EMILY MARTELL

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EDUCATION

University of California, Berkeley 2021 – Expected May 2027
PhD in Economics (PhD Candidate)
Dissertation Committee: Yuriy Gorodnichenko (chair), Chen Lian, David Romer, Jón Steinsson

College of William & Mary 2015 – 2019
Bachelor of Arts in Economics (3.98 GPA), Summa Cum Laude with Honors

DISSERTATION

Moral Suasion: Constructing an Index Over Time

- Quantifying the use of moral suasion, or informal pressure, by the Federal Reserve on financial institutions
- Employing 5 RAs and generative AI models in Python to identify moral suasion in 60,000 documents
- Found moral suasion is employed to address present risks during crises and in the Fed's supervisory role

Borrowing Constraints, Markup Dispersion, and Misallocation (with Huiyu Li, Chen Lian, and Yueran Ma)

- Augmented Kimball demand models with new facts linking firms' markups to borrowing constraints
- Showed quantitatively that borrowing constraints reduce the welfare consequences of markup dispersion

Macroeconomics and the American Environmental Movement

- Performed web scraping in Python to identify New York Times articles 1940-1990 about the environment
- Demonstrated newspaper mentions of the environment are procyclical with regression analysis

PROFESSIONAL EXPERIENCE

Graduate Student Researcher (GSR) for Chen Lian, UC Berkeley June 2023 – August 2023

- Parallelized, sped up, and calibrated a Kimball demand model with asset- and earnings-based borrowing

GSR for Emi Nakamura, UC Berkeley November 2022 – July 2023

- Collected and analyzed measures of US supply chain disruption and industry-level macroeconomic data

GSR for Yuriy Gorodnichenko, UC Berkeley May 2022 – August 2022

- Coded functional forms for financial stress in a heterogeneous-agent continuous-time model

Senior Research Analyst, Federal Reserve Bank of New York July 2019 – July 2021
RA to President John Williams, Macroeconomic and Monetary Studies Function

- Calculated risk-neutral densities for interest rates and exchange rates from options data for an AER revision
- Ran and prepared r* estimates for public posting, adapted r* forecasting models in R to account for COVID
- Implemented non-parametric models linking Treasury yields to macro shocks and tested for overfitting
- Analyzed NY Fed Survey of Consumer Expectations data in an adaptive learning model in STATA

Summer Analyst, Federal Reserve Bank of New York June 2018 – August 2018
DSGE team under Marco Del Negro, Macroeconomic and Monetary Studies Function

- Generalized codes in Julia for solving heterogeneous-agent continuous-time models
- Used GitHub to track changes, emacs to edit code, and Linux terminal exclusively for project workflow

Research Assistant, William & Mary June 2016 – August 2017

- Edited Donald Campbell's textbook Incentives: Motivation and the Economics of Information

TEACHING EXPERIENCE

- Graduate Student Instructor (GSI) for Principles of Economics (Econ 2), UC Berkeley Fall 2024
- GSI for Principles of Economics (Econ 2), UC Berkeley Spring 2024

- GSI for Math-intensive Macroeconomics (Econ 101b), UC Berkeley Fall 2023
- Teaching Assistant for Economics of Information (Econ 420), College of William & Mary Spring 2017

OTHER RESEARCH EXPERIENCE

Opportunity Lab/Energy Institute Graduate Student Research Award ($7,500) August 2023 – May 2024
- Guided and mentored 2 RAs to study the relationship between firm financial constraints and pollution
- Analyzed EPA plant-level pollution data and Compustat firm-level financial data in STATA

Undergraduate Thesis (Advised by Nathaniel Throckmorton) August 2018 – May 2019
Comparison of Global Solution Methods to a Zero Lower Bound (ZLB) Model
- Compared performance of solution methods for nonlinear New Keynesian models with ZLB constraints
- Examined the impact on speed and accuracy of conditioning the policy functions on whether the ZLB binds
- Found regime-indexed policy functions are quite nonlinear and time-intensive to approximate

Economics Department Student-Faculty Research Grant ($2,600) June 2017 – September 2017
Analytical and Numerical Methods for Regime-switching Monetary Policy Models
- Solved log-linearized fixed monetary regime models and nonlinear regime-switching models in MATLAB
- Used analytical and numerical methods to study the propagation of structural macroeconomic shocks

Monroe Scholars Summer Research Funding ($1000) May 2016 – August 2016
The Great Moderation: Past, Present, and Future
- Wrote a report studying the Great Moderation in US financial markets and its future implications
- Ran time-series econometric tests for breaks in aggregate volatility around the 2007-8 financial crisis

AWARDS

- National Science Foundation Graduate Research Fellowship 2021
- Lord Botetourt Metal, College of William & Mary (one graduating senior) 2019
- Robert A. Barry Award, College of William & Mary, Economics Department 2019
- Terry Glenn Scholarship, College of William & Mary, Economics Department 2018
- Goble Scholarship, College of William & Mary, Economics Department 2017
- Monroe Scholars Program, College of William & Mary 2015 – 2019

WORKSHOPS

- AEA CSWEP Mentoring Workshop 2024
- Edgeworth Economics: Consulting PhD Summer Symposium 2024
- NBER Behavioral Macroeconomics Research Boot Camp 2024
- Princeton Initiative: Macro, Money & Finance 2023
- Berkeley Environmental/Energy Economics Summer School 2023
- Stanford Big-Data Initiative in International Macro-Finance 2023
- NBER Heterogeneous-Agent Macro Workshop 2023

SKILLS

MATLAB, R, Python, Stata, Julia, Windows, Linux, Git, Emacs, MS Office, LaTeX, ChatGPT, OpenAI API

EXTRACURRICULAR ACTIVITIES

UC Berkeley Economists for Equity 2021 –
- Identified underrepresented job market candidates and seminar speakers for faculty consideration
- Provided research guidance for local high school students and mentored undergraduate students

UC Berkeley Student Parent Food Donations Program 2022 –
- Volunteered over 70 hours for food donation distribution and cleanup for student parents and their families