

# Michael Cai

## OFFICE ADDRESS

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## CONTACT INFORMATION

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## EDUCATION

2019–            Ph.D in Economics, Northwestern University  
                    Advisors: Matthias Doepke (chair), Marios Angeletos, and Matthew Rognlie  
2013 – 2017    B.S. *summa cum laude*, Economics, New York University Stern School of Business

## RESEARCH AREAS

Macroeconomics, Behavioral Economics, Time Series Econometrics

## JOB MARKET PAPER

### Macro Inertia and the Variable Lags of Policy Transmission

This paper quantifies the sources of macroeconomic inertia that policymakers can and cannot influence and analyzes how changes in systematic policy conduct can reduce inertial transmission (“lags”). To isolate policy-invariant inertia due to preferences and technologies, I introduce an approach to identifying parameters in dynamic structural models, which directly uses survey data on expectations in place of traditional assumptions on expectations. Applied to standard consumption-savings models, I find only two simple features are needed to match the dynamic response of consumption to shocks: 1) a high current MPC and 2) a low EIS. There is no need for classic sources of preference inertia, such as habits. In an estimated HANK model with learning disciplined by these estimates and expectations data, inertia emerges endogenously when a measure of belief feedback strength is high but is absent otherwise. This measure is large precisely when the current MPC is high and EIS is low. Stabilizing monetary and fiscal policy can reduce feedback, shortening transmission lags. Monetary-fiscal interactions produce a novel government debt stabilization motive to reduce lags: shortening the timeline for debt repayment diminishes belief feedback from past, stale expectations into future realized demand.

## WORK IN PROGRESS

**Optimal Long-Run Fiscal Policy with Heterogeneous Agents** with Adrien Auclert, Matthew Rognlie, and Ludwig Straub.

We introduce a new approach to characterizing the steady state of dynamic Ramsey taxation problems, and apply this approach to standard calibrations of heterogeneous-agent models a la Aiyagari (1995). In many cases, we find that such Ramsey steady states do not exist, with our results instead pointing to the optimality of long-run immiseration. When Ramsey steady states do exist, they are associated with optimal long-run labor income taxes close to 100%. We show that these conclusions are related to unreasonably strong anticipatory effects of future tax changes.

## PUBLICATIONS

**Online Estimation of DSGE Models** with Marco Del Negro, Edward Herbst, Ethan Matlin, Reza Sarfati, and Frank Schorfheide

*The Econometrics Journal*: Volume 24, Issue 1, Jan 2021, Pg. C33-C58

**DSGE Forecasts of the Lost Recovery** with Marco Del Negro, Marc Giannoni, Erica Moszkowski, Pearl Li, and Abhi Gupta

*International Journal of Forecasting*: Volume 35, Issue 4, Oct-Dec 2019, Pg. 1770-1789

## PRESENTATIONS

2018    JuliaCon 2018 (University College London) link

## **PREVIOUS EMPLOYMENT AND PROFESSIONAL ACTIVITIES**

- 2024 – 2024 Visiting Scholar, Federal Reserve Bank of Chicago
- 2021 – 2021 Research Officer, International Monetary Fund  
Supervised by Filiz Unsal and Vu Chau
- 2017 – 2019 Senior Research Analyst, Federal Reserve Bank of New York  
Supervised by Marco Del Negro
- 2016 – 2017 Research Assistant, New York University Economics Department  
Supervised by Tim Christensen
- 2016 – 2016 Independent Research, New York University Stern School of Business  
Supervised by Dave Backus

## **HONORS AND AWARDS**

- 2023— NBER Dissertation Fellowship in Behavioral Macroeconomics