Rajarshi Datta

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CONTACT
INFORMATION

University of Washington
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EDUCATION

University of Washington — Seattle, WA
Ph.D. in Economics — 2018 –
  • Dissertation Topic: Heterogeneous Asset Returns & Monetary Policy
M.A. in Economics, GPA: 3.84 — 2018 – 2020

Indian Statistical Institute — Kolkata, India
M.Sc. in Quantitative Economics — 2015 – 2017

St. Xavier's College, Kolkata — Kolkata, India
B.Sc. in Economics, Minor : Statistics & Mathematics — 2012 – 2015

INTERESTS

Wealth Inequality, Housing & Heterogenous Agent DSGEs, Applied Econometrics

RESEARCH

Working Papers

Heterogeneous Asset Returns and Monetary Policy Redistribution *R. Datta, August 2022*

Full employment and asymmetric response of monetary policy with Claudia Sahm *(ongoing)*

Wealth Inequality & Business cycles: The Role of Housing *R. Datta, August 2021*

Choice of refinance & Hand to mouth status: Evidence from US data *R. Datta, February 2020*

SKILLS

Programming: Matlab, Python, SQL, Stata, Fortran, R, Julia, SAS, C, Java, LaTeX.
Macro: Continuous time dynamic programming, Jump diffusion processes, Viscosity solutions
Time Series Forecasting, Local Projections, GARCH, Cointegration & VECM
Econometrics, Markov Switching, Machine Learning, Scikit-learn

HONORS

Henry T. Buechel Memorial Fellowship, — Spring 2022
University of Washington
Grover and Creta Ensley Fellowship in Economic Policy, — Autumn 2021
University of Washington
James K. & Viola M. Hall Fellowship, — Spring 2019
University of Washington

TEACHING EXPERIENCE

Graduate Teaching Assistant
  • ECON 509 (Graduate Macroeconomics) — Spr21,22

Instructor
  • ECON 201 (Introduction to Macroeconomics) — Sum20,Win22
  • ECON 200 (Introduction to Microeconomics) — Aut2020

Teach Assistant
- ECON 300 (Intermediate Macroeconomics)   Win2021
- ECON 201 (Introduction to Macroeconomics)   Aut2018-Spr2020

WORK
EXPERIENCE

Macroeconomic Research Fellowship at the Jain Family Institute (JFI) from June 2022 onwards for assisting in constructing a Heterogeneous Agent New Keynesian model and using it to evaluate monetary policy options.

Worked as an Associate Solution Advisor at Deloitte US India from May 2017 till June 2018. Worked in Anti Money Laundering and Model Validation for Comprehensive Capital Analysis Review (CCAR) projects.

Two and a half month Summer Internship at D.E. Shaw & Co. in FinRes/FundamentalReasearch Department during the period May-July 2016. Worked in evaluation and forecasting of financial data from multiple sources.

SEMINARS &
PRESENTATIONS

Paper Presentation at Confluence, the Annual National Economic Summit of St. Xavier's College, Kolkata-"Capital Inflow into Emerging Markets", 2014, 2nd Position.

Publications in Echo Echoes-the annual magazine of the Economics Department, St. Xavier's College, Kolkata - "War Economics" and "Sinocentrism of Brics", 2013.

GRADUATE
COURSEWORK

- ❏ Incomplete Market Models
- ❏ International Finance
- ❏ Macroeconomics of Safe Assets
- ❏ Econometric Theory
- ❏ Empirical Asset Pricing
- ❏ Contract Theory
- ❏ International Trade Theory
- ❏ Optimization Techniques
- ❏ Non-cooperative & Cooperative Game Theory
- ❏ Mechanism Design
- ❏ Industrial organization
- ❏ Auction Theory

REFERENCES

Professor Yu-chin Chen (committee chair)
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Professor Brian Greaney (committee chair)
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Professor Fabio Ghironi (committee)
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Professor Stephen Turnovsky (committee)
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RESEARCH
ABSTRACTS

Heterogeneous Asset Returns and Monetary Policy Redistribution   *(Job Market Paper)*
(R. Datta)

The paper shows that the elasticity of aggregate consumption from a one percent decline in the real interest rate is significantly underestimated in the absence of returns heterogeneity through the redistribution channel in the short run. My mechanism operates via the differential impact of a monetary policy shock for equity & housing with its consequent implications for heterogeneous *MPCs* across the wealth distribution. Greater the gap between returns across assets, larger

is the aggregate consumption response. I develop a flexible model free sufficient statistics approach that can handle the conditional impact of monetary policy. Relative to Auclert (2019), aggregate consumption in general equilibrium is 15% higher with a 43% share of redistribution. It is 74% higher in comparison to a RANK model with separate returns to housing and equity. Second, direct effects rise by nearly 63% and strengthens on shortening asset maturities. Third, consumption declines 12% less under contractionary policy. The model predicts consumption to increase by 30% (53%) if all mortgages were ARMs with baseline (quarterly) maturity in 2019. In 2007, a lower wealth inequality would predict an even larger response. Household portfolio heterogeneity affects overall monetary transmission more than previously estimated, even for the short run.

Choice of Refinancing & Hand-to-mouth Status
(*R. Datta*)

What does the choice of refinancing reveal about the Hand-to-mouth (HtM) status of households? Preliminary empirical analysis from the SCF corroborates the interlinkage between household debt & HtM status. Further evidence from refinance approvals indicate strong demand for home equity extraction in periods of high unemployment often aided by higher house prices. Following Kaplan, Violante and Weidner (2014), I motivate their measurement by setting up a 3 period partial equilibrium model with heterogeneous preferences to investigate the importance of considering mortgages distinctly from other illiquid assets in the determination of HtM status. Better estimates of the same is imperative for understanding the transmission and redistributive effects of monetary policy & fiscal transfers. Simple qualitative experiments in a calibrated model strongly match the current trends in house prices, unemployment and mortgage refinancing.

Wealth Inequality & Business cycles: The Role of Housing
(*R. Datta*)

What is the role of wealth inequality in causing and amplifying business cycles & vice-versa? In particular, can we quantify the correlation between housing and estimated business cycle shocks & frictions along the lines of Bayer et. (2020) with its subsequent impact on business-cycles & the time-varying wealth distribution ? I propose to estimate a heterogeneous-agent New-Keynesian (HANK) model in continuous time featuring two illiquid assets and gross positions for housing. The model emphasizes the differential impacts of asset price changes suitably calibrated to match key features of the observed US wealth distribution. The constructed counterfactuals are intended to have strong implications for the redistributive role of monetary & fiscal policy in impacting the wealth-shares of both the top 10% & middle 50-90% in the post-pandemic era.

OTHER INFORMATION	Language: English (Fluent), Bengali, Hindi
	Citizenship: India

OTHER ACHIEVEMENTS — Member of the Editorial Board of Echo Echoes, the Annual Journal of the Economics Department, St. Xavier's College, Kolkata, 2013.

Was awarded a "Scholarship for Higher Education" (SHE) under the Innovation in Science Pursuit for Inspired Research (INSPIRE) programme of the Department of Science and Technology, Government of India, New Delhi, by virtue of performance within top 1% of the School Board Examination at Class XII (2012) tenable up to Ph. D. in Basic or Natural Science courses like Mathematics, Statistics, Physics, Chemistry, Botany or Zoology.