ERIC HARDY
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EDUCATION

Ph.D., Economics, Boston University, Boston MA, May 2023
Dissertation Title: *Essays in Monetary Economics*
Dissertation Committee: Robert G. King, Paul S. Willen, and Stephen J. Terry

B.A., Economics with High Honors; Minor in Mathematics, Oberlin College, Oberlin, OH, 2011

FIELDS OF INTEREST

Macroeconomics, Monetary Economics

PUBLICATIONS

Hardy, Eric, Raymond, Fisman and Sergey, Mityakov (2021) "Transparency, Contracting Frictions, and Trade: Evidence across Firms" *The Journal of Law, Economics, and Organization*, (2021)

WORKING PAPERS

"Wealth Transfers as Externalities of Optimal Fiscal and Monetary Policy", September 2023. Job Market Paper.
"Estimating Inflation Using Inflation Expectations", April 2023.
"Financial Institutions in General Equilibrium", April 2023.

WORK IN PROGRESS

"Expected Cash Flows from Commercial Real Estate" (with Paul Willen)
"Offered Mortgage Rates by Borrower Characteristics and the Decision to Refinance" (with Paul Willen)

PRESENTATIONS

Midwest Finance Association (presentation by Sergey Mityakov), Chicago, IL, 2019
BU-BC Green Line Macro Meeting, Boston, MA, 2018, 2020
BU Macro Dissertation Workshop, Boston, MA, 2017, 2018, 2021
BU Macro Student Workshop, Boston, MA, 2017, 2018, 2019, 2021

FELLOWSHIPS AND AWARDS

Dean's Fellowship, Boston University, Fall 2015-Fall 2019
Outstanding Paper Award, Midwest Finance Association, Spring 2019
Undergraduate Paper Award, Midwest Economics Association, Spring 2011
John Frederick Oberlin Scholar, Oberlin College, Spring 2007
National Scholar Athletic Award, United States Army Reserve, Spring 2007

WORK EXPERIENCE

Senior Research Assistant for Paul Willen, Federal Reserve Bank of Boston, 2020-present
Research Assistant for Robert G. King, Boston University, Fall 2019
Research Assistant for Raymond Fisman, Boston University, 2016-2017
Research Associate, Columbia Business School, 2013-2015
Senior Research Assistant, Federal Reserve Board of Governors, 2011-2013

TEACHING EXPERIENCE

Teaching Fellow, EC 541: Topics in Monetary Theory and Macroeconomics, Boston University, Spring 2019
Teaching Fellow, EC 392: International Finance, Boston University, Fall 2018
Teaching Fellow, EC 323: Behavioral Economics, Boston University, Fall 2018
Teaching Fellow, EC 203: Empirical Economics I, Boston University, Fall 2018
Teaching Fellow, EC 379: Markets and Development Economics, Boston University, Fall 2016

LANGUAGES: English (native), Spanish (elementary), Chinese (elementary)

COMPUTER SKILLS: R, STATA, Python, Matlab, Linux, LaTeX

CITIZENSHIP: United States of America

REFERENCES

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ERIC HARDY

Wealth Transfers as Externalities of Optimal Fiscal and Monetary Policy (Job Market Paper)

I develop a neoclassical model to study how a welfare-maximizing government should conduct fiscal and monetary policy to finance exogenous government purchases and transfer payments. The government raises revenue through distortionary taxes, and finances its expenditures by issuing nominal one-period bonds and consols. I study a sequence of example economies to show that under flexible prices the government can support the complete markets real allocations of Lucas and Stokey (1983) with moderate inflation volatility and positive bond issuance. Policy that combines state-contingent expected inflation targets with consol issuance is most effective at reducing inflation associated with adverse government purchase shocks and adverse productivity shocks. Stylized facts using data from the example economies are comparable to their analogues in post-war U.S. data.

Estimating Inflation Using Inflation Expectations

Inflation is difficult to measure directly. Even a chain-weighted ideal price index may not accurately measure inflation because new goods enter, old goods leave, and the quality of goods may change over time. First, I show that a time series for inflation can be recovered from a time series of inflation expectations by imposing an assumption that the true model for inflation is AR(p), and I extract the time series for inflation implied by the Michigan Survey of Consumers question on Inflation Expectations. Using the Michigan Survey Expectations, real consumption per capita grew 60% from 1978 to 2007, and subsequently declined so that real consumption per capita in 2019 was only 50% higher than it was in 1978. Second, I show that a measurement of expected inflation can be recovered from the Euler Equation written in terms of nominal asset returns and nominal aggregate consumption growth. For given parameter values, this produces an estimate of expectations for "behaviorally relevant inflation": the level of expected inflation consistent with the Euler Equation. Euler Equation Inflation Expectations produce estimates of real consumption that follow the same broad pattern as the Michigan Survey Expectations after 1978, and imply a surprising decrease in real consumption from 1959 to 1978.

Financial Institutions in General Equilibrium

I propose a model in which households and firms may only contract with each other through the financial sector. Firms use two factors of production: bank loans and labor. The use of bank loans as an additional input to production creates a time-varying labor wedge, which is a function of loan and deposit interest rates. The labor wedge is the channel through which financial shocks can influence real variables, even under flexible prices. However, data on interest rates over monthly period lengths reveal the labor wedge to be small, so that the equilibrium in the presence of a financial sector is nearly identical to that in an economy without an explicitly modeled financial sector. Banks are subject to idiosyncratic deposit withdrawal shocks at the end of each period, and hold excess reserves to avoid overdraft penalties imposed by the central bank. Empirically, aggregate bank holdings of excess reserves per unit of deposits are trendless from 1959 to 2007, consistent with a "money multiplier" view of banks' creation of inside money. When the Federal Funds rate is equal to the rate on excess reserves, the model implies that banks will hold one dollar of reserves in excess of their required reserves for each dollar of deposits. Consistent with the model prediction, the empirical analogue to the aggregate "money multiplier" approached one beginning in 2008.