# **Mert Demirer**

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### **Academic Positions**

Assistant Professor of Economics, MIT Sloan School of Management, July 2021-

Faculty Research Fellow, National Bureau of Economic Research, April 2023-

Post-doctoral Researcher, Microsoft Research New England, 2020-2021.

### **Education**

Ph.D. Economics, MIT, 2020.

Committee: Nikhil Agarwal, Daron Acemoglu, Anna Mikusheva, and Victor Chernozhukov.

M.A. Economics, Koc University, 2013

B.S. Electrical and Electronics Engineering, Boğaziçi University, 2011

#### Areas of Interest

Firm Productivity, Digital Technologies, Antitrust, and Impact of Generative AI on Productivity

## **Working Papers**

"Welfare Effects of Buyer and Seller Power" with Michael Rubens

"Firm Productivity and Learning with Digital Technologies: Evidence from Cloud Comput-

with James Brand, Connor Finucane, and Avner Kreps

"Do Mergers and Acquisitions Improve Efficiency: Evidence from Power Plants" with Omer Karaduman R&R, Journal of Political Economy

"Data, Privacy Laws and Firm Production: Evidence from GDPR" with Diego Jimenez Hernandez, Dean Li and Sida Peng R&R, Journal of Political Economy

"The Effects of Generative AI on High-Skilled Work: Evidence from Three Field Experiments with Software Developers"

with Kevin Cui, Sonia Jaffe, Leon Musolff, Sida Peng and Tobias Salz

R&R, Management Science

"Production Function Estimation with Factor-Augmenting Technology: An Application to Markups"

R&R, Econometrica

"Production Function Estimation with Imperfect Proxies"

### **Published and Accepted Papers**

"Drug Rebates and Formulary Design: Evidence from Statins on Medicare Part D" with Alex Olssen

Conditionally accepted, Journal of Political Economy, Microeconomics

"Generic Machine Learning Inference on Heterogeneous Treatment Effects in Randomized Experiments"

with Victor Chernozhukov, Esther Duflo and Ivan Fernandez-Val

Forthcoming, Econometrica

"Double/Debiased Machine Learning for Treatment and Structural Parameters" with Victor Chernozhukov, Denis Chetverikov, Esther Duflo, Christian Hansen, Whitney Newey and James Robins.

The Econometrics Journal 21.1 (2018): C1-C68.

"Estimating Global Bank Network Connectedness" with Francis X. Diebold, Laura Liu, Kamil Yilmaz.

Journal of Applied Econometrics 33, No. 1 (2018): 1-15...

"Semi-Parametric Efficient Policy Learning with Continuous Actions" with Vasilis Syrgkanis, Greg Lewis, Victor Chernozhukov.

Advances in Neural Information Processing Systems 32 (NIPS 2019).

## Work in Progress

"How On-Demand Inputs Change Firm Production and Business Dynamism: The Case of Cloud Computing"

with James Brand and Rebekah Dix

"Federated Learning and Privacy Protection" with Dirk Bergemann, Alessandro Bonatti and Vod Vilfort

"Datacenter Entry and Congestion in the US Electricity Markets" with El Hadi Caoui, Andrew Stack and Sophie Calder-Wang

### **Policy and Other Publications**

"Double/Debiased/Neyman Machine Learning of Treatment Effects" with Victor Chernozhukov, Denis Chetverikov, Esther Duflo, Christian Hansen and Whitney Newey.

American Economic Review Papers and Proceedings, 2017, vol. 107, issue 5, pp. 261-265.

"The Intended and Unintended Consequences of Privacy Regulation for Consumer Marketing: A Marketing Science Institute Report"

with Jean-Pierre Dubé, Dirk Bergemann, Avi Goldfarb, Garrett Johnson, Anja Lambrecht, Tesary Lin, Anna Tuchman, Catherine Tucker, John Lynch.

Marketing Science Institute.

"How AI-powered Software Development May Affect Labor Markets" with Peter Cihon

Brookings Series: The Economics and Regulation of Artificial Intelligence and Emerging Technologies.

### **Dormant Papers**

"Partial Identification of Linear Models Using Homophily in Network Data"

"Financial Sector Volatility Connectedness and Equity Returns" with Umut Gokcen, Kamil Yilmaz.

### **Professional Activities**

#### Refereing:

Econometrica, American Economic Review, Quartely Journal of Economics, Journal of Political Economy, Review of Economic Studies, Review of Economics and Statistics, Rand Journal of Economics, American Economic Review: Insights, Management Science, International Journal of Industrial Organization, American Economic Journal: Macroeconomics, American Economic Journal: Applied Economics, American Economic Journal: Economic Policy, Journal of Law and Economics, Journal of Public Economics, Journal of Banking and Finance, Journal of Financial Econometrics, Journal of Applied Econometrics, Quantitative Economics, Journal of the European Economics Association, Econometrics Journal, Econometric Reviews, Journal of Economic Growth, Southern Economic Journal, Journal of Economic Growth, Review of Empirical Finance, Annals of Economics and Statistics, Biometrika, National Science Foundation, Communications

#### Seminer and Conference Presentations:

2025 (including scheduled): ASSA Annual Meeting; Winter Business Economics Conference; Paris Dauphine University; Ohio State; UBC Sauder; Rice University; OpenAI; IIOC; NBER Productivity, Innovation, and Entrepreneurship Spring Meeting; UCLA; CEPR/JIE Conference on Applied Industrial Organization; LSE; Europe Competition Authority; Bocconi University; Producers And Retailers Organization Conference; ZEW Conference on the Economics of Information and Communication Technologies

**2024**: AI, Cognition, and the Economy Conference; Amazon; ASSA Annual Meeting; Columbia Management Analytics and Data Conference; Harvard Economics; Harvard Business School; IIOC (discussant); MIT Economics; NBER IO Winter Meeting; NBER Organizational Economics Fall Meeting; NEBA TEC Conference; Palermo Productivity Workshop; Tilburg University; Toulouse Conference on the Economics of Energy and Climate; Toulouse Economics of Platforms Seminar; The UK Office of Communications; Triangle Conference; University of Berkeley; University of Maryland; University of Toronto; University of Wisconsin-Madison; Bay Area IO Fest

2023: Barcelona Summer Forum; Brookings Institute; CEPR/JIE Conference on Applied Industrial Organization; Chicago Fed; CRESSE; Department of Justice; EARIE; Hal White Antitrust Conference; IIOC; Leuven Summer Event; Microsoft the Office of Chief Economist; NBER IO/Digitization Summer Institute; Northwestern Annual Conference on Antitrust Economics and Competition Policy; Summer Institute in Competitive Strategy; University of Glasgow; University of Iowa; ZEW Conference on the Economics of Information and Communication Technologies

2022: ASSA 2022 Annual Meeting; Bilkent University; Boston Conference on Markets and Competition; Cowles Foundation Conference on Models and Measurement (Discussant); Erasmus University Rotterdam; Federal Trade Commission's Microeconomics Conference; Koc University; NBER Organizational Economics Fall Meeting; Pennsylvania State University; Princeton University; Ridge IO Winter Forum; Stanford SITE Conference

2021: ASSA 2021 Annual Meeting (Discussant); CEMFI; Columbia University; Econometric Society European Winter Meeting; Stanford University; The University of Texas at Austin; University of Michigan

**2020**: MIT Sloan School of Management; Toronto University; Microsoft Research New England; Yale School of Management; University of Pennsylvania; Boston University; Carnegie Mellon University Tepper Business School; Duke University; Microsoft Research Redmond; Charles River Associates; Koc University

### Honors, Awards, & Fellowships

MIT Climate and Sustainability Consortium Seed Award, 2022

MIT Sloan Health Systems Initiative Research Grant, 2022

MIT Sloan Junior Faculty Research Assistance Program (JFRAP) Grant, 2022

Mack Institute Research Fellowship, 2021

MIT Robert M. Solow Prize for Excellence in Graduate Research and Teaching, 2020

Richard Stone Prize for "Estimating Global Bank Network Connectednes" (with Francis X. Diebold, Laura Liu, Kamil Yilmaz), Journal of Applied Econometrics (Best paper in two volumes.), 2020

George & Obie Schulz Fund Grant, 2018-19
UniCredit & Universities Crivelli Europe Scholarship. 2014-16
Koç University High Merit Scholarship, 2012-14