MIT Economics

CHRISTINA PATTERSON

OFFICE CONTACT INFORMATION
MIT Department of Economics
77 Massachusetts Avenue, E52-301
Cambridge, MA 02139
cpatt@mit.edu
http://economics.mit.edu/grad/cpatt

HOME CONTACT INFORMATION
1310 U Street NW, Apt. 315
Washington, DC 20009
Mobile: 617-794-0521

MIT PLACEMENT OFFICER
Professor Benjamin Olken
bolken@mit.edu
617-253-6833

MIT PLACEMENT ADMINISTRATOR
Mr. Thomas Dattilo   dattilo@mit.edu
617-324-5857

DOCTORAL STUDIES	Massachusetts Institute of Technology (MIT) PhD, Economics, Expected completion June 2019 DISSERTATION: "Essays on Labor Market Dynamics"

DISSERTATION COMMITTEE AND REFERENCES

Professor Daron Acemoglu
MIT Department of Economics
77 Massachusetts Avenue, E52-446
Cambridge, MA 02139
617-253-1927
daron@mit.edu

Professor David Autor
MIT Department of Economics
77 Massachusetts Avenue, E52-438
Cambridge, MA 02139
617-258-7698
dautor@mit.edu

Professor Heidi Williams
MIT Department of Economics
77 Massachusetts Avenue, E52-440
Cambridge, MA 02139
617-324-4326
heidiw@mit.edu

Professor Jonathan Parker
MIT Sloan School of Management
100 Main Street
Cambridge, MA 02142
617-253-7218
japarker@mit.edu

PRIOR EDUCATION	Columbia University, Columbia College B.A. in Mathematics and Economics, *magna cum laude*	2011

CITIZENSHIP	USA	**GENDER**	Female

FIELDS	Primary Fields: Macroeconomics, Labor Economics Secondary Fields: Public Economics, Applied Econometrics

TEACHING EXPERIENCE	14.03/14.003 Microeconomic Theory and Public Policy	2016
	Teaching Assistant to Professor David Autor	
	Introduction to Econometrics, Columbia University	2011
	Teaching Assistant for Christopher Conlon and Seyahn Arkonac	
	Intermediate Macroeconomics, Columbia University	2010
	Teaching Assistant for Professor Xavier Sala-i-Martin	

RELEVANT POSITIONS	Research Assistant to David Autor	2013-2016
	Senior Research Analyst, Federal Reserve Bank of New York	2012-2013
	Research Associate, Federal Reserve Bank of New York	2011-2012
	Research Assistant, Institute for Fiscal Studies	2009

FELLOWSHIPS, HONORS, AND AWARDS	Washington Center for Equitable Growth Pre-Doctoral Fellowship	2018-2019
	Washington Center for Equitable Growth Doctoral Grant	2017
	NBER Pre-Doc. Fellowship on the Economics of an Aging Workforce	2016-2018
	MIT Fellowship	2013-2015
	Columbia University	
	Romine Prize for Best Undergraduate Thesis in Economics	2011
	Phi Beta Kappa	2011
	Economics Departmental Honors	2011

PROFESSIONAL ACTIVITIES	**Refereeing**: *Quarterly Journal of Economics; Journal of Political Economy; Journal of Money, Credit and Banking; American Economic Review: Insights; Empirical Economics*

PUBLICATIONS	"Job Search Behavior Over the Business Cycle" (Joint with Toshihiko Mukoyama and Ayşegül Şahin), *AEJ: Macroeconomics,* January 2018. Vol 10, No. 1. 190-215.
	"Concentrating on the Fall of the Labor Share" (joint with David Autor, David Dorn, Lawrence F. Katz and John Van Reenen). *American Economic Review, Papers and Proceedings. May 2017. Vol.107, No. 5. 180-185.*
	"Working Hard in the Wrong Place: A Mismatch Based Explanation to the U.K's Productivity Puzzle" (Joint with Ayşegül Şahin , Giorgio Topa and Giovanni Violante), *European Economic Review,* 2016, 84, 42-56

RESEARCH
PAPERS

"The Matching Multiplier and the Amplification of Recessions" (Job Market Paper)
Recessions are thought to be larger than the shocks that cause them, and the incidence of recessions is unequally distributed across workers. This paper shows empirically that the unequal incidence of recessions is a core channel through which shocks are amplified. I show that the aggregate marginal propensity to consume (MPC) is larger when income shocks disproportionately hit high-MPC individuals, and I define the *matching multiplier* as the component of the output multiplier that comes from that heterogeneous incidence. Using administrative earnings data from the United States, I document that the earnings of individuals with a higher marginal propensity to consume are more exposed to recessions. I show that this covariance is large enough to increase shock amplification by 40 percent over a benchmark in which all workers are equally exposed. Using local labor market variation, I validate this amplification mechanism – areas with higher matching multipliers experience larger employment fluctuations over the business cycle. Lastly, I derive a generalization of the matching multiplier in an incomplete markets model and show numerically that this mechanism is quantitatively similar within this richer framework.

"The Fall of the Labor Share and the Rise of Superstar Firms" (joint with David Autor, David Dorn, Lawrence F. Katz, and John Van Reenen) Revise and Resubmit, *Quarterly Journal of Economics*
The fall of labor's share of GDP in the United States and many other countries in recent decades is well documented but its causes remain uncertain. Existing empirical assessments of trends in labor's share typically have relied on industry or macro data, obscuring heterogeneity among firms. In this paper, we analyze micro panel data from the U.S. Economic Census since 1982 and international sources and document empirical patterns to assess a new interpretation of the fall in the labor share based on the rise of "superstar firms." If globalization or technological changes advantage the most productive firms in each industry, product market concentration will rise as industries become increasingly dominated by superstar firms with high profits and a low share of labor in firm value-added and sales. As the importance of superstar firms increases, the aggregate labor share will tend to fall. Our hypothesis offers several testable predictions: industry sales will increasingly concentrate in a small number of firms; industries where concentration rises most will have the largest declines in the labor share; the fall in the labor share will be driven largely by between-firm reallocation rather than (primarily) a fall in the unweighted mean labor share within firms; the between-firm reallocation component of the fall in the labor share will be greatest in the sectors with the largest increases in market concentration; and finally, such patterns will be observed not only in U.S. firms, but also internationally. We find support for all of these predictions.

"It's What You Know that Matters: Task-Based Networks and Industry-Specific Shocks"

While demand shocks typically occur at the industry level, workers are more closely tied to occupations and specific tasks, which are distributed across many industries. This paper explores how the distribution of tasks across industries affects labor market responses to shocks. I present a model in which task-level wages connect industries employing the same tasks, meaning that the distribution of tasks across industries insures some workers against shocks and alters their labor market experiences. Workers trained in more dispersed tasks (e.g. accountants) face less unemployment risk from industry-specific shocks than workers who do tasks that are concentrated in few industries (e.g. petroleum engineers). Using industry and regional data, I show empirical evidence that supports the model's predictions – industries that employ more specialized labor contract less in response to demand shocks than industries with less specialized labor.

"The Forward Guidance Puzzle" (joint with Marco Del Negro and Marc Giannoni) With short-term interest rates at the zero lower bound, forward guidance has become a key tool for central bankers, and yet we know little about its effectiveness. This paper first empirically documents the impact of forward guidance announcements on a broad cross section of financial markets data and professional forecasts. We find that Federal Open Market Committee (FOMC) announcements containing forward guidance had heterogeneous effects depending on the other content of the statement. We show that once we control for these other elements, forward guidance had, on average, positive and meaningful effects on output and inflation expectations. Using this benchmark, we then show that standard medium-scale DSGE models tend to grossly overestimate the impact of forward guidance on the macroeconomy, a phenomenon we call the "forward guidance puzzle." We explain why this is the case and show that incorporating a perpetual youth structure into the benchmark provides a possible resolution to the puzzle.

RESEARCH IN PROGRESS

"What's the Holdup? Productivity Bottlenecks and the Productivity Puzzle", (joint with Daron Acemoglu and David Autor)
Despite the rapid pace of innovation in information and communications technologies (ICT), measured aggregate U.S. productivity growth has been modest since the 1970s, particularly since the early 2000s. We explore whether the network structure of industry linkages can partly explain this productivity puzzle. If an industry's inputs are strongly complementary, large productivity gains in a subset of its intermediate input suppliers will not translate into commensurate productivity gains in the purchasing industry because lagging sectors will hold up progress. We propose to study the relevance of productivity bottlenecks in an extended input-output model that relates an industry's output to the distribution of its suppliers' productivity. Using data on input-output linkages within US manufacturing industries from 1977-2007, we find preliminary evidence in support

of the bottleneck hypothesis. Industries benefit from the productivity growth of their suppliers, but the distribution of this growth matters, not just its mean. Downstream benefits are heavily attenuated if the dispersion in productivity growth among supplying sectors is high.

"Shock Amplification Through Worker Heterogeneity and Regional Demand"
(joint with John Sturm and Joel Flynn)
We study how household heterogeneity and regional and industrial linkages affect shock propagation in a model with short-run labor rationing. In our model, households differ in their income sensitivity to shocks affecting different firms and regions, in the magnitudes of their MPCs, and in the firms and regions where they spend their marginal dollars. Theoretically, we express the general equilibrium effect of partial equilibrium shocks using a generalized Keynesian multiplier, written in terms of sufficient statistics. We draw attention to a novel propagation mechanism: due to nonlinearities in the multiplier and heterogeneous MPCs across regions, regional inwardness increases shock amplification. Empirically, we take our multiplier to the data and find that the correlation between MPC and income sensitivity, the regionality of spending, and the interaction between the two all amplify shocks. These three terms make roughly equal contributions, and together, they increase shock propagation by 50%. Finally, we consider optimal fiscal policy, decomposing the effects of government expenditure and giving simple formulae for optimal transfers.