Tao Wang

CONTACT
INFORMA-
TION

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RESEARCH
INTEREST

- **Behavioral macroeconomics**: expectation formation

- **Heterogeneous-agent macroeconomics:** household behaviors and macroeconomic dynamics

EDUCATION **Johns Hopkins University**, Baltimore, MD 2017– 2022 (expected)

- M.A. and Ph.D. candidate in Economics

- Advisor: Prof. Christopher Carroll

- Coursework: Time Series Econometrics, Asset Pricing, Decision Making under Uncertainty, Computational Macroeconomics, Information in Economics and Finance, International Finance, Advanced Macroeconomics I & II

Cornell University, Ithaca, NY 2013–2015

- M.P.A. in Cornell Institute for Public Affairs

- Thesis: *Chinese Macroeconomic Policies, Restrictive Central Bank Independence, and Market Expectations*, advisor: Prof. Assaf Razin

Renmin University of China, Beijing, China 2009–2013

- B.A. in Economics

- Thesis: *Economic Behaviors of Local Governments*

WORK IN
PROGRESS

1. *"Rigidity of Expectations, Additional Evidence from Density Forecasts of the Inflation by Professionals and Households"*, working paper draft, 2019.

   Abstract: Density forecasts of macroeconomic variables provide one additional moment restriction, uncertainty, for testing and exploring the implications of theories about how people form expectations differently from full-information rationality benchmark. This paper first documents the persistent dispersion in inflation uncertainty of professionals and households, and how it conveys different information from the widely used proxies to uncertainty such as cross-sectional disagreement and forecast errors. Second, utilizing the panel data structure of both surveys, I provide additional reduced-form test results as well as structural estimates for each particular theory of "irrational expectation" by jointly accounting for its predictions for different moments. This is a natural extension of Coibion and Gorodnichenko (2012), which examines different moments separately. Also, motivated by the time-varying pattern of the uncertainty observed from surveys, I extend their work to allow for an alternative inflation process featuring stochastic volatility. These extensions allow me to match the joint dynamics of inflation and forecast moments in a better degree of fitness. It also illustrates how incorporating higher moments from survey data helps understand both the expectation formation mechanisms and inflation dynamics.

2. *"Perceived Income Risks"*, work in progress.

Abstract: What econometricians have assumed to be the labor income risks facing agents based on estimates from cross-sectional inequality may not necessarily be consistent with what is truely perceived. This work in progress studies individual-specific perceived income risks utilizing a density survey of labor income. Empirically, I have found the earners who are female, from low-income households and low education has higher perceived risks. And both perceived variance and tail risk measure skewness are negatively correlated with stock market returns. The ongoing work includes characterizing how the subjective differences are both driven by the true income risk profile and perceptual heterogeneity from alternative mechanisms of expectation formation deviating from full-informational rationality. I will also incorporate empirical findings in an otherwise standard life-cycle model of consumption and portfolio choice to explore their implications on consumption insurance and asset pricing.

RESEARCH ASSISTANT EXPERIENCE

- **Heterogeneous-agent macroeconomic modeling** 2019
  Econ-ARK Project led by Prof. Christopher Carroll
    - Wrote Python code that evaluates, illustrates and visualizes the dimension-reduction by Bayer and Luetticke (2018).
    - Contributed to the Jupyter notebook replicating Krusell-Smith (1998) algorithm via HARK toolkit.

- **Tutorials on quantitative economic modeling** 2017
  Quantitative Economics, Prof. Thomas Sargent (New York University)

- **Capital account liberalization and exchange rate dynamics** 2015
  Prof. Eswar Prasad (Cornell University)

EMPLOYMENT EXPERIENCES

- **International Monetary Fund** 2016-2017
  Research Assistant in the Research Department

- **The Brookings Institution** 2015-2016
  Research Analyst in Global Economy and Development Program

TECHNICAL SKILLS

- *Programming Languages*: Python, Matlab, Stata

POLICY PUBLICATION

1. **A Sy and T Wang** . *"De-risking, Renminbi Internationalization and Regional Integration: Evidence from Payment Flows of Sub-Saharan Africa"*. Brookings Working Paper, 2016.

REFERENCES

- Prof. **Christopher Carroll** (JHU), ccarroll@jhu.edu

- Prof. **Jonathan Wright** (JHU), wrightj@jhu.edu