

## **SETH MURRAY**

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### **PLACEMENT DIRECTORS**

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### **EDUCATION**

Ph.D. Economics, University of Maryland at College Park, expected May 2020  
B.A. Mathematics and Economics, Swarthmore College, 1998

### **FIELDS OF SPECIALIZATION**

Primary: Macroeconomics  
Secondary: Labor Economics

### **DISSERTATION**

*Essays on Wages and Employment*

Committee: Prof. John Haltiwanger (Chair), Prof. Boragan Aruoba, Prof. Judith Hellerstein, Dr. Henry Hyatt

### **JOB MARKET PAPER**

[“Downward Nominal Wage Rigidity and Job Destruction”](#)

This paper provides quasi-experimental evidence that downward nominal wage rigidity causes firms to destroy jobs and that this effect is empirically relevant for the macroeconomy. Given the unanticipated nature of the financial collapse in Q3 of 2008, differences across firms in their patterns of seasonal nominal wage adjustment generated heterogeneity in firms' exposure to downward nominal wage rigidity in Q4 of 2008. To identify these seasonal patterns, I develop a set of machine learning tools that I apply to longitudinal data on individual U.S. firms. I find that exposure to downward nominal wage rigidity generated by firms' seasonal wage adjustment patterns accounts for 23% of the spike in aggregate job destruction that occurred in Q4 of 2008. Since this empirical finding runs counter to the assumption in many macro models that downward wage rigidity does not cause job destruction, I develop a model wherein downward nominal wage rigidity causes inefficient job destruction, while ensuring, á la Barro (1977), that workers and firms realize mutually beneficial nominal wage cuts.

### **OTHER RESEARCH PAPERS**

[“Cyclical Labor Market Sorting,”](#) 2019, invited submission at the *Journal of Econometrics*, with Leland Crane and Henry Hyatt

“Aggregate Labor Market Fluidity,” 2019, with Henry Hyatt and Kristin Sandusky

“Retirements, Vacancy Chains, and the Decline in Employer-to-Employer Transitions,” 2019

“An Empirical Evaluation of Theories of Wage Adjustment”, work in progress

“A Microfoundation for Taylor-Style Annual Nominal Wage Adjustment Patterns”, work in progress

## **TEACHING EXPERIENCE**

Instructor, Econometrics II (undergraduate), University of Maryland, Summer 2019

## **RESEARCH AND RELEVANT WORK EXPERIENCE**

Research Assistant, Center for Economic Studies, The U.S. Census Bureau, Fall 2016 - present

Research Assistant, Prof. Will Dobbie, Princeton University, Summer 2015 - Summer 2016

Founder and President, various technology startups, Winter 2000 - Summer 2013

Economic Consultant, Ernst & Young, Boston, Summer 1998 - Winter 2000

## **GRANTS AND AWARDS**

Roger and Alicia Betancourt Fellowship in Applied Economics, Fall 2019

Retirement Dissertation Fellowship, Center for Retirement Research, Boston College, 2018

High Honors in Economics and Mathematics, Swarthmore College 1998

Adam’s Prize for Best Senior Thesis, Economics Department, Swarthmore College, 1998

## **CONFERENCE AND SEMINAR PRESENTATIONS**

2019: U.S. Bureau of Labor Statistics, U.S. Census Bureau

2018: Econometrics Society North American Summer Meeting, Western Economics Association Meeting, Bates College, U.S. Census Bureau, NBER Summer Institute (coauthor presented), American Economic Association meeting (coauthor presented)

2017: U.S. Census Bureau, NBER Summer Institute (coauthor presented)

## **PATENTS AND PATENT APPLICATIONS**

“Generating topic-specific language models,” 2018, US Patent 9,892,730

“Ranking search results,” 2012 and 2016, US Patents 8,176,043 and 9,348,915

“System and method for personalized search of television content using a reduced keypad,” 2006, US Patent Application 11/270,023

## **REFERENCES**

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Prof. Judith Hellerstein	University of Maryland	<a href="mailto:hellerst@econ.umd.edu">hellerst@econ.umd.edu</a>	(301) 405-3545