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Curriculum Vitae Fall 2020

AMY HANDLAN

Personal Data

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Citizenship: USA

Major Fields of Concentration

Monetary Economics, Public Finance, Financial Economics

Education

Degree	Field	Institution	Year
PhD	Economics	University of Minnesota (expected)	2021
MA	Economics	University of Minnesota	2018
BS	Economics summa cum laude	George Mason University	2015
	Mathematics Minor		

Dissertation

Title: "Text Shocks and Monetary Surprises"

Dissertation Advisor: Professor Christopher Phelan

Expected Completion: Summer 2021

References

Professor Christopher Phelan	(612) 626-2533 cphelan@umn.edu	Department of Economics University of Minnesota 4-101 Hanson Hall
Professor V. V. Chari	(612) 626-7151	1925 Fourth Street South
	chari002@umn.edu	Minneapolis, MN 55455
Professor Loukas Karabarbounis	(612) 625-3524	
	loukas@umn.edu	
Dr. Simran Sahi	(612) 625-6353	
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Honors and Awards

Summer 2020	AEA Summer Economics Fellow, Federal Reserve Bank of Illinois, Chicago, Illinois	
2019-2020	Doctoral Dissertation Fellowship, University of Minnesota, Minneapolis, Minnesota	
2018-2019	Distinguished Instructor, Department of Economics, University of Minnesota, Minnesota	
2018	Career Readiness Graduate Instructor Teaching Fellowship, University of Minnesota, Minneapolis,	
	Minnesota	
2017	Princeton Initiative: Macro, Money, and Finance, Princeton University, Princeton, New Jersey	
2016-2017	Herbert Mohring Fellowship, University of Minnesota, Minneapolis, Minnesota	
2016-2017	Distinguished Teaching Assistant, Department of Economics, University of Minnesota, Minneapolis,	
	Minnesota	
2015-2016	Bert and Susan Hill Gross Fellowship, University of Minnesota, Minneapolis, Minnesota	
2015	NSF Graduate Research Fellowship Program Honorable Mention	
2015	Howard R. Bloch Memorial Award for highest GPA in the economics program, George Mason	
	University, Fairfax, Virginia	
2015	OSCAR Student Excellence Award, George Mason University, Fairfax, Virginia	
2015	Economics Departmental Honors, George Mason University, Fairfax, Virginia	
2015	Phi Beta Kappa Honor Society, George Mason University, Fairfax, Virginia	
2015	Omicron Delta Epsilon Economics Honor Society, George Mason University, Fairfax	
2015	Honors College Mentorship Award, George Mason University, Fairfax, Virginia	
2014	Undergraduate Research Scholars Program Grant, George Mason University, Fairfax	

Teaching Experience

2017-2019	Large Lecture Instructor, Department of Economics, University of Minnesota, Minnesota, Minnesota.
	Instructor for large lecture of Intermediate Microeconomics Prepared all instructional material and
	supervised teaching assistants and graders.
2016-2017	Teaching Assistant, Department of Economics, University of Minnesota, Minnesota, Minnesota. Led
	recitations and graded for Intermediate Microeconomics.
2015	Learning Assistant, Math Department, George Mason University, Fairfax, Virginia. Led review sessions
	for Multivariable Calculus.
2014-2015	Substitute Teacher, Fairfax County Public Schools, Fairfax, Virginia

Research Experience

2018-2020 *Research Analyst/Visiting Scholar*, Research Department, Federal Reserve Bank of Minneapolis, Minneapolis, Minnesota

Working Papers

"Text Shocks and Monetary Surprises: Text Analysis of FOMC Statements with Machine Learning," job market paper "FedSpeak Matters: FOMC Statements and Monetary Policy Expectation"

Media Coverage

"A Good Handle on a Messy Process," Smera Tiwari, Heller Hurwicz Economics Institute, March 31, 2020. https://cla.umn.edu/heller-hurwicz/news-events/story/good-handle-messy-process

Presentations

- "Text Shocks and Monetary Surprises: Text Analysis of FOMC Statements with Machine Learning," presented at the Macro Seminar, Federal Reserve Bank of Chicago, August, 2020; Macroeconomics Workshop, Vanderbilt University, September, 2020; Economics Student Seminar Series, Universitat Autònoma de Barcelona, November, 2020 (scheduled); Virtual Seminar Series, Ryerson University, December, 2020 (scheduled).
- "FOMC Statements and Monetary Policy Expectations," presented at the Midwest Macroeconomics Meetings, Athens, Georgia, 2019.
- "Analyzing Federal Reserve Reputation and Incentives Through the Efficacy of 'Forward Guidance,'" presented at the Midwest Economic Association Meeting, Evanston, Illinois, 2018.
- "Political Regimes and Financial Crises: Does Macroeconomic Instability Differ Over Government Structures?," presented at the Eastern Economic Association Meeting, New York, New York, 2015.

Computer Skills

Python, Matlab, Stata, SAS

Languages

English (native)

Abstracts

"Text Shocks and Monetary Surprises: Text Analysis of FOMC Statements with Machine Learning," job market paper

This paper studies how information in Federal Reserve communication affects expectations and other economic variables, over and above the effects of setting the federal funds rate. To do this, I adapt neural network methods from the computer science literature to analyze the text in Federal Open Market Committee (FOMC) post-meeting statements. In particular, I examine the relationship between FOMC statements and high-frequency changes in fed funds futures (FFF) prices around the release of those statements. I find that actual FOMC statements account for four times more variation in FFF prices than only announcing changes to the target federal funds rate. More generally, the monetary policy shock literature tries to identify exogenous changes in monetary policy to study its effects on the economy. In this paper, I create a new monetary policy shock series for 2005-2014 by projecting FFF prices onto FOMC statements using the neural network. In particular, if the neural network predicts a particular FOMC statement should have a large effect on FFF prices, that statement is said to be a large policy shock. Furthermore, the text shock series is capturing the effects of forward guidance directly from variation in the wording of FOMC statements. I then estimate the effect of these "text shocks" on economic and financial variables. I show that real interest rates have a correlation with my text shocks that is two times larger than with pure FFF price changes. Using changes in FFF prices as a monetary shock, rather than my text shocks, produces responses in output and inflation that are qualitatively consistent with theory. That is, a contractionary monetary shock is associated with decreases in both output and inflation.

"FedSpeak Matters: FOMC Statements and Monetary Policy Expectation"

The Federal Open Market Committee (FOMC) claims that their post-meeting statements shift market expectations of future monetary policy. In this paper, I provide evidence supporting this claim. I apply a methodology from computational text analysis to produce a pairwise-statement similarity measure that compares wording between two FOMC statements. This similarity measure documents that FOMC statements have become more similar over time. With an event-study approach, I find that a decrease in the similarity of sequential FOMC statements is correlated with an increase the variation of federal funds rate expectations, calculated from high-frequency fed funds futures prices. This relationship persists even after controlling for changes in the target federal funds rate and Federal Reserve Chair. Standard monetary regressions omit any measure of policy statement texts and are thus biased. Adding the sequential statement similarity measure to a regression of federal funds rate expectations on the target rate accounts for 1.5 times the variation in market expectations. This paper suggests that more detailed text analysis on FOMC statements will improve modeling of monetary policy expectations.