

# ALEXANDER TEYTELBOYM

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## Current Employment

Associate Professor, Department of Economics, University of Oxford, 2017–  
Tutorial Fellow, St. Catherine's College, University of Oxford, 2017–

## Previous Employment

Visiting Assistant Professor, Department of Economics, M.I.T., March–May, 2017  
Otto Poon Research Fellow, Institute for New Economic Thinking (INET) at the Oxford Martin School and the Smith School for Enterprise and the Environment (S.S.E.E.), University of Oxford, 2014–2017  
Postdoctoral Fellow, Laboratory for Information and Decision Systems, M.I.T., 2013–2014  
Consultant, Office of Chief Economist, European Bank for Reconstruction and Development, 2010–2011

## Affiliations

Research Affiliate (I.O.), Centre for Economic Policy Research, 2021–  
Senior Research Fellow, INET, 2019–  
Senior Advisor, *The Behaviouralist* Ltd, 2018–  
Human Capital and Economic Opportunity Global Working Group, 2017–  
External Fellow, Centre for Mechanism and Institution Design, 2018–  
Deputy Director, Economics of Sustainability Group, INET and S.S.E.E., 2017–2019  
Advisory Group, Rockefeller Economic Council on Planetary Health, 2018–2019

## Education

D.Phil., Economics, University of Oxford, 2010–2013  
Thesis: “Essays on Networks and Market Design”  
Committee: Vincent P. Crawford (supervisor), Paul Klemperer, and Zaifu Yang.  
M.Phil., Economics, University of Oxford, 2008–2010  
B.Sc., Economics, London School of Economics, 2005–2008

## Selected journal publications

- “Placement Optimization in Refugee Resettlement” (with Narges Ahani, Tommy Andersson, Alessandro Martinello, and Andrew C. Trapp), forthcoming at *Operations Research*.
- “Stability in Matching Markets with Complex Constraints” (with Hai Nguyen and Thanh Nguyen), forthcoming at *Management Science*.
- “Collective Dynamics of Dark Web Marketplaces” (with Abeer ElBahrawy, Laura Alessandretti, Leonid Rusnac, Daniel Goldsmith, and Andrea Baronchelli), *Nature Scientific Reports*, 10:18827, 2020.
- “Economic Complexity and the Green Economy” (with Penny Mealy), forthcoming at *Research Policy*.
- “Trading Networks with Frictions” (with Tamás Fleiner, Ravi Jagadeesan, and Zsuzsanna Jankó), *Econometrica*, 87(5): 1633–1661, 2019.
- “Targeted Carbon Tax Reforms” (with Bassel Tarbush and Maia King), *European Economic Review*, 119:526–547, 2019.
- “Interpreting Economic Complexity” (with Penny Mealy and J. Doyne Farmer), *Science Advances*, 5(1):eaau1705, 2019.
- “Social Groups and Social Network Formation” (with Bassel Tarbush), *Games and Economic Behavior*, 103: 286–312, 2017.
- “Gross Substitutes and Complements: A Simple Generalization”, *Economics Letters*, 123(2): 135–138, 2014.

### Working papers

- “Matching Mechanisms for Refugee Resettlement” (with David Delacrétaz and Scott Duke Kominers) *R&R*.
- “EPIC Fail: How Below-Bid Pricing Backfires in Multiunit Auctions” (with Daniel Marszalec and Sanna Laksa), *Reject and Resubmit*.
- “Trading Networks with Bilateral Contracts” (with Tamás Fleiner, Zsuzsanna Jankó and Akihisa Tamura). *R&R*.
- “Complexity of Stability in Trading Networks” (with Tamás Fleiner, Zsuzsanna Jankó, and Ildikó Schlotter), *R&R*.

### Refereed conference publications

- “Matching and Money” (with Ravi Jagadeesan), **EC’21, 22nd ACM Conference on Economics and Computation**, 2021.
- “Dynamic Placement in Refugee Resettlement” (with Narges Ahani, Paul Gözl, Ariel Procaccia, and Andrew Trapp), **EC’21, 22nd ACM Conference on Economics and Computation**, 2021.
- “Contagion in Graphons” (with Selman Erol and Francesca Parise), **EC’20, 21st ACM Conference on Economics and Computation**, 2020.
- “The Equilibrium Existence Duality: Equilibrium with Indivisibilities & Income Effects” (with Elizabeth Baldwin, Omer Edhan, Ravi Jagadeesan, and Paul Klempner), **EC’20, 21st ACM Conference on Economics and Computation**, 2020.
- “Stability in Matching Markets with Complex Constraints” (with Hai Nguyen and Thanh Nguyen), **EC’19, 20th ACM Conference on Economics and Computation**, 2019.
- “Trading Networks with Bilateral Contracts” (with Tamás Fleiner, Zsuzsanna Jankó, and Akihisa Tamura), **WINE’18, Conference on Web and Internet Economics**, 2018.
- “Trading Networks with Frictions” (with Tamás Fleiner, Ravi Jagadeesan, and Zsuzsanna Jankó), **EC’18, 19th ACM Conference on Economics and Computation**, 2018.
- “Matching Markets with Contracts for Electric Vehicle Smart Charging” (with Thomas Morstyn and Malcolm McCulloch), **IEEE Power and Energy Society General Meeting**, 2018. (**One of Best Papers on Power System Planning, Operation, and Electricity Markets**).
- “Competitive Rumour Spread in Social Networks” (with Yongwhan Lim and Asuman Ozdaglar), **ACM SIGMETRICS Performance Evaluation Review**, 44(3): 7-14, 2016.
- “Homophily in Online Social Networks” (with Bassel Tarbush), **WINE’12, Conference on Web and Internet Economics**, 2012.

### Reviews, book chapters, and permanent working papers

- “Discovering Auctions: Contributions of Paul R. Milgrom and Robert B. Wilson” (with © Shengwu Li © Scott Duke Kominers © Mohammad Akbarpour © Piotr Dworzak), **Scandinavian Journal of Economics**, 2021.
- “A Parable of the Auctioneer. Review of: *Discovering Prices: Auction Design in Markets with Complex Constraints* by Paul Milgrom” (with Scott Duke Kominers), **Journal of Economic Literature**, 58(4), 2020.
- “Adaptive Targeted Infectious Disease Testing” (with Max Kasy), **Oxford Review of Economic Policy**, 36(S1): S77–S93, 2020.
- “Networks and Economic Policy” (with Matt Elliott and Sanjeev Goyal), **Oxford Review of Economic Policy**, 35(4), 2019.
- “Is Natural Capital Really Substitutable?” (with François Cohen and Cameron Hepburn) **Annual Review of Environment and Resources**, 44(1): 425-448, 2019.
- “Steering the climate system: an extended comment” (with Linus Mattauch, Richard Millar, Frederick van der Ploeg, Armon Rezai, Anselm Schultes, Frank Venmans *et al.*), Centre for Climate Change Economics and Policy Working Paper No. 347 and Grantham Research Institute on Climate Change and the Environment Working Paper No. 315, 2019.
- “Natural Capital Market Design”, **Oxford Review of Economic Policy**, 35(1):138-161, 2019.
- “Green Growth” (with Cameron Hepburn and Alex Pfeiffer), *The New Oxford Handbook of Economic*

*Geography* (edited by Gordon L. Clark, Maryann P. Feldman, Meric S. Gertler, and Dariusz Wójcik), Chapter 40, 2018.

- “An Invitation to Market Design” (with Scott Duke Kominers and Vincent P. Crawford), *Oxford Review of Economic Policy*, 33(4): 541-571, 2017.
- “Climate Change Policy After Brexit” (with Cameron Hepburn), *Oxford Review of Economic Policy*, 33(S1): S144–S154, 2017.
- “Reforming the EU ETS – Where are we now?” (with Cameron Hepburn), *Energy Tax and Regulatory Policy in Europe: Reform Priorities* (edited by Ian Parry, Karen Pittel, and Herman Vollebergh), Chapter 1, The MIT Press, 2017.
- “The third wave in the economics of climate change” (with J. Doyne Farmer, Cameron Hepburn and Penny Mealy), *Environment and Resource Economics*, 62(2): 1-29, 2015.
- “Innovation, Path Dependence and Climate Policy” (with Philippe Aghion, Cameron Hepburn and Dimitri Zenghelis), Centre for Climate Change Economics and Policy Grantham Research Institute on Climate Change and the Environment Policy Paper, 2014. (Forthcoming in the *Handbook on Green Growth* edited by Roger Fouquet.)
- “Resilient and inclusive prosperity within planetary boundaries” (with Eric Beinhocker, J. Doyne Farmer and Cameron Hepburn), *China & World Economy*, 22(5): 1-16, 2014.
- “Political Economy of Climate Change Policy” (with Franklin Steves), Smith School for Enterprise and the Environment Working Paper 13-02, 2013.
- “Part II: Policy instruments for sustainable road transport” (with Georgina Santos and Hannah Behrendt), *Research in Transportation Economics*, 28(1): 46-91, 2010.
- “Part I: Externalities and economic policies in road transport” (with Georgina Santos, Hannah Behrendt, Laura Maconi and Tara Shirvani), *Research in Transportation Economics*, 28(1): 2-45, 2010.

#### **Other publications in peer-reviewed journals**

- “Dark Web Marketplaces and COVID-19: before the vaccine” (with Alberto Bracci, Matthieu Nadini, Maxwell Aliapoulos, Damon McCoy, Ian Gray, Angela Gallo, and Andrea Baronchelli) *European Physical Journal: Data Science*, 10(6).
- “Integrating P2P Energy Trading with Probabilistic Distribution Locational Marginal Pricing” (with Thomas Morstyn, Cameron Hepburn, and Malcolm McCulloch), *IEEE Transactions on Smart Grid*, 11(4): 3095-3106, 2020.
- “Designing Decentralized Markets for Distribution System Flexibility” (with Thomas Morstyn and Malcolm McCulloch), *IEEE Transactions on Power Systems*, 34(3): 2128-2139, 2019.
- “Bilateral Contract Networks for Peer-to-Peer Energy Trading” (with Thomas Morstyn and Malcolm McCulloch), *IEEE Transactions on Smart Grid*, 10(2):2026-2035, 2019.
- “The Local Refugee Match: Aligning refugees’ preferences with the capacities and priorities of localities” (with Will Jones), *Journal of Refugee Studies*, 31(2): 152–178, 2017.
- “Matching systems for refugees” (with Will Jones), *Journal of Migration and Human Security*, 5(3): 666-680, 2017.
- “The International Refugee Match: A System that Respects Refugees’ Preferences and the Priorities of States” (with Will Jones), *Refugees Survey Quarterly*, 36(2): 84–109, 2017.
- “Choices, preferences and priorities in a matching system for refugees” (with Will Jones), *Forced Migration Review*, 51: 80-82, 2016.

#### **Policy reports**

- “The Wealth of Nature: Increasing National Wealth and Reducing Risk by Measuring and Managing Natural Capital” (with Francois Cohen, Kirk Hamilton, Cameron Hepburn, and Frank Sperling), Report for the Green Economy Coalition, 2017.
- “Special Report on Climate Change: The Low Carbon Transition”, Chapter 4 (with Franklin Steves and Daniel Treisman), Report for the EBRD, June 2011.
- “Life in Transition: After the Crisis” (with Franklin Steves), Chapter 4, Report for the EBRD, April 2011.

## Policy and advisory work

Expert witness at an appeal against the design of the Irish spectrum auction, 2021  
Advising RSPB on the design of a combinatorial auction for turtle dove habitat, 2019–  
Advising SilviaTerra (now NCX) on the design of a quarterly auction for forest conservation, 2019–  
Advising the Namibian government on the design of fishing quota auctions, 2020–  
Designing a matching system for resettled refugees for HIAS resettlement agency, 2018–

## Honors, grants and awards

ERC Starting Grant DUALMARKETS “Duality in Market Design: Theory and Applications”, 2021–  
Vice-Chancellor’s Innovation Award for Annie® MOORE (Highly Commended in the Policy Engagement Category), 2020.  
UKRI, Ideas to Address COVID-19 Grant Call, “Monitoring the effects of the pandemic on illicit online trade”, 2020-2021 (with Andrea Baronchelli and Angela Gallo)  
UKRI, Strategic Priorities Fund Grant, “HAUS (Housing Allocation Upgraded Solutions)”, 2020  
ESRC New Investigator Grant, “Designing Marketplaces with Complementarities”, 2018–2021  
BA/Leverhulme Small Research Grant (co-applicant with Tatiana Komarova), 2018,  
Skoll Centre for Social Entrepreneurship Research Grant (for *Refugees.AI*), 2016  
Éprime Eshag Senior Scholarship, 2012  
Young Economist at Lindau Nobel Economics Laureates Meeting, 2011  
Two-year Economics Department Doctoral Studentship, 2010

## Visiting fellowships

U.C. Berkeley (Simons Institute), Visiting Scientist, August–September 2019  
Osaka University (Institute of Social and Economic Research), Visiting Scholar, March–April 2019  
University of Tokyo, Visiting Scholar, November 2016  
University of Melbourne, European Union Centre Visiting Fellow, March 2016

## Refereeing

Journals: *American Economic Review*, *Econometrica*, *Games and Economic Behavior*, *Journal of Economic Theory*, *Journal of European Economic Association*, *Journal of Political Economy*, *Management Science*, *Operations Research*, *Proceedings of the National Academy of Sciences*, *Quarterly Journal of Economics*, *Review of Economic Studies*, *Science...*

Senior Program Committee: *ACM Economics and Computation EC’20* (also: Best Presentation Award Committee)

Program Committees: *ACM Economics and Computation EC’21*, SIGecom Doctoral Dissertation Award Committee, 2021; NetEcon’21; 4th Workshop on Mechanism Design for Social Good; *ACM Economics and Computation EC’19* (Applied Modelling Track); *MATCH-UP* 2019; NetEcon’19.

## Editorial boards

Associate Editor, *Journal of Mechanism and Institution Design*, December 2018–present  
Associate Editor, *Oxford Review of Economic Policy*, July 2015–present

## Teaching

- Undergraduate
  - Microeconomics (2<sup>nd</sup> year, *Competitive Markets and Welfare*, lectures and tutorials, Oxford, 2017–)
  - Networks (economics/engineering joint course, *Economics of Networks*, lectures, M.I.T., 2017)
  - Microeconomic Analysis (3<sup>rd</sup> year, tutorials, Oxford, 2018-2019)

- Graduate
  - Microeconomics (1<sup>st</sup> year, Welfare and Public Economics, Oxford, 2021-)
  - Advanced Microeconomics (2<sup>nd</sup> year, *Matching Markets and Networks*, lectures, Oxford, 2017-)
  - Introduction to Quantitative Methods (1<sup>st</sup> year, lectures, Oxford, 2011-2013)
- Short courses
  - Oxford University Business Education Programme (2018, 2019)
  - Market Design (Russian Summer School on Institutional Economics)
  - Networks (IPAM Summer School; European Summer School on Institutional Economics)

## Student Supervision

### *Undergraduate*

- Sam Wycherly (P.P.E., thesis supervisor, 2019-2020), “Endogenous network formation in games of strategic complements”, George Webb Medley Prize for best thesis.

### *Master*

- Alexander Katz, (M.Phil. co-supervisor with Peter Eső, 2016-2017), “Dynamic Refugee Matching”, placement: Frontier Economics.
- Felix Soliman (M.Phil. 2018-2019), “Intrafirm Leakage”, placement: European Central Bank, now: PhD student at the University of Zurich.
- Lia Petrose (M.Sc. in Statistical Science, co-supervisor with Mihai Cucuringu, 2019-2020), placement: PhD student at M.I.T.

### *Doctoral*

- George Charlson (D.Phil. co-supervisor with Mark Armstrong, 2017-2020), “Essays in Strategic Decision-Making in Complex Environments”, placement: Postdoc at the University of Cambridge (INET and Christ’s College).
- Vatsal Khandelwal (D.Phil. co-supervisor with Stefan Dercon, 2018-2021), placement: Junior Research Fellowship in Global Well-Being, Merton College, University of Oxford.
- Taco Prins (D.Phil. co-supervisor with Elizabeth Baldwin, 2019-)
- Verena Wiedemann (D.Phil. co-supervisor with Chris Woodruff, 2021-)

## PhD Committees

- Milan van den Heuvel (Ghent University, External Examiner, 2019), placement: Postdoc at Ghent University.
- Marco Pangallo (University of Oxford, Internal Examiner, 2019), placement: James S. Mc Donnell Foundation Postdoc in Complex Systems at Sant’Anna School of Advanced Studies, Italy.
- Ravi Jagadeesan (Harvard University and Harvard Business School, PhD committee, 2020), placement: Postdoc at Stanford University.
- Matteo Bizzarri (Bocconi University, External Examiner, 2020), placement: Research fellow at CSEF and Università Federico II di Napoli.
- Wanyi Li (Stanford University, PhD committee, 2021), placement: Economist at Novi Financial.

## Conferences

- Co-organiser (with Sera Linardi and Scott Page), NBER CEME Decentralization Conference “Mechanism Design for Vulnerable Populations”, April 2021.
- Co-organiser (with Martin Bichler and Sasa Pekec), Frontiers of Market Design Workshop at EC’20, July 2020 (moved to EC’21).
- Co-organiser (with Martin Bichler and Bob Day), Frontiers of Market Design Workshop at EC’19, May 2019.
- Co-organiser (with Scott Duke Kominers, Ben Roth, and Natalia Rigol), *HCEO Conference on Market Design and Development*, November 2018.
- Co-organiser (with Mohammad Akbarpour), Frontiers of Market Design Workshop at EC’18, May 2018.
- Co-organiser (with the editorial board of the *Oxford Review of Economic Policy*), *The Economic Consequences of Brexit*, January 2017.
- Co-organiser (with Scott Duke Kominers), *HCEO Conference on Market Design and Inequality*, August 2016.

### **Administrative Duties**

- ACM SIGEcom Doctoral Dissertation Award Committee, Spring 2021
- Research Computing Board, University of Oxford, May 2021-
- Social Sciences Divisional Board, University of Oxford, January 2021-
- Development Board, Department of Economics, University of Oxford, October 2020-
- Research Information Management Technology Sub-Committee, University of Oxford, October 2020-
- Fabric Subcommittee, St. Catherine's College, University of Oxford, October 2020-
- Search Group for Statutory Professors, Department of Economics, University of Oxford, April 2020-
- Research Committee, Department of Economics, University of Oxford, March 2020-
- Harassment Officer, Department of Economics, University of Oxford, September 2019-
- Associate Professor Search Committee, Department of Economics, University of Oxford, 2019-2020
- M.Phil. Exam Board, September 2019-
- Finance Committee, St. Catherine's College, University of Oxford, September 2019-
- Course Convenor, M.Phil. Advanced Microeconomics, Department of Economics, University of Oxford, September 2018-

### **Personal**

- Born: 21 April 1987 (U.S.S.R.)
- Erdős number: 3 (via Tamás Fleiner)