

**Last Revised: September, 2019**

## **Employment**

Senior Economist, Federal Reserve Bank of Philadelphia, 2019-present.

Assistant Professor, University of Wisconsin-Madison, Department of Economics, 2014-2019.

## **Education**

Ph.D., Economics, University of Chicago, 2008-2014.

B.A., Applied Mathematics, University of California, Berkeley, 2006.

## **Publications**

1. The Evolution of Work in the United States (with Phai Phongthientham, Sebastian Sotelo, and Daniel Tannenbaum), *American Economic Journal: Applied Economics*, forthcoming.
2. How Wide Is the Firm Border? (with Ali Hortaçsu, Mary Jialin Li, and Chad Syverson), *Quarterly Journal of Economics*, forthcoming.
3. New Technologies and the Labor Market (with Phai Phongthientham, Sebastian Sotelo, and Daniel Tannenbaum), *Journal of Monetary Economics* (Carnegie-Rochester-NYU Conference Series), 2018, 97: 48-67.
4. Accounting for the Sources of Macroeconomic Tail Risks (with Thorsten Drautzburg and Zhenting Wang), *Economics Letters*, 2018, 165: 65-69.
5. How Important Are Sectoral Shocks?. *American Economic Journal: Macroeconomics*, 2017, 9(4): 254-280.
6. Vertical Integration and Input Flows (with Ali Hortaçsu and Chad Syverson), *American Economic Review*, 2014, 12(4): 1120-1148.
7. Materials Prices and Productivity. *Journal of the European Economic Association*, 2014, 12(3): 575-611.
8. Sources of Variation in Social Networks. *Games and Economic Behavior*, 2013, 79: 106-131.
9. Network Structure of Production (with Ali Hortaçsu, Jimmy Roberts, and Chad Syverson), *Proceedings of the National Academy of Sciences*, 2011, 108(13): 5199-5202.
10. The Topology of the Federal Funds Market (with Morten Bech), *Physica A*, 2010, 389(22): 5223-5246.

## **Research Papers/Work in Progress**

1. Emerging and Disappearing Work, Thriving and Declining Firms, (with Sarada), 2019.
2. Gender Targeting in U.S. Newspaper Ads: 1940-2000 (with Lisa Kahn), 2019.

## **Older Research Papers**

1. Quantifying the Benefits of a Liquidity-Saving Mechanism (with Antoine Martin and Jamie McAndrews), 2010. Federal Reserve Bank of New York Staff Reports, #447.

2. The Welfare Effects of a Liquidity-Saving Mechanism (with Antoine Martin and Jamie McAndrews), 2010. Federal Reserve Bank of New York Staff Reports, #331.

### **Discussions/Comments**

- Review of “Financial and Macroeconomic Connectedness: A Network Approach to Measurement and Monitoring,” by Francis Diebold and Kamil Yilmaz. *Journal of Economic Literature*, 53(4): 1021-1023.
- Discussion of “Cascades and Fluctuations in an Economy with an Endogenous Production Network,” by Michael Weber and Ali Ozdagli, presented at the 2017 ASSA Meetings.
- Discussion of “Monetary Policy Through Production Networks: Evidence from the Stock Market,” by Mathieu Taschereau-Dumouchel, presented at the 2017 ITAM-PIER Conference on Macroeconomics.
- Discussion of “Financial Networks over the Business Cycle” by Alexandr Kopytov, presented at the 2019 Federal Reserve Board Conference on the Interconnectedness of Financial Systems.
- Discussion of “Structural Change Within Versus Across Firms: Evidence from the United States” by Xiang Ding, Teresa Fort, Stephen Redding, and Peter Schott, presented at the 2019 NBER Conference on Mega-Firms and Changes in Market Power.

### **Presentations by Year**

- 2012: 2012 Midwest Macro Meetings; Research Data Center Annual Conference, Chicago FRB; 10th Annual International Industrial Organization Conference
- 2013: 2013 Midwest Macro Meetings; Networks in Macroeconomics and Finance Conference at the BFI; EIEF Doctoral Workshop in Economic Theory and Econometrics.
- 2014: Columbia, Federal Reserve Bank of New York, Federal Reserve Board, Northwestern, Pennsylvania, UC-Berkeley, UCLA, UW-Madison
- 2015: Federal Reserve Bank of Richmond, Mannheim, UW-Milwaukee, Vanderbilt
- 2016: University of Nebraska, University of Connecticut
- 2017: ASSA Meetings, Cornell University, Carnegie-Rochester-NYU Conference, Sabanci University, Tinbergen Institute Conference on International Production Networks
- 2018: Virginia Tech, 2018 Society for Institutional & Organizational Economics Meeting, 2018 Midwest Macro Meetings, Society for Economic Dynamics, ESRC/Cenmap Conference on the Empirical Analysis of Contracting and Bargaining, NBER Summer Institute (CRIW); University of British Columbia, University of Memphis, Brigham Young University, Federal Reserve Bank of Philadelphia, Federal Reserve Bank of Richmond, Washington University of St. Louis Mini-Conference, Empirical Management Conference at Harvard Business School
- 2019: US Census Bureau, Federal Reserve Bank of Atlanta, Society of Economic Dynamics, UT-Austin Workshop on Trade and Business Cycles, De Paul University, Bank of Mexico, Indiana University (scheduled)

### **Teaching Experience**

- Spring, 2015-2019: Industrial Organization and Imperfect Competition (Undergraduate)
- Spring, 2016-2019: Macroeconomic Theory (Graduate)

Fall, 2014-15, Spring 2017-19: Topics in Macroeconomics (Graduate)

### **Professional Activities**

Program committee for the Spring 2018 Midwest Macro Meetings

Program committee for the 2019 Society for Economic Dynamics Meetings

### **External Grants**

Washington Center for Economic Growth: \$43,000, April 2016 to March 2018. Joint with Daniel Tannenbaum and Sebastian Sotelo.

Russell Sage Foundation: \$114,772, July 2018 to June 2020. Joint with Daniel Tannenbaum and Sebastian Sotelo.