University of Chicago Booth School of Business 5807 S Woodlawn Avenue, Chicago IL 60637 http://faculty.chicagobooth.edu/eric.budish eric.budish@chicagobooth.edu

CURRENT POSITIONS

University of Chicago Booth School of Business

January 2022 – Present	Paul G. McDermott Professor of Economics and
	Entrepreneurship (inaugural holder)
July 2019 – Dec 2021	Steven G. Rothmeier Professor of Economics
July 2015 – June 2019	Professor of Economics
July 2013 – June 2015	Associate Professor of Economics
July 2009 – June 2013	Assistant Professor of Economics

University of Chicago Law School

2019 – Present Krane Distinguished Visiting Professor

National Bureau of Economic Research

2016 – Present	Research Associate
2015 - 2016	Faculty Research Fellow

EDUCATION

Harvard University

Ph.D., 2009, Business Economics

Dissertation: "Essays on Market Design"

Committee: Alvin Roth (chair), Susan Athey, Ariel Pakes, David Parkes

University of Oxford, Nuffield College

MPhil, 2004, Economics, with Distinction

Amherst College

Bachelor of Arts, 2000

Majors in Economics and Philosophy

Summa cum Laude

HONORS, SCHOLARSHIPS, AND FELLOWSHIPS

- Centel Foundation/Robert P. Reuss Faculty Scholar, 2018-2022
- Western Finance Association Two Sigma Award for Best Paper on Investment Management, 2020
- AEA-AFA Joint Luncheon Speaker, 2017
- David G. Booth Faculty Fellow, 2016-2017
- Leo Melamed Prize for Outstanding Research in Finance, 2015

- Richard N. Rosett and David G. Booth Faculty Fellow, 2015-2016
- Alfred P. Sloan Foundation Research Fellowship, 2015
- Neubauer Family Faculty Fellow, Chicago Booth, 2012-2013, 2014-2015
- Richard J. Herrnstein Dissertation Prize, Harvard University, 2009
- Fellow, Project on Justice, Welfare and Economics at Harvard University, 2008-2009
- National Science Foundation Graduate Research Fellowship, 2004-2007
- George Webb Medley Economics Thesis Prize (proxime accessit), Oxford, 2004
- Marshall Scholarship, 2002-2004
- James R. Nelson Economics Thesis Prize, Amherst, 2000
- Bernstein Prize in Economics, Amherst, 2000
- Phi Beta Kappa, Amherst, 2000

PUBLICATIONS

Refereed Journal Articles

- 1. "An Economic Framework for Vaccine Prioritization," (with Mohammad Akbarpour, Piotr Dworczak, and Scott Duke Kominers), 2021, *Quarterly Journal of Economics*, conditionally accepted.
- 2. "Primary-Market Auctions for Event Tickets: Eliminating the Rents of 'Bob the Broker'?" (with Aditya Bhave), *American Economic Journal: Microeconomics*, forthcoming.
- 3. "Quantifying the High-Frequency Trading 'Arms Race': A Simple New Methodology and Estimates," (with Matteo Aquilina and Peter O'Neill), *Quarterly Journal of Economics* 137(1): 493-564, 2022. (Winner of the WFA 2020 Two Sigma Best Paper Award for Investment Management.)
- 4. "Can Market Participants Report Their Preferences Accurately (Enough)?" (with Judd Kessler), *Management Science*, Articles in Advance: 1-24, 2021.
- 5. "Market Design to Accelerate COVID-19 Vaccination," (with Amrita Ahuja, Susan Athey, Arthur Baker, Juan Camilo Castillo, Rachel Glennerster, Scott Duke Kominers, Michael Kremer, Jean Lee, Canice Prendergast, Christopher M. Snyder, Alex Tabarrok, Brandon Joel Tan, and Witold Wiecek), *Science* 371(6534): 1107-1109, 2021.
- 6. "An Improved Bound for the Shapley-Folkman Theorem," (with Philip J. Reny), *Journal of Mathematical Economics* 89: 48-52, 2020.
- 7. "Strategy-proofness in the Large," (with Eduardo Azevedo), Review of Economic Studies 86(1): 81-116, 2019.
- 8. "Course Match: A Large-Scale Implementation of Approximate Competitive Equilibrium from Equal Incomes for Combinatorial Allocation," (with Gerard Cachon, Judd Kessler and Abe Othman), *Operations Research* 65(2): 314-336, 2017.

- 9. "The High Frequency Trading Arms Race: Frequent Batch Auctions as a Market Design Response," (with Peter Cramton and John Shim), *Quarterly Journal of Economics* 130(4): 1547-1621, 2015. (Lead article, winner of 2014 AQR Insight Award and 2015 Utah Winter Finance Conference Best Paper Award.)
- 10. "Do Firms Underinvest in Long-Term Research? Evidence from Cancer Clinical Trials," (with Benjamin Roin and Heidi Williams), American Economic Review 105(7): 2044-2085, 2015. (Winner of the inaugural Kauffman/iHEA Award for Health Care Entrepreneurship and Innovation Research, 2013, and winner of the Arrow Award for "Best Paper Published in Health Economics," 2015.)
- 11. "Designing Random Allocation Mechanisms: Theory and Applications," (with Yeon-Koo Che, Fuhito Kojima, and Paul Milgrom), *American Economic Review* 103(2): 585-623, 2013.
- 12. "The Multi-Unit Assignment Problem: Theory and Evidence From Course Allocation at Harvard," (with Estelle Cantillon), *American Economic Review* 102(5): 2237-2271, 2012.
- 13. "The Combinatorial Assignment Problem: Approximate Competitive Equilibrium from Equal Incomes," *Journal of Political Economy* 119(6): 1061-1103, 2011.
- 14. "Finding Approximate Competitive Equilibria: Efficient and Fair Course Allocation," (with Abe Othman and Tuomas Sandholm), *Proc. Of 9th Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS 2010)*.
- 15. "Buy Prices in Online Auctions: Irrationality on the Internet?" (with Lisa N. Takeyama), *Economics Letters* 72(3): 325-33, 2001.

Working Papers

- 1. "Flow Trading," (with Peter Cramton, Albert Kyle, Mina Lee, and David Malec), 2021.
- 2. "Maximize Utility subject to R≤1: A Simple Price-Theory Approach to Covid-19 Lockdown and Reopening Policy," NBER Working Paper 28093, 2020.
- 3. "A Theory of Stock Exchange Competition and Innovation: Will the Market Fix the Market?" (with Robin Lee and John Shim), NBER Working Paper 25855, 2020, Revise and Resubmit at Journal of Political Economy.
- 4. "The Economic Limits of Bitcoin and the Blockchain," NBER Working Paper 24717, 2018.

Non-Refereed Journal Articles

1. "Preparing for a Pandemic: Accelerating Vaccine Availability," (with Amrita Ahuja, Susan Athey, Arthur Baker, Juan Camilo Castillo, Rachel Glennerster, Scott Duke Kominers, Michael Kremer, Jean Lee, Canice Prendergast, Christopher M. Snyder, Alex Tabarrok,

- Brandon Joel Tan, and Witold Wiecek), American Economic Association Papers and Proceedings 111: 331-335, 2021.
- 2. "Patents and Research Investments: Assessing the Empirical Evidence," (with Benjamin Roin and Heidi Williams), *American Economic Review Papers and Proceedings*, 2016.
- 3. "Implementation Details for Frequent Batch Auctions: Slowing Down Markets to the Blink of an Eye," (with Peter Cramton and John Shim), *American Economic Review Papers and Proceedings*, 2014.

Book Chapters and Surveys

- 1. "Market Design," (with Nikhil Agarwal), September 2021, Handbook of Industrial Organization, Volume IV, forthcoming.
- 2. "Matching 'versus' Mechanism Design," ACM SIGecom Exchanges, 11(2): 4-15, 2012.

Financial Markets Policy Comment Letters

- 1. European Securities and Markets Authority Comment Letter re "Call for Evidence: Periodic Auctions for Equity Instruments," 2019.
- 2. Securities and Exchange Commission Comment Letter re Chicago Stock Exchange Liquidity Taking Access Delay, 2016.
- 3. Department of the Treasury Comment Letter re RFI on U.S. Treasury Market Structure, 2016.
- 4. Securities and Exchange Commission Comment Letter re Proposed Commission Interpretation Regarding Automated Quotations under Regulation NMS, 2016.
- 5. Securities and Exchange Commission Comment Letter re Investors' Exchange LLC Form 1 Application, 2016.

Op-Ed Articles

- 1. "Bigger is Better When it Comes to Vaccine Production," (with Christopher Snyder), Wall Street Journal, 2021.
- 2. "Google should beware the 'Winner's Curse," (with Paul Klemperer) Financial Times, 2004.

Patents

1. "System and Method for Conducting Electronic Commerce," US Patent 7,398,229, 2004.

TEACHING

PhD Market Design (2011, 2012, 2014, 2016, 2018, 2020) Microeconomics Reading and Research Seminar (2020-Present)

MBA Competitive Strategy (MBA 2010-Present)

JD Competitive Strategy (2019-Present)

EXTERNAL GRANTS

- Alfred P. Sloan Research Fellowship, February 2015.
- NSF Interface between Computer Science and Economics Collaborative Research Grant on "Understanding the Role of Intermediaries in Matching Markets," July 2012 (with Ali Hortacsu, Nicole Immorlica, Scott Kominers).
- NBER Innovation Policy and the Economy Grant for "Do fixed patent terms distort innovation? Evidence from cancer R&D," February 2011 (Ben Roin and Heidi Williams).

KEYNOTE ADDRESSES AND SELECTED PANEL DISCUSSIONS

- Frequent Batch Auctions Friend or Foe? BofA Webinar Sept 2020
- IGM Covid-19 Policy Conference, April 2020
- Keynote, Federal Trade Commission Conference on the Event Tickets Market, June 2019
- Atlanta Fed Financial Markets Conference, May 2019
- CME/MSRI Conference in Honor of Pete Kyle, April 2019
- AEA Panel on Blockchain: Myth and Reality, Jan 2019
- ACM EC Keynote, June 2018
- AEA-AFA Joint Luncheon Address, January 2017
- Fed/Treasury/SEC Conference on the Evolving Structure of the US Treasury Market, Oct 2015
- Keynote, AMMA Conference on Auctions, Market Mechanisms and Their Applications, Aug 2015
- SIFMA Equity Market Structure Conference, May 2015
- Keynote, European Capital Markets Institute, Oct 2014
- Keynote, COMSOC-2014, Fifth International Workshop on Computational Social Choice, June 2014
- CFTC Technology Advisory Committee Meeting, Feb 2014
- CME Group MSRI Panel Discussion, Oct 2013
- Baruch College Conference on Market Integrity, Oct 2013
- Keynote, Universite Libre de Brussels / ECARES Matching in Practice workshop, May 2013

ALL RESEARCH PRESENTATIONS

2022 AEA Session on Market Design for Medical Resources; AFA Session on Market Microstructure

2021	BIS Seminar; Bocconi Finance Seminar; NBER Market Design; University of Michigan Theory Seminar; TMX Group Seminar; NBER SI Big Data; Plato Market Innovators Conference; Swiss Finance Institute; Paris Virtual Market Design; UZH Economics; UPenn Economics; Berkeley Finance Seminar; Econometric Society Meetings; AFAs
2020	IEX Academic Research Conference; Stanford GSB Finance Seminar; Virtual Finance Theory Seminar; European Finance Association; Microstructure Online Seminars Asia Pacific; Microstructure Exchange; WFA Annual Meeting; Chicago Booth Finance Lunch; Chicago Booth Micro Lunch; SFS Cavalcade Conference; University of Pennsylvania Theory Seminar; Stigler Center Covid-19 Policy Seminar; IGM Covid-19 Policy Conference; Columbia Law and Economics of Capital Markets; Econometric Society Meetings
2019	U.S. Securities and Exchange Commission; NBER IO Summer Institute; 30th Annual Stony Brook Game Theory Conference, Semi-Plenary; Federal Trade Commission Conference on the Event Tickets Market, Keynote; Atlanta Fed Financial Markets Conference; Northwestern University Conference in Honor of Mark Satterthwaite; Carnegie Mellon Joint Theory/CS Seminar; CME/MSRI Conference in Honor of Pete Kyle; University of Pennsylvania New Directions in Market Design Conference; Wharton Finance Seminar; AEA Panel on Blockchain: Myth and Reality
2019	Harvard Business School Entrepreneurial Management Seminar; BFI Conference on Cryptocurrencies and Blockchains; NBER Monetary Economics Summer Institute; Music Industry Research Association Economics Conference; ACM EC Keynote; MIT Media Lab Digital Currency Initiative
2017	NBER Market Design; NYU Stern Joint IO/Finance Seminar; Yale Theory Seminar; Harvard/MIT IO Seminar; Northwestern IO Seminar; Berkeley IO Seminar; FCA Microstructure Conference; Harvard Symposium on the Computational Economy; AEA-AFA Joint Luncheon Address
2016	Yale IO Seminar; Chicago Booth All-Faculty Seminar; Princeton Applied Economics Seminar; Boston College Theory Seminar; UIUC Finance Seminar; FCA/LSE Conference on Financial Market Regulation; American Economic Association Winter Meetings
2015	Simons Institute Conference on Algorithmic Game Theory and Practice, Berkeley; MSR Conference on Designing the Digital Economy; Fed/Treasury/SEC Conference on the Evolving Structure of the US Treasury Market; Princeton Finance Seminar; Wisconsin Theory Seminar; AMMA Conference on Auctions, Market Mechanisms and Their Applications, Keynote; INFORMS Marketplace Innovation Workshop, Columbia; SIFMA Equity Market Structure Conference; Federal Reserve Board, Banking and Finance Seminar; University of Chicago Health Economics Workshop; Utah Winter Business Finance Conference; American Economic Association Winter Meetings
2014	Market Microstructure: Confronting Many Viewpoints; FIA Expo Conference; Columbia/Duke/MIT/Northwestern IO Theory Conference; Netherlands Authority for the Financial Markets; European Capital Markets Institute (keynote);

Stanford Theory Seminar; Kellogg Management and Strategy; UK Financial Conduct Authority; NBER Industrial Organization Summer Institute; COMSOC-2014, Fifth International Workshop on Computational Social Choice (keynote); NBER Market Design; Market Microstructure Conference, Stevanovich Center for Financial Mathematics; SEC First Annual Conference on the Regulation of Financial Markets; FINRA; AQR Insight Award Conference; Goldman Sachs Securities Division; CFTC Technology Advisory Committee Meeting; American Economic Association Winter Meetings

- 2013
- University of Chicago Theory Seminar; Columbia IO Seminar; Columbia Law and Economics of Capital Markets Seminar; Harvard / MIT Applied Theory Seminar; Harvard Finance Seminar; NYU IO Seminar; NBER Market Design Working Group Meeting; Berkeley Haas Finance Seminar; University of Chicago Conference on BCA of Financial Regulation; CME Group MSRI Panel Discussion; Baruch College Conference on Market Integrity; IEX; NASDAQ Brownbag Lunch; Wharton Applied Economics Workshop; ACM EC 2013; University of Oxford; Universite Libre de Brussels / ECARES Theory Seminar; Universite Libre de Brussels / ECARES Matching in Practice workshop (keynote); Chicago Booth Finance Lunch; Chicago Federal Reserve Financial Markets Group
- 2012
- University of Pennsylvania Theory Seminar; University of Maryland Theory Seminar; University of Michigan Auctions and Matching Workshop; NBER Market Design Conference; University of Chicago Theory Seminar; Stanford Applied Micro Seminar; Princeton Theory Seminar; NYU Stern IO Day; Duke Applied Economics Seminar; ACM Conference on Electronic Commerce; Frontiers of Market Design Conference; Northwestern Economic Theory; Chicago Booth Applied Theory; University of Rochester; Northwestern Computer Science Theory
- 2011
- eBay Research; UC Berkeley Theory Seminar; University of Montreal Theory Seminar; Carnegie Mellon / University of Pittsburgh Theory Seminar; University of Michigan Theory Seminar; Duke / University of North Carolina Theory Seminar; NBER Conference on Market Design; Boston College Theory Seminar; AMMA Conference on Auctions, Market Mechanisms, and their Applications; UCLA Micro Theory Seminar; MFI Matching and Price Theory Conference, University of Chicago; Ohio State University Micro Theory Seminar; Matching: Findings, Flaws, and Future. Northwestern
- 2010
- World Congress of the Econometric Society, Shanghai; WCU-Economics Conference, Yonsei University, Seoul; University of California San Diego Micro Lunch; University of Chicago Economics Department Theory Seminar; Behavioral & Quantitative Game Theory: Conference on Future Directions; Roth and Sotomayor: Twenty Years After; Texas A&M; Rice University
- 2009
- Columbia Economics / GSB; NBER Conference on Market Design; AMMA Conference on Auctions, Market Mechanisms, and their Applications; Microsoft Research; Yale Economics / SOM; LSE Economics; Yahoo! Research; Stanford Economics / GSB; Chicago Booth; NYU Stern
- 2008
- **Econometric Society Winter Meetings**

PROFESSIONAL ACTIVITIES

Initiative on Global Markets at Chicago Booth Co-Director, July 2019 – Present Executive Board, July 2015 – June 2019

Chicago Booth Microeconomics Group Ph.D. Program Faculty Director, July 2017 – Present

Econometrica

Associate Editor, July 2016 – Present

American Economic Review: Insights

Board of Editors, January 2018 – Present

Brookings Center on Regulation and Markets Advisory Council Member, January 2018 – Present

ACM Conference on Electronic Commerce Senior Program Committee, 2014, 2015, 2017, 2018, 2020 Program Committee, 2010, 2011, 2012

National Bureau of Economic Research
Organizer, Industrial Organization, winter meetings, Feb 2019

American Economic Journal: Microeconomics Board of Editors, July 2016 – Present

Simons Institute

Co-organizer, Conference on Algorithmic Game Theory and Practice, November 2015

University of Chicago Becker Friedman Institute Co-organizer, Midway Market Design Workshop, July 2014

Jerusalem Summer School in Economic Theory
Lecturer, Matching and Market Design, 2014

University of Chicago Milton Friedman Institute
Executive Committee, Matching and Price Theory Conference, May 2011

AMMA

Program Committee, the Second Conference on Auctions, Market Mechanisms, and Their Applications, 2011

OUTSIDE ACTIVITIES

Cognomos LLC

Course Allocation Software (based on Budish, 2011 JPE) Board Member, 2017 – Present

ConSwap

Batch Auctions for Decentralized Finance (based on Budish, Cramton and Shim, 2015 QJE) Technical Advisor, 2022 – Present

PREVIOUS EMPLOYMENT

2000 – 2002 **Goldman Sachs**

Financial Analyst, Investment Banking Division: M&A Group. Experience: Sale of Borden Foods Corporation in four pieces (combinatorial!); sale of OTG Software to Legato Systems; Anti-Raid Team (hostile takeover preparation / defense)

Last Updated: January 2022