).
- ▲ Abstract for "When Family Incentives Meet Caseworker Scarcity: Improving Adoption Outcomes

for Children with Disabilities." In ***Proceedings of the 6th ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO'26)***, 2026, forthcoming (with Ludwig Dierks and Vincent W. Slaugh).

▲ * "Child Welfare Services in the United States: An Operations Research Perspective." In G. Berenguer and M. Sohoni (Editors): **Nonprofit Operations and Supply Chain Management: Theory and Practice**, Springer Series in Supply Chain Management, Volume 25, Springer, March 2025, Chapter 14, 321-347 (with Vincent W. Slaugh, Ludwig Dierks, Alan Scheller-Wolf, and Andrew C. Trapp).

▲ "The Pennsylvania Adoption Exchange Improves Its Matching Process." ***Interfaces*** (renamed as ***INFORMS Journal on Applied Analytics***), March–April 2016, 46 (2), 133-153 (with Vincent Slaugh, Mustafa Akan, and Onur Kesten).

Multi-Unit Allocation and Exchange

Allocation and exchange of multiple units under compatibility-based preferences; blood allocation with replacement donors and course bidding.

See also "Dual-Donor Organ Exchange" under *Exchange of Paired Living Liver Donors: Theory and Application*.

○ "Flexible Multi-unit Exchange: Theory and An Application to Blood Allocation with Replacement Donors." Revised: March 2026, Initial: June 2021, Revise-and-Resubmit, ***American Economic Review*** (with Xiang Han and Onur Kesten).

▲ Extended Abstract for "Blood Allocation with Replacement Donors: A Theory of Multi-unit Exchange with Compatibility-based Preferences." In ***Proceedings of the 22nd ACM Conference on Economics and Computation (EC'21)***, July 2021, 585-586 (with Xiang Han and Onur Kesten).

▲ "Course Bidding at Business Schools." ***International Economic Review***, February 2010, 51 (1), 99-123 (with Tayfun Sönmez).

▲ "Improving the Efficiency of Course Bidding at Business Schools: Field and Laboratory Studies." ***Marketing Science***, March–April 2008, 27 (2), 262-282 (with Aradhna Krishna).

(Re)assignment in Matching Markets

Markets where agents start with an assignment: teacher reassignment, student exchange, and labor mobility restrictions.

See also "House Allocation with Existing Tenants: A Characterization" and "House Allocation with Existing Tenants: An Equivalence" under *Discrete Allocation and Mechanism Design*.

○ "Rematching with Contracts under Labor Mobility Restrictions: Theory and Application." Revised: December 2025, Initial: April 2024, Revise-and-Resubmit, ***Management Science*** (with Umut Dur and Robert G. Hammond).

○ "Market Design for Distributional Objectives in (Re)assignment: An Application to Improve the Distribution of Teachers in Schools." Revised: January 2025, Initial: February 2022, Revise-and-Resubmit, ***American Economic Review*** (with Julien Combe, Umut M. Dur, Olivier Tercieux, and Camille Terrier).

▲ "Two-Sided Matching via Balanced Exchange." ***Journal of Political Economy***, June 2019, 127 (3), 1156-1177 (with Umut Dur).

▲ "Random Paths to Pairwise Stability in Many-to-Many Matching Problems: A Study on Market Equilibration." ***International Journal of Game Theory***, Special Issue in Honor of David Gale's 85th Birthday, March 2008, 36 (3-4), 473-488 (with Fuhito Kojima).

▷ "Maintaining Diversity in Student Exchange." Latest: April 2015 (with Umut Dur and Onur Kesten).

School Choice

Lotteries, the Boston mechanism, and trading cycles in school choice.

- ▲ "A Theory of School Choice Lotteries." ***Theoretical Economics***, May 2015, 10 (2), 543-595 (with Onur Kesten).
- ▲ "The 'Boston' School Choice Mechanism: An Axiomatic Approach." ***Economic Theory***, April 2014, 55 (3), 515-544 (with Fuhito Kojima).
- ▷ "Trading Cycles for School Choice." Latest: July 2011 (with Marek Pycia).

Discrete Allocation and Mechanism Design

Incentives, efficiency, and fairness in allocating indivisible objects without money.

- ▲ "Ordinal Simplicity in Discrete Mechanism Design." ***International Economic Review***, October 2025, 66 (4), 1665-1680 (with Marek Pycia).
- ▲ "Outside Options in Neutral Allocation of Discrete Resources." ***Review of Economic Design***, Special Issue in Honor of Semih Koray, December 2022, 26 (4), 581-604 (with Marek Pycia).
- ▲ "On Characterizations of the Probabilistic Serial Mechanism Involving Incentive and Invariance Properties." ***Mathematical Social Sciences***, Special Issue in Honor of Hervé Moulin, November 2017, 90, 56-62 (with Onur Kesten and Morimitsu Kurino).
- ▲ "Incentive Compatible Allocation and Exchange of Discrete Resources." ***Theoretical Economics***, January 2017, 12 (1), 287-329 (with Marek Pycia).
- ▲ "Decomposing Random Mechanisms." ***Journal of Mathematical Economics***, December 2015, 61, 21-33 (with Marek Pycia).
- ▲ "Two Axiomatic Approaches to the Probabilistic Serial Mechanism." ***Theoretical Economics***, January 2014, 9 (1), 253-277 (with Tadashi Hashimoto, Daisuke Hirata, Onur Kesten, and Morimitsu Kurino).
- ▲ "House Allocation with Existing Tenants: A Characterization." ***Games and Economic Behavior***, July 2010, 69 (2), 425-445 (with Tayfun Sönmez).
- ▲ "House Allocation with Existing Tenants: An Equivalence." ***Games and Economic Behavior***, July 2005, 52 (1), 153-185 (with Tayfun Sönmez).
- ▷ "Ordinal Simplicity and Auditability in Discrete Mechanism Design." Latest: October 2023 (with Marek Pycia).

Two-Sided Matching Markets: Stability and Unraveling

Stability, unraveling, and the performance of centralized and decentralized two-sided matching markets.

See also "Two-Sided Matching via Balanced Exchange" under *(Re)assignment in Matching Markets*.

- ▲ "Unraveling Results from *Comparable* Demand and Supply: An Experimental Investigation." ***Games***, Special Issue on Matching Markets, 2013, 4 (2), 243-282 (with Muriel Niederle and Alvin E. Roth).
- ▲ "Unraveling Yields Inefficient Matchings: Evidence from Post-Season College Football Bowls." ***RAND Journal of Economics***, Winter 2007, 38 (4), 967-982 (with Guillaume Fréchette and Alvin E. Roth).
- ▲ "Equilibrium Selection and the Role of Information in Repeated Matching Markets." ***Economics Letters***, February 2007, 94 (2), 284-289 (with Ernan Haruvy).
- ▲ "Games of Capacity Manipulation in Hospital-Intern Markets." ***Social Choice and Welfare***, August 2006, 27 (1), 3-24 (with Hideo Konishi).
- ▲ "Credible Group Stability in Many-to-Many Matching Problems." ***Journal of Economic Theory***, July 2006, 129 (1), 57-80 (with Hideo Konishi).
- ▲ "The Dynamics of Law Clerk Matching: An Experimental and Computational Investigation of Propos-

als for Reform of the Market." ***Journal of Economic Dynamics and Control***, March 2006, 30 (3), 457-486 (with Ernan Haruvy and Alvin E. Roth).

- ▲ "On the Survival of Some Unstable Two-Sided Matching Mechanisms." ***International Journal of Game Theory***, June 2005, 33 (2), 239-254.
- ▲ "Backward Unraveling over Time: The Evolution of Strategic Behavior in the Entry-Level British Medical Labor Markets." ***Journal of Economic Dynamics and Control***, June 2001, 25 (6-7), 1039-1080.

Contest Design

Fair design of sequential team contests: penalty shootouts.

- ▲ "Designing Practical and Fair Sequential Team Contests: The Case of Penalty Shootouts." ***Games and Economic Behavior***, November 2021, 130, 25-43 (with Nejat Anbarcı and Ching-Jen Sun).

Voting under Majority Rule

Existence of majority-rule equilibria in spatial voting models.

- ▲ "Toward a 50%-majority Equilibrium When Voters are Symmetrically Distributed." ***Mathematical Social Sciences***, Special Issue in Honor of Hervé Moulin, November 2017, 90, 145-149 (with Hervé Crès).
- ▲ "Ideology and Existence of 50%-Majority Equilibria in Multidimensional Spatial Voting Models." ***Journal of Theoretical Politics***, October 2010, 22 (4), 431-444 (with Hervé Crès).

Auctions, Markets, and Fair Division

Auctions, markets with artificial agents, and fair division with money.

- ▲ "Internet Auctions with Artificial Adaptive Agents: A Study on Market Design." ***Journal of Economic Behavior and Organization***, August 2008, 67 (2), 394-417 (with John Duffy).
- ▲ "Asset Price Bubbles and Crashes with Near-Zero-Intelligence Traders." ***Economic Theory***, April 2006, 27 (3), 537-563 (with John Duffy).
- ▲ "Room Assignment-Rent Division: A Market Approach." ***Social Choice and Welfare***, June 2004, 22 (3), 515-538 (with Atila Abdulkadiroğlu and Tayfun Sönmez).
- ▲ "On Determination of Optimal Reserve Price in Auctions with Common Knowledge about Ranking of Valuations." In M. R. Sertel and S. Koray (Editors): **Advances in Economic Design**, Springer Studies in Economic Design, 2003, 79-94 (with A. Alexander Elbittar).
- ▷ "Market Mechanisms for Fair Allocation of Indivisible Objects and Money." Latest: March 2007, Final status: Revise-and-Resubmit, *Social Choice and Welfare*.