This project studies the reallocation of workers across establishments within the firm, and how these decisions are affected by taxes and other local government policies. Typically, when economists use the term reallocation, we are thinking of the movement of jobs between firms. In contrast, we study how firms reallocate jobs across their different establishments. This has been historically hard to examine due to data limitations; however, the Longitudinal Business Database (LBD), created by the US Census, provides information on the employment distribution in each firm over time, enabling us to research intra-firm reallocation. We combine this data with additional data on locality-level policies to understand how tax policies affect where firms choose to locate workers. The use of micro-level data is crucial for this project, as compared to aggregate data which potentially would not tell the whole story of the movement of jobs. For example, if a plant shrinks (or closes), it would be considered a job loss in the location if we were to use the aggregate data, as the number of workers in that location decreased. However, it is possible that the firm moved jobs from one location to another as part of a re-structuring plan. The LBD allows us to track the movement of these jobs to understand what happens in response to tax policies. Moreover, it may be that one firm shrinks in location A while expanding in location B while a different firm does the opposite; these bilateral changes would be cancelled out in aggregated locality-based data.

In the first part of this project, we use the LBD to compute estimates of the flow of workers from establishment to establishment within the firm. It is important to note that these are estimates, since we do not actually see when a job is moved from plant to plant, and instead see the job gain or loss at each establishment in the firm. Consider a simple example of a 2-plant firm to understand our methodology. If plant A increases by 5 workers and plant B shrinks by 8 workers, we say that 5 jobs were reallocated from plant A to plant B, and the remaining 3 lost jobs at plant B are a contraction by the firm. It is more complicated with firms with more than 2 locations. In this case, we assume that the share of job creation due to reallocation is constant within expanding establishments at a firm. This procedure allows us to compute estimates of the location-to-location movements of jobs. This can be aggregated to the state level to understand the pairwise movement of jobs. Importantly, we estimate the flows of jobs in both directions, not just the net movement of jobs.

We can use these estimates to examine whether state-level conditions are associated with inflows of jobs from other states. State taxes, right-to-work laws, and state educational expenditures have all been promoted for their ability to attract employers to locate within a state. When looking at taxes, we ideally will consider corporate tax rates, state tax credits, and firm specific incentives, following Slattery and Zidar (2020).[1] The advantage of using our job flow statistics over the traditional job creation and job destruction statistics for this purpose is that they focus on the reallocation of jobs across states, and are therefore more strongly connected to the competition incentives. With a panel of job flows over time for each state, we will conduct a state-level fixed-effects analysis to see how job flows are changed following changes in conditions in a state. This analysis can be conducted on both net job flows and gross inflows and outflows. Second, we will analyze the structure of bilateral flows between states. Since inter-state, intra-firm job flows have not previously been constructed, this analysis will shed light on how jobs migrate across space. We will consider whether job flows between states tend to be one-way or two-way by analyzing whether flows from a given state to another tend to be offset by significant flows in the opposite direction. This analysis will reveal the extent to which states compete for employers with their neighbors or peers.

In the second part of the project, we study the determinants of firm location decisions and distribution of employment, including both where to operate and, for multi-establishment firms, how to allocate workers across locations. New firms must consider local labor market conditions, infrastructure, taxes, and the regulatory environment when deciding where to locate their production facilities. This is also relevant for existing firms as location decisions are not permanent and incumbents respond to changes in the economic environment in which they operate. In addition, existing firms may face adjustment costs when altering the size of establishments. To quantify the importance of these factors, we will estimate a structural dynamic model of firm location decisions. Firms decide where to locate, and given the total number of workers they employ in the US, decide on how many workers to employ at each location. Decisions can be influenced by the decisions of competitors, and we will allow for strategic interactions and/or competitive market size effects. We model this in general

[1] The data on firm specific incentives are from Slattery (2022). We do not have access to these data at this point but will incorporate this into our work if we are able to access the data.

equilibrium, following Lee and Wolpin (2006). After estimating the model, we can conduct counterfactual analysis to study how variations in state tax levels affect firm location decisions. We can also study how shocks to local labor market conditions are propagated across localities via the employment decisions of multi-unit firms.

Our research builds on prior work that has investigated the role of local policies on firm location decisions. The two most related papers are Suarez Serrato and Zidar (2014) and Giroud and Rauh (2019). Suarez Serrato and Zidar (2014) use variation in state income taxes to study how taxes affect the welfare of workers and firms, who are mobile. Giroux and Rauh (2019) examine the importance of multi-unit firms as networks linkages between localities, but do not conduct welfare analysis.

References

Giroud, X. and Rauh, J. (2019). "State taxation and the reallocation of business activity: Evidence from establishment-level data." *Journal of Political Economy*, 127 (3): 1262-1316.

Lee, D. and Wolpin, K.I. (2006). "Intersectoral labor mobility and the growth of the service sector." *Econometrica,* 74 (1): 1-46.

Slattery, C. (2022). "Bidding for firms: Subsidy competition in the U.S." Working paper.

Slattery, C. and Zidar, O. (2020). "Evaluating state and local business incentives." *Journal of Economic Perspectives*, 34 (2): 90-118.

Suarez Serrato, J.C. and Zidar, O. (2016). "Who benefits from state corporate tax cuts? A local labor markets approach with heterogeneous firms." *American Economic Review*, 106 (9): 2582-2624.

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Position

Associate Professor of Economics (without tenure) 2020-
Tepper School of Business, Carnegie Mellon University

Assistant Professor of Economics 2012-2020
Tepper School of Business, Carnegie Mellon University

Instructor 2011-2012
Tepper School of Business, Carnegie Mellon University

Education

University of Wisconsin-Madison 2011
Ph.D. Economics

University of Wisconsin-Madison 2009
M.S. Economics

Massachusetts Institute of Technology 2005
B.S. Economics, B.S. Political Science

Published papers

"Do house prices affect campaign contributions" (with Sarah Niebler and Carly Urban), *Economics and Politics*, 2022, Forthcoming.

"How do U.S. visa policies affect unauthorized immigration?" (with Brian Kovak), *Journal of Monetary Economics* (Carnegie-Rochester-NYU), 2020, 113:92-108.

"Immigrant wage growth in the United States: The role of occupational upgrading" (with Carl Sanders), *International Economic Review*, 2020, 61(2): 941-972.

"Immigrant wages and recessions: Evidence from undocumented Mexicans" (with Kayuna Nakajima), *European Economic Review*, 2019, 114: 92-115.

"Mexico-U.S. migration: Effects of wages and border enforcement", *The Review of Economic Studies*, 2018, 85 (4), 2353-2388.

"Local economic growth from primary election spending" (with Carly Urban), *The Economic Journal*, 2016, 126 (597): 2147-2172.

"The political orientation of newspaper endorsements in U.S. Elections" (with Stephen Ansolabehere and James Snyder), *Quarterly Journal of Political Science*, 2006, 1 (4): 393-404.

Work in Progress

"The effect of family structure on children" (with Carl Sanders)

"Job search and matching by race and gender" (with Robert Miller)

Awards

"PaCE: Developing a Pandemic Consumption Expenditure Index" (with Laurence Ales, Chris Telmer, and Ariel Zetlin-Jones), 2020, Block Center for Technology and Society, Carnegie Mellon University, $27,000

"PaCE: Developing a Pandemic Consumption Expenditure Index" (with Laurence Ales, Chris Telmer, and Ariel Zetlin-Jones), 2020, Richard King Mellon Foundation, $50,000

"Immigrant wage growth in the United States: The role of occupational upgrading" (with Carl Sanders), 2013, Borders Awards in Immigration Research, University of Arizona, $30,000

Berkman Award, Carnegie Mellon University, 2015

Christensen Award in Empirical Economics, University of Wisconsin-Madison, 2010

NICHD Trainee, Center for Demography and Ecology, University of Wisconsin-Madison, 2009

Field Research Award, Center for Southeast Asian Studies, University of Wisconsin-Madison, 2009

Conference & Seminar Presentations

2022 University of Colorado-Boulder, Society of Labor Economists, North American Summer Meeting of the Econometric Society, Banff Empirical Microeconomics Workshop

2021 Barcelona GSE Summer Forum (Structural Microeconometrics)

2020 Bocconi University

2019 Rochester, Penn State, Barcelona GSE Summer Forum (Structural Microeconometrics), Society for Economic Dynamics, Carnegie-Rochester-NYU conference on public policy

2018 Society for Economic Dynamics, UVA (Darden), Southern Economics Association

2017 Georgetown, Notre Dame, Society of Labor Economists, University of Wisconsin alumni conference

2016 Federal Reserve Bank of St. Louis, Barcelona GSE Migration workshop, Institute for Research on Poverty Summer Research Workshop (University of Wisconsin-Madison)

2015 University of Calgary, ZEW workshop on "Development and Consequences of Atypical Employment"

2014 UCL, LSE, Society of Labor Economics, North American Summer Meeting of the Econometric Society

2013 NYU, Society of Labor Economics, Montana State University

2012 European Society for Population Economics

2011 Carnegie Mellon, Penn State, Ohio State, American University, Census Bureau, Royal Economic Society, Midwest Economic Association, Norface migration network conference on "Migration: Economic Change, Social Challenge"

2010 UW-Madison, Kent State, Midwest International Economic Development Conference

Professional Activities

Referee: Econometrica, Review of Economic Studies, International Economic Review, Journal of Labor Economics, Review of Economic Dynamics, Journal of Human Resources, European Economic Review, Journal of the European Economic Association, , Journal of Monetary Economics, Economic Inquiry, Labour Economics, Public Choice, International Migration Review, Aging and Society, Journal of Demographic Economics, Economics of Education Review

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Professional Affiliations

Permanent Academic

Stumpf Early Career Professor of Economics, The Pennsylvania State University, July 2019–Present.

Professor of Economics, The Pennsylvania State University, July 2022–Present.

Associate Professor of Economics, The Pennsylvania State University, July 2016–June 2022.

Assistant Professor of Economics, The Pennsylvania State University, August 2010–June 2016.

Visiting Academic

Research Visiting Scholar, School of Economics and Finance, University of Hong Kong, August-September 2017.

Visiting Scholar, Stanford Institute for Economic Policy Research (SIEPR), Stanford University, January-March 2018.

Competition and Policy Initiative Fellow, The Wharton School, University of Pennsylvania, April-May 2018.

Education

Ph.D. Economics, Northwestern University, Evanston, IL, 2010.
Committee Chairpersons: Professors Aviv Nevo and Elie Tamer.

M.A. Economics, Northwestern University, Evanston, IL, 2007.

M.S. Computer Science, College of William and Mary, Williamsburg, VA, 2003.

B.A. Economics & International Relations, College of William and Mary, Williamsburg, VA, 2002.

Professional Activities

Co-editor, *Journal of Industrial Economics*, 2022-Present.

Board of Editors, *American Economic Review*, 2021-Present.

Associate Editor, *Journal of Industrial Economics*, 2016-2022.

Program Committee Member, International Industrial Organization Conference (IIOC), 2016-2017, 2022.

Scientific Committee Member, European Association for Research in Industrial Economics Annual Conference (EARIE), 2019-2022.

Research Papers

Publications

Input Prices, Productivity and Trade Dynamics: Long-run Effects of Liberalization on Chinese Paint Manufactures (with Shengyu Li and Hongsong Zhang), *RAND Journal of Economics*, forthcoming.

The Influence of Hidden Researcher Decisions in Applied Microeconomics (with Nick Huntington-Klein, Andreu Arenas, Emily A. Beam, Marco Bertoni, Jeffrey R. Bloem, Pralhad Burli, Naibin Chen, Godwin Ekpe, Todd Pugatch, Martin Saavedra and Yaniv Stopnitzky), *Economic Inquiry*, 2021, 59(3): 944-960.

Measuring Competition in Spatial Retail: An Application to Groceries (with Paul B. Ellickson and Oleksii Khvastunov), *RAND Journal of Economics*, 2020, 50(1): 189-232.

Strategic Patient Discharge: The Case of Long Term Care Hospitals (with Paul J. Eliason, Ryan C. McDevitt, and James W. Roberts), *American Economic Review*, 2018, 108(11): 3232-3265.

Brewed in North America: Mergers, Marginal Costs, and Efficiency (with Margaret Slade and Joris Pinkse), *International Journal of Industrial Organization*, 2018, 59: 24-65.

What Drives Home Market Advantage? (with A. Kerem Cosar and Felix Tintelnot), *Journal of International Economics*, 2018, 110: 135-150.

Productivity and Quality in Health Care: Evidence from the Dialysis Industry (with Ryan C. McDevitt), *Review of Economic Studies*, 2017, 84(3): 1071-1105.

Production Function Estimation with Unobserved Price Dispersion (with Shengyu Li and Hongsong Zhang), *International Economic Review*, 2016, 57(2): 665–690.

Borders, Geography, and Oligopoly: Evidence from the Wind Turbine Industry (with A. Kerem Cosar and Felix Tintelnot), *Review of Economics and Statistics*, 2015, 97(3): 623–637.

Unigeniture in an Uncertain World (with Nic Ziebarth), 2015, *Cliometrica* 9: 139–166.

Multiplicity of Equilibria and Information Structures in Empirical Games: Challenges and Prospects (with Ron Borkovsky, Paul Ellickson, Brett Gordon, Victor Aguirregabiria, Pedro Gardete, Todd Gureckis, Teck-Hua Ho, and Andrew Sweeting), 2015, *Marketing Letters*, 26(2): 115-125.

Bias in Estimating Border and Distance-related Trade Costs: Insights from an Oligopoly Model (with A. Kerem Cosar and Felix Tintelnot), 2015, *Economics Letters*, 126: 147–149.

Who Pays for Switching Costs? (with Guy Arie), 2014, *Quantitative Marketing and Economics* 12(4): 379–419.

Discrete Games with Flexible Information Structures: An Application to Local Grocery Markets, 2014, *RAND Journal of Economics* 45(2): 303–340.

Wal-Mart and the Geography of Grocery Retailing (with Paul Ellickson), 2013, *Journal of Urban Economics* 75, 1–14.

Mobility and Mortgages: Evidence from the PSID (with N. Edward Coulson), 2013, *Regional Science and Urban Economics* 43(1): 1–7.

The Payoff to America from Globalisation (with Scott C. Bradford and Gary Clyde Hufbauer), 2006, *World Economy* 29(7): 893–916.

Working Papers

Conformant and Efficient Estimation of Discrete Choice Demand Models, (with Charles Murry, Joris Pinkse, and Stephan Sagl), June 2022.

Evolution of Market Power in the US Auto Industry (with Charles Murry and Ali Yurukoglu), April 2022.

Generalized Insurer Bargaining (with Guy Arie and Shiran Rachmilevitch), February 2020.

Seminar and Conference Presentations

2022 (including scheduled) - Massachusetts Institute of Technology, Cambridge, MA; University of Toronto, Toronto, Canada; University of British Columbia, Vancouver, Canada; University of Wisconsin, Madison, WI; Imperial College London, London, United Kingdom; Northwestern University, Evanston, IL.

2021 (all virtual due to pandemic) – Carnegie Mellon University, Pittsburgh, PA; Bank of Canada, Ottawa, Canada; Texas A&M University, College Station, TX; Research Institute for Development, Growth and Economics (RIDGE) Workshop on Industrial Organization; University of Buffalo, Buffalo, NY; Rice University, Houston, TX; Department of Justice, Washington, DC.

2020 – All presentations cancelled due to COVID-19 pandemic.

2019 – Purdue University, West Lafayette, IN; Indiana University, Bloomington, IN; Boston University, Boston, MA; IO Summer School at Shanghai University of Finance and Economics, Shanghai, China; European Association for Research in Industrial Economics Annual (EARIE) Conference, Barcelona, Spain; University of Georgia, Athens, GA; University of California at Los Angeles, Los Angeles, CA.

2018 – Stanford University, Palo Alto, CA; University of Pennsylvania, Philadelphia, PA; Society for Economic Dynamics Annual Conference, Mexico City, Mexico; Auburn University, Auburn, AL.

2017 – University of Pennsylvania, Philadelphia, PA; United States Census Bureau, Suitland, MD; University of Hong Kong, Hong Kong; Peking University, Beijing, China; Shanghai Universiity of Finance and Economics (SUFE), Shanghai, China; University of New South Wales, Sydney, Australia; Australian National University, Canberra, Australia; University of Melbourne, Melbourne, Australia.

2016 – University of Texas, Austin, TX; NBER Winter IO Meetings, Palo Alto, CA; International Industrial Organization Conference, Philadelphia, PA; CIREQ Workshop on the Applications of Industrial Organization, Montreal, Canada; Vanderbilt University, Nashville, TN.

2015 – International Industrial Organization Conference, Boston, MA; Wharton School, Philadelphia, PA; University of Illinois, Urbana-Champaign, IL; University of Wisconsin, Madison, WI; Boston College, Chestnut Hill, MA.

2014 – UNC/Duke Microeconomics Seminar, Chapel Hill, NC; International Industrial Organization Conference, Chicago, IL; CIBC Centre for Human Capital and Productivity Conference on Firm-Level Productivity, London, ON; Johns Hopkins University, Baltimore, MD; Penn State-Cornell Econometrics and IO Conference, State College, PA; Princeton University, Princeton, NJ; University of Maryland, College Park, MD; Collegio Carlo Alberto, Turin, Italy; Einaudi Institute for Economics and Finance, Rome, Italy.

2013 – Econometric Society/ASSA Winter Meetings, San Diego, CA; University of Iowa, Iowa City, IA; College of William and Mary, Williamsburg, VA; 9th Invitational Choice Symposium, Noordwijk, The

Netherlands; European Association for Research in Industrial Economics Annual Conference, Evora, Portugal; Columbia University, New York, NY; University of Toronto, Toronto, ON; Conference on Recent Advances in Set Identification: Theory and Applications, Toulouse, France.

2012 – Massachusetts Institute of Technology, Cambridge, MA; International Industrial Organization Conference, Arlington, VA; North American Summer Meetings of the Econometric Society, Evanston, IL; FTC Microeconomics Conference, Washington, DC.

2011 – Stanford University, Palo Alto, CA; International Industrial Organization Conference, Boston, MA; The Ohio State University, Columbus, OH; US Census Bureau Center for Economic Studies, Suitland, MD; UECE Lisbon Meetings on Game Theory and Applications, Lisbon, Portugal.

2010 – Johns Hopkins University, Baltimore, MD; The Pennsylvania State University, University Park, PA; University of Wisconsin-Madison, Madison, WI; University of Arizona, Tuscon, AZ; IO Conference on Food and Food Processing, Toulouse, France; Econometric Society World Congress, Shanghai, China; Cornell University, Ithaca, NY; Southern Economic Association Conference, Atlanta, GA.

2009 – Northwestern University, Evanston, IL.

Fellowships, Grants, and Awards

Economic Inquiry Paper of the Year, "The Influence of Hidden Researcher Decisions in Applied Microeconomics," 2021.

Journal of the European Economic Association Excellence in Refereeing Award, 2021.

National Science Foundation Grant SES-1459905, "Trade Costs, Preferences, and Government Policies: Understanding Market Outcomes in the World Automobile Industry," (co-PI with Felix Tintelnot and A. Kerem Cosar), 2015-2017.

Undergraduate Teaching Award, Penn State Department of Economics, 2015.

EARIE Young Economist Essay Award, European Association for Research in Industrial Economics, 2013.

Strumpf Early Career Professorship, The Pennsylvania State University, 2012-2013.

Robert Eisner Memorial Fellowship, Northwestern University, 2008-2009.

Phi Beta Kappa, Alpha of Virginia, 2002.

Referee Service

Agricultural and Resource Economics Review, American Economic Review, American Economic Journal: Applied Economics, American Economic Journal: Microeconomics, American Journal of Agricultural Economics, Econometrica, Econometrics Journal, Economic Journal European Economic Review, Health Economics, International Economic Review, International Journal of Electronic Commerce, International Journal of Industrial Organization, Journal of Applied Econometrics, Journal of Business & Economic Statistics, Journal of Development Economics, Journal of Econometrics, Journal of Econometric Methods, Journal of Economics & Management Strategy, Journal of the European Economic Association, Journal of Industrial Economics, Journal of Mathematical Economics, Journal of Political Economy, Journal of Urban Economics, National Science Foundation, Quantitative Economics, Quarterly Journal of Economics, RAND Journal of Economics, Real Estate Economics, Regional Science and Urban Economics, Review of Economic Studies, Review of Industrial Organization, Southern Economic Journal.

Teaching

Instructor, The Pennsylvania State University, 2010-present:

ECON 444, Undergraduate Economics of the Corporation.

ECON 512, Ph.D. Empirical Methods.

ECON 530/531, Master's Essay Workshop.

ECON 543, Ph.D. Industrial Organization.

ECON 597, Ph.D. Advanced Topics in Industrial Organization.

Teaching Assistant, Northwestern University, 2006-2009:

ECON 381-1,2, Undergraduate Econometrics I & II

ECON 450, Graduate Industrial Organization

Teaching Assistant, Kellogg School of Mangement, 2006:

MGMT 431, Business Strategy.

Doctoral Advising

Yao Luo (2013, University of Toronto), Hongsong Zhang (2013, University of Hong Kong), Shengyu Li (2014, Durham University), Rong Luo (2015, University of Georgia), Alex Fakos (2015, Instituto Tecnológico Autónomo de México), Farid Farrokhi (2016, Purdue University), Xiaolu Zhou (2017, Xiamen University), Oleksii Khvastunov (2017, Capital One), Naibin Chen (2020, Bates White), Farhod Olimov (2020, Digonex), Jia Xiang (2020, Harvard Public Health post-doc & Indiana University–Kelley School).

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RESEARCH FIELDS

Macroeconomics, Productivity, Firm Dynamics, Entrepreneurship, Economics of Uncertainty.

APPOINTMENTS AND ACADEMIC VISITS

Duke University:	Associate Professor, Department of Economics, since 2021.
	Assistant Professor, Department of Economics, 2017-21.
University of Texas at Austin:	Assistant Professor, Department of Economics, 2011-16.
	Faculty Research Affiliate, Population Research Center, 2012-16.
National Bureau of Economic Research:	Faculty Research Fellow, since 2018.
Centre for Economic Policy Research:	Research Affiliate, since 2017.
University of Chicago:	Visiting Scholar, Becker-Friedman-Institute, 2021-22.
Stanford University:	Visiting Scholar, Dept. of Economics, Spring and Fall 2015.
University of Mannheim:	Visiting Scholar, Dept. of Economics, 2014-16.
Duke University:	ERID Visiting Scholar, Dept. of Economics, September 2013.
Federal Reserve Bank of Minneapolis:	Visiting Scholar, September 2019.
Federal Reserve Bank of St. Louis:	Visiting Scholar, December 2018.
Federal Reserve Bank of Atlanta:	Visiting Scholar, April 2012.

EDUCATION

Northwestern University:	Ph.D. in Economics, June 2011; M.A. in Economics, June 2007.
Stockholm School of Economics:	CEMS Master in International Management, August 2005.
University of Cologne:	Diplom-Volkswirt (equiv. to M.A. in Economics), August 2005.

PUBLICATIONS

1.) "The Micro-Level Anatomy of the Aggregate Labor Share Decline" (with Nicolas Vincent), *Quarterly Journal of Economics*, vol. 136, no. 2, pp. 1031-1087, May 2021.
2.) "The Cross-Section of Labor Leverage and Equity Returns," (with Andres Donangelo, François Gourio and Miguel Palacios, *Journal of Financial Economics*, vol. 132, no. 2, pp. 497-518, May 2019.
3.) "Slow to Hire, Quick to Fire: Employment Dynamics with Asymmetric Responses to News." (with Cosmin Ilut and Martin Schneider), *Journal of Political Economy*, vol. 126, no. 5, pp. 2011-2071, October 2018.
4.) Comment on "Computerizing Industries and Routinizing Jobs: Explaining Trends in Aggregate Productivity" by Sangmin Aum, Sang Yoon (Tim) Lee, Yongseok Shin, *Journal of Monetary Economics*, vol. 97, pp. 22-28, August 2018.
5.) "The Effects of the Real Oil Price on Regional Wage Dispersion" (with Nicolas Ziebarth), *AEJ: Macroeconomics*, vol. 9, no. 2, pp. 115-148, April 2017.

WORKING PAPERS

6.) "Good Dispersion, Bad Dispersion," (with Nicolas Vincent), revise & resubmit at the *Review of Economic Studies*, November 2020.
7.) "Welfare Effects of Gas Price Fluctuations," (with Florian Kuhn and Nic Ziebarth), November 2020.
8.) "Returns to Scale, Productivity and Competition: Empirical Evidence from U.S. Manufacturing and Construction Establishments" (with Wei Gao), February 2020.
9.) "The Cyclical Nature of the Productivity Distribution," revise and resubmit at the *Quarterly Journal of Economics*, March 2015.
10.) "Financial Frictions and Investment Dynamics in Multi-Plant Firms" (with Nicolas Vincent), U.S. Census *Center for Economic Studies Discussion Paper 13-56*, June 2013.

WORK IN PROGRESS

11.) "Job Reallocation between and within Occupations" (with Miao Ben Zhang).
12.) "The Anatomy of a Housing Bubble."

OLDER WORKING PAPERS

13.) "How Do Oil Price Shocks Matter? Transmission Channels on the Supply and the Demand Side," with Nicolas Ziebarth, May 2009.
14.) "Limited Commitment and Moral Hazard in Late Classical Athenian Maritime Loans," April 2008.

DISCUSSIONS

1.) "Strategic Product Diversity" by Nuno Clara, Alexandre Corhay and Howard Kung, American Finance Association Annual Meeting, January 2021.
2.) "Occupational exposure to capital-embodied technological change" by Julieta Caunedo, David Jaume and Elisa Keller, NBER SI Economic Growth, July 2020.
3.) "Allocating Misallocation: Decomposing Measures of Aggregate Allocative Efficiency," by G. Jacob Blackwood, John Haltiwanger and Zoltan Wolf, Oxford Conference on Firm Dynamics, June 2020.
4.) "Corporate Tax Cuts and the Decline of the Manufacturing Labor Share" by Barıs Kaymak and Immo Schott, Econometric Society North American Winter Meetings, January 2020.
5.) "Direct and Indirect Effects of Financial Access on SMEs" by Jing Cai and Adam Szeidl, NBER SI Household Finance, July 2019.
6.) "The Use of Performance-Based Pay versus Wage Insurance within the Megafirm: Implications for the Within-Person Volatility of Income" by Chinhui Juhn, Kristin McCue, Brooks Pierce and Kathryn Shaw, NBER Conference on "The Rise of the Mega-firm: Causes and Consequences for Labor and Product Markets," October 2018.
7.) "The Fall of the Labor Share and the Rise of Superstar Firms" by David Autor, David Dorn, Lawrence F. Katz, Christina Patterson and John Van Reenen, Bundesbank-Banque de France Conference, June 2018.
8.) "Computerizing Industries and Routinizing Jobs: Explaining Trends in Aggregate Productivity" by Sangmin Aum, Sang Yoon (Tim) Lee and Yongseok Shin, Carnegie-Rochester-NYU Conference on Public Policy, November 2017.
9.) "Changing Business Dynamism and Productivity: Shocks vs. Responsiveness" by Ryan A. Decker, John C. Haltiwanger, Ron S. Jarmin and Javier Miranda, NBER SI CRIW, July 2017.
10.) "National Income Accounting When Firms Insure Workers: Understanding Firm Size and Compensation Inequality" by Barney Hartman-Glaser, Hanno Lustig, Mindy X. Zhang, Advances in Macro-Finance Tepper/LAEF Conference, Pittsburgh, September 2016.
11.) "The End of Men" by Nir Jaimovic and Henry Siu, Northwestern Macro Alumni Conference, Evanston, February 2016.
12.) "Firm Volatility in Granular Networks" by Bryan Kelly, Hanno Lustig, Stijn van Nieuwerburgh, NBER SI Capital Markets and the Economy, Cambridge, July 2013.

13.) "Banking, Liquidity and Bank Runs in an Infinite Horizon Economy" by Mark Gertler and Nobuhiro Kiyotaki, Texas Monetary Conference, College Station, April 2013.
14.) "Capital Requirements in a Quantitative Model of Banking Industry Dynamics" by Dean Corbae and Pablo D'Erasmo, CIREQ Macroeconomics Conference, Montréal, April 2012.

SEMINAR AND CONFERENCE PRESENTATIONS (including scheduled; * = Discussant)
MIT (2022), LSE (2022), Stockholm (2022), Notre Dame (2022), Federal Reserve (2022, 2013, 2011), Penn State (2021, 2017, 2016, 2014, 2013), Bank of Canada (2021), Duke (2021, 2019, 2016, 2013, 2011), Triangle Macro-Finance Workshop (2020), World Bank (2020), BIS (2019), NYU-Stern (2019, 2017), UMN (2019), Houston (2019, 2015), Rochester (2019), Columbia (2019), FRB Minneapolis (2019), BI Norwegian Business School (2019), Paris School of Economics (2019), Einaudi Institute (2019, 2013), CERGE-EI (2019), Clemson (2019), FRB St. Louis (2018), UNC Chapel Hill (2018), Auburn (2018), Chicago-Booth (2018), Cornell (2018), FRB Chicago (2018, 2010), UIUC (2018), LMU Munich (2018), UCL (2018), Royal Holloway (2018), UAB (2018), UVA (2018), ITAM (2017), Banco de México (2017), Bank of Finland (2017), CREI (2016), Birmingham (2016), Wharton (2016, 2014), Bonn (2016, 2011), De Nederlandsche Bank (2016), Mannheim (2016, 2014, 2011), Oxford (2016), Stanford (2015), Toulouse (2015), USC (2015), Banque de France (2015), Amsterdam (2014), Bank of England (2014), Census Bureau-CES (2014), Texas CRDC (2014), Iowa (2013), UW Madison-Business (2013), Texas A&M (2013), Arizona State (2013), UT Austin (2013, 2011), FRB New York (2012), Frankfurt (2012), FRB Atlanta (2012), Cologne (2012), Montréal (2011), Western Ontario (2011), FRB Richmond (2011).
NBER Economic Fluctuations and Growth Research Meeting, 2017.
NBER Summer Institute Macroeconomics and Productivity: 2016, 2012.
NBER Summer Institute Economic Growth: 2020*.
NBER Summer Institute Household Finance: 2019*.
NBER Summer Institute CRIW: 2017*.
NBER Summer Institute Capital Markets and the Economy: 2013*.
NBER Conference on "The Rise of the Mega-firm: Causes and Consequences for Labor and Product Markets," October 2018*.
CEPR European Summer Symposium in International Macroeconomics: 2018.
Barcelona Summer Forum Market Power and the Labor Market: 2021.
Barcelona Summer Forum Firms in the Global Economy: 2017, 2016.
Barcelona Summer Forum Applied Industrial Organization: 2017.
SED Annual Meeting: 2021, 2018, 2017, 2013, 2011.
Carnegie-Rochester Conference on Public Policy: November 2017*.
Econometric Society World Congress: 2015.
Econometric Society North American Winter Meetings: 2020*, 2012.
American Economic Association Annual Meeting: 2019, 2014, 2012.
EEA Annual Meeting: 2020, 2015.
RES Annual Conference: 2011.
Midwest Macro Meetings: Fall 2012, Spring 2012.
SAET Annual Conference: 2019.
Firm Heterogeneity and the Macroeconomy Conference, Oxford/virtual, June 2020*.
Macroeconomics Worskhop, Bank of Portugal, December 2019.
BFI Workshop "Workers and Firms," University of Chicago, September 2019.
RDC Data Resources Workshop, Duke University, April 2019.
2nd Annual Macro-Financial Research Conference, IMF, April 2019.
"Advances in Macroeconomics: Growth, Misallocation and Factor Shares," Arizona State, March 2019.
Macro Finance Society, 12th Workshop, Austin, November 2018.
Bundesbank-Banque de France Conference, Paris: June 2018*.
6th CAPR Investment and Production based Asset Pricing Workshop, Oslo, May 2018.
E1Macro Conference, Queen Mary University, London: May 2018.

ERID Mini-Conference of Firm, Industry, and Trade Dynamics, Duke, May 2018.
Marco Fanno Alumni Workshop, Milan: 2017.
Micro-Macro Workshop, HEC Montréal: 2016.
Empirical Macro Workshop: 2019, 2018, 2017, 2016, 2015, 2013.
Northwestern Macro Alumni Conference, Evanston: 2018, 2016*.
German Economists Abroad Annual Meeting: 2019, 2015, 2014, 2013, 2012, 2011.
"Macroeconomics and Survey Data," Ifo Institute Munich: 2016, 2014, 2013, 2012.
Advances in Macro-Finance Tepper/LAEF Conference, Pittsburgh, 2016*.
"Workshop on Inequality," FRB St. Louis: September 2016.
"Firms in Macroeconomics," Cambridge-INET conference: August 2016.
"The Causes and Macroeconomic Consequences of Uncertainty," FRB Dallas: October 2013.
Cologne Macro Workshop: October 2014.
Frankfurt-Mannheim Macro Workshop: September 2014.
Comparative Analysis of Enterprise Data (CAED) Annual Conference: 2013.
Texas Monetary Conference: 2013*.
CIREQ Macro Conference, Montréal: 2012*.
SITE Workshop, Macroeconomics of Uncertainty and Volatility, Stanford: 2011.
Census RDC Annual Research Conference: 2010.
Midwest Economics Association Annual Meeting: 2010.

FELLOWSHIPS, GRANTS AND AWARDS

National Science Foundation Research Grant, 2018-2021.
Research Grant, Fritz Thyssen Stiftung, 2015.
Foscolo Europe Fellowship, 2014-17.
Research Grant, University of Mannheim, 2014.
Research Grant, University of Texas at Austin, PRC, 2014.
Proposal Development Grant, Texas Census RDC, 2013.
Summer Research Fellowship, University of Texas at Austin, 2012.
Fulbright Fellowship, 2005-2006.
Marie Curie Fellowship, 2005-2008, declined.
CEMS Honors Program, 2002-2005.
Erasmus Exchange Scholarship, 2002.
Konrad Adenauer Scholarship, 2001-2005.

REFEREEING

Econometrica, Journal of Political Economy, Quarterly Journal of Economics, American Economic Review, American Economic Review: Insights, Review of Economic Studies, Review of Economics and Statistics, Journal of the European Economic Association, European Economic Review, Economic Journal, American Economic Journal: Macroeconomics, Journal of Monetary Economics, Carnegie-Rochester-NYU Conference Series of Public Policy, Review of Economic Dynamics, Quantitative Economics, Journal of Finance, Review of Financial Studies, Journal of Economic Theory, Journal of Industrial Economics, International Journal of Industrial Organization, Journal of Public Economics, Journal of Economic Dynamics and Control, Journal of Macroeconomics, Journal of Economics and Management Strategy, Energy Journal, World Development, Scandinavian Journal of Economics, Southern Economic Journal, Economics Letters, Finance Research Letters, Economic Inquiry.
National Science Foundation, United States-Israel Binational Science Foundation, Social Sciences and Humanities Research Council, European Research Council.

TEACHING

Duke University
Graduate Empirical Macroeconomics (2nd year PhD): Fall 2020, Fall 2019, Fall 2018, Fall 2017.

Independent Research Study (MA student):	Weiting Miao (Fall 2018).
Intermediate Macroeconomics (undergraduate):	Fall 2020, Spring 2020, Fall 2017.
Independent Research Study (undergraduate):	Gaurav Sharma and Nikhil Sridhar (Spring 2020), Caroline Yunjie Wei (Fall 2018).

University of Texas at Austin

Graduate Macroeconomics II (1st year PhD):	Spring 2014, Spring 2013.
Intermediate Macroeconomics (undergraduate):	Fall 2013, Fall, 2012, Spring 2012.

SERVICE

Panelist, NSF Graduate Research Fellowship Program: 2018/19.
External Expert, "Evidence and analysis of monopsony power, including, but not limited to, labor markets." Public Hearing of the Federal Trade Commission: October 2018.
Junior Recruiting, Duke University: 2018
Co-Organizer: ERID Mini-Conference of Firm, Industry, and Trade Dynamics, Duke: 2019, 2018.
Macro Research Seminar, Duke University: 2019, 2018, 2017.
Senior Recruiting (part of Executive Council), UT Austin: 2011-14.
Junior Recruiting, UT Austin: 2011-14.
Macro Research Seminar, UT Austin: 2011-14.

ADVISING

Graduate (graduation year, initial placement)
Yanran Guo (ongoing)
David Min (ongoing)
Sumin Chun (ongoing)
Xian Jiang (ongoing)
Jay Im (Committee Member, 2021, Office of Comptroller Currency)
Elessar Chen (Committee Member, 2021, Offers from Renmin and Nankai Universities)
Vytautas Valaitis (Chair, 2021, Max-Weber PostDoc at EUI, then University of Surrey)
Taehoon Kim (Co-Chair, 2021, Korea Institute for Industrial Economics and Trade)
Eugene Tan (Committee Member, 2019, University of Toronto, Rotman School of Management)
Weiting Miao (MA student, 2019, PhD program at Duke University)
Vasco Botelho (Committee Member, 2018, European Central Bank)
Soroush Ghazi (Committee Member, 2018, University of Alabama)
Florian Kuhn (Co-Chair, 2015, SUNY Binghamton)
Chacko George (Chair, 2014, FDIC)
Ayşe Kabukçuoglu Dur (Committee Member, 2013, Koç University, now North Carolina State University)
Ahmet Taşkin (Committee Member, 2013, Central Bank of Turkey, now Ulm University and IAB)
Jorge Barro (Committee Member, 2012, Louisiana State University, now Baker Institute for Public Policy)

Undergraduate (graduation year, first job)
Gaurav Sharma (2020)
Nikhil Sridhar (2020, Mercatus Center at George Mason University)
Caroline Lai (2019, 4Paradigm, Beijing)
Nina Le (2014, Deloitte)
Ian Arena (2013, Privateer Capital Managment)

Budget estimate

We request a total of $15,000. It will be allocated as follows

- $6,612 for Rebecca Lessem to make 12 trips to the Research Data Center at Penn State.
- $1,884 for Matthias Kehrig to make 2 trips to the Research Data Center at Penn State.
- $6,504 to hire research assistants.

Below, we explain in more detail about each of these projected expenses.

1. We request funding for Rebecca Lessem to visit State College, Pennsylvania 12 times to access the Census data at the Research Data Center. Each trip will last 3 days, and the estimated cost is $551 per trip. This leads to a total of $6,612 for the 12 trips. Here is the breakdown of costs for each of the 12 trips.
    a. Rebecca Lessem will be driving from Pittsburgh, Pennsylvania. The mileage reimbursement is $178.40.
    b. Each trip is 3 days, where 2 of the 3 days are travel days. We estimate meals and incidentals expenses of $69 for the non-travel day and 51.75 for each of the travel days. This sums to a total of $172.5 for meals and incidentals for each trip.
    c. We estimate costs of $100 per night for lodging, meaning a total of $200 for lodging per trip.
2. We request funding for Matthias Kehrig to travel to State College, Pennsylvania 2 times. Each of these trips is for 4 days. The goal of these trips is for all co-authors to access the data and discuss our findings together. The estimated cost of each trip is $942, for a total cost of $1,884 for the 2 visits.
    a. Matthias Kehrig will be flying from Durham, NC to State College, PA. The estimated airfare is $400 for each trip.
    b. For a 4-day trip, he will have meals and incidentals for 2 non-travel days and for 2 travel days. The estimated meals and incidentals are $51.75 for travel days and $69 for non-travel days. This is a total cost of $241.5 per trip.
    c. We estimate costs of $100 per night for lodging, for a total cost of $300 per trip.
3. The last component of the budget is for research assistance. For this project, we require many external data sources, and hope to hire a research assistant to help collect this information. This will potentially be an undergraduate or a PhD student. We request $6,504 to hire a research assistant.