WALKER RAY

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RESEARCH AND TEACHING FIELDS:

Primary	*Secondary*
Macroeconomics, Finance	Public Economics, International Economics

DISSERTATION: "Essays in Macroeconomics and Financial Frictions"

Expected Date of Completion:	May 2019
Principal Advisor:	Professor Yuriy Gorodnichenko
Other References:	Professors Pierre-Olivier Gourinchas and David Romer

UNDERGRADUATE STUDIES:

2011	B.S., Applied Mathematics – Economics, Honors, Brown University

RESEARCH EXPERIENCE:

U.C. Berkeley, Graduate Research Assistant

2016-2017	Prof. Andres Rodriguez-Clare
2017	Prof. Ben Faber
2015-2016	Prof. Christina Romer, Prof. David Romer
2015	Prof. Amir Kermani
2014-2015	Prof. Yuriy Gorodnichenko

Federal Reserve Board, Senior Research Assistant

2011-2013	Trade and Financial Studies, Division of International Finance

White House, Research Intern

2010	Office of Management and Budget
2009	National Economic Council

TEACHING EXPERIENCE:

2014-2018	Mathematical Tools for Economists (Ph.D.)
2017	Empirical Methods in Finance (Masters)

FELLOWSHIPS AND AWARDS:

2018	Doctoral Completion Fellowship, U.C. Berkeley
2017	Research Grant, Clausen Center for International Business and Policy
2016	Outstanding Graduate Student Instructor Award, U.C. Berkeley
2014	Berkeley Economic History Lab Mentored Fellowship
2013	Berkeley Institute for New Economic Thinking Fellowship
2013	Honorable Mention, Graduate Research Fellowship, National Science Foundation

JOB MARKET PAPER:

"Monetary Policy and the Limits to Arbitrage: Insights from a New Keynesian Preferred Habitat Model"

With conventional monetary policy unable to stabilize the economy in the wake of the global financial crisis, central banks turned to unconventional tools. This paper embeds a model of the term structure of interest rates featuring market segmentation and limits to arbitrage within a New Keynesian model to study these policies. Because the transmission of monetary policy depends on private agents with limited risk-bearing capacity, financial market disruptions reduce the efficacy of both conventional policy as well as forward guidance. Conversely, financial crises are precisely when large scale asset purchases are most effective. Policymakers can take advantage of the inability of financial markets to fully absorb these purchases, which can push down long-term interest rates and help stabilize output and inflation.

WORKING PAPERS:

"Unbundling Quantitative Easing: Taking a Cue from Treasury Auctions" (with Yuriy Gorodnichenko)

To understand the effects of large-scale asset purchase programs recently implemented by central banks, we study how markets absorb large demand shocks for risk-free debt. Using high-frequency identification, we exploit the structure of the primary market for U.S. Treasuries to isolate demand shocks. These shocks are sizable, leading to large movements in Treasury yields and impacting corporate borrowing rates. Informed by a preferred habitat model of the term structure, we test for "local" demand effects and find evidence consistent with theoretical predictions. Crucially, this local effect is strongest when financial markets are disrupted. Our estimates are consistent with the view that quantitative easing worked mainly via market segmentation, with a potentially limited role for other channels.

WORK IN PROGRESS:

"Cyclicality of Markups: Evidence from Heteroskedasticity-Identified Estimation"

How markups vary over the business cycle is a crucial question in macroeconomics. Building on heteroskedasticity-based identification strategies, this paper develops a flexible nested CES estimator that overcomes existing finite sample issues, which frequently result in upwardly biased estimates of demand elasticities. Applying this approach to large U.S. retail datasets, I explore the heterogeneity in demand elasticities and markups over time. The evidence suggests that desired markups exhibit counter-cyclical behavior.

"Polarized Expectations" (with Rupal Kamdar)

This paper explores the role of political polarization in shaping the economic expectations of households. Using survey data, we find that the rise in political polarization has led to polarized beliefs about macroeconomic fundamentals. We then develop a rational inattention model in which heterogeneous households choose from where to get their information. We show that an increasing number of information sources leads to growing ex-post disagreement about economic fundamentals, even when these sources are unbiased. Further, under general conditions there is a "paradox of information" where falling information costs exacerbates disagreement.

"Indian Demonetization and Real Effects" (with Rupal Kamdar and Mauricio Ulate)

On November 8, 2016, India demonetized all outstanding 500 and 1,000 rupee notes, removing 86% of cash in circulation. New 500 and 2,000 rupee notes were eventually issued, but the process of printing and distribution took longer than anticipated. The motive for demonetization was to crack down on counterfeiting and money laundering and, as such, was unrelated to the state of the Indian macro-economy. Therefore, Indian demonetization can serve as a unique natural experiment to study the real effects of monetary shocks, price rigidities, and relative substitution patterns following a liquidity crunch. This project uses disaggregated data on prices and quantities of different consumption categories across regions in India to study these topics. Our results suggest that the prices of agricultural goods responded strongly and somewhat persistently to demonetization; however, the household consumption response was more muted.

"Monetary Policy Shocks: What's in the News?" (with Ricardo Nunes)

"Currency Unions and Thick Financial Markets"

REFEREEING SERVICE:

Review of Economics and Statistics