

## STEFANO PICA

Boston University Department of Economics  
270 Bay State Road  
Boston MA 02215  
Cell: (781) 484-7246 (US), +39-333-5396499 (ITA)  
Email: [stpica@bu.edu](mailto:stpica@bu.edu)  
Web site: <https://stefanopica.com>

---

### EDUCATION

Ph.D., Economics, Boston University, Boston MA, May 2022 (expected)  
Dissertation Title: *Essays On Monetary Policy in Europe*  
Dissertation Committee: Adam Guren, Stephen Terry, and Robert King

M.A., Political Economy, Boston University, Boston MA, 2018

M.Sc., Economics and Finance, CEMFI, Madrid, Spain, 2016

M.Sc., Economics and Finance, University of Naples Federico II, Naples, Italy, 2014

Erasmus Exchange, Goethe University, Frankfurt am Main, Germany, 2013

B.A., Economics, University of Naples Federico II, Naples, Italy, 2012

### FIELDS OF INTEREST

Macroeconomics, Monetary Economics, Household Finance

### WORKING PAPERS

“[Housing Markets and the Heterogeneous Effects of Monetary Policy Across the Euro Area](#),”  
November 2021. Job Market paper.

### WORK IN PROGRESS

“Household Beliefs Across Euro Area Countries During Covid-19” (joint with Clodomiro Ferreira)  
“Future Policy and Information Dissemination: A Natural Language Processing Approach”  
(joint with Alden Porter)  
“A New Keynesian Model with a Rigid Housing Market”

### PRESENTATIONS

European Central Bank – Housing Market Team, Frankfurt, Germany, 2021  
BU-BC Green Line Macro Meeting, Boston, MA, 2021  
European Central Bank – Research Department, Frankfurt, Germany, 2021  
BU Macro Dissertation Workshop, Boston, MA, 2018, 2019, 2020, 2021  
BU Macro Student Workshop, Boston, MA, 2018, 2019, 2020, 2021

### VISITING POSITIONS

European Central Bank, Frankfurt am Main, Germany, 2021  
Bank of Spain, Madrid, Spain, 2018  
Capital Markets Cooperative Research Center, Sydney, Australia, 2014

## **FELLOWSHIPS AND AWARDS**

Doctoral Research Assistantship, Boston University, 2017-2021  
ECB Summer Research Graduate Program, European Central Bank, 2021  
Teaching Fellowship, Boston University, 2017-2019  
Dean's Fellowship, Boston University, 2016-2017  
Master Program Full Scholarship, CEMFI, 2014-2016  
Messaggeri della Conoscenza Program Scholarship, Italian Ministry of Education, 2014  
Erasmus Program Scholarship, University of Naples Federico II, 2013-2014

## **WORK EXPERIENCE**

Research Assistant to Stephen Terry, Boston University, Boston, Fall 2021  
Research Assistant to Adam Guren, Boston University, Boston, 2018-2021  
Research Assistant to Jaime Luque, ESCP Business School, Madrid, Fall 2020  
Research Assistant to Raul Santaeulalia-Llopis, CEMFI, Madrid, Summer 2015

## **DEPARTMENTAL SERVICE**

Macroeconomics Reading Group, Boston University, Co-Organizer, 2017-19

## **TEACHING EXPERIENCE**

Teaching Assistant, 1<sup>st</sup> year Ph.D. Macroeconomics, Boston University, Department of Economics, Spring 2017-2019

## **LANGUAGES**

Italian (Native), English (Fluent), Spanish (Fluent)

**COMPUTER SKILLS:** Python, Stata, R, Julia, Matlab, Dynare, Fortran, LaTeX

**CITIZENSHIP/VISA STATUS:** Italy/F1

## **REFERENCES**

**Professor Adam Guren**  
Department of Economics  
Boston University  
Phone: (617) 353-4534  
Email: [guren@bu.edu](mailto:guren@bu.edu)

**Professor Stephen Terry**  
Department of Economics  
Boston University  
Phone: (617) 353-4455  
Email: [stephent@bu.edu](mailto:stephent@bu.edu)

**Professor Robert King**  
Department of Economics  
Boston University  
Phone: (617) 353-5941  
Email: [rking@bu.edu](mailto:rking@bu.edu)

# STEFANO PICA

---

## **Housing Markets and the Heterogeneous Effects of Monetary Policy Across the Euro Area**

(Job Market Paper)

Monetary policy has heterogeneous effects across euro area countries. There are strong correlations between cross-country monetary policy potency and housing and mortgage market institutions, namely the share of adjustable-rate mortgages and the homeownership rate. To disentangle the relative importance of these institutions, I incorporate them into a quantitative currency-union New Keynesian model with rich household balance sheets. I calibrate the model to Spain and the euro area. The model fits well: the consumption response in Spain is 2.4 times stronger than the euro area in the model relative to 2.5 in the data. My results reveal that a higher adjustable-rate mortgage share and a higher homeownership rate interact to amplify the effects of monetary policy on economic activity due to smaller mortgage interest payments and a higher fraction of mortgaged homeowners operating in the market. I use the model to show that a banking union requiring shared financial regulation decreases the heterogeneous effects of monetary policy by weakening the pass-through to average mortgage interest rates. Finally, including house prices into the euro area price index stabilizes output at the cost of less stable goods inflation.

## **Household Beliefs Across Euro Area Countries During Covid-19** *(with Clodomiro Ferreira)*

How do households across euro area countries plan their spending during the covid-19 pandemic? Making use of the Consumer Expectation Survey administered by the European Central Bank, we find that current balance sheets positions, as well as expectations about individual and aggregate variables, play an important role in household planned expenditures in durables. Expectations about both house price growth and inflation shape such plans, and these impacts have been changing during the course of the pandemic. An increase in the number of Covid-related deaths in the region where households reside sharply decreases their planned expenditures over the following 12 months. Additionally, we uncover significant heterogeneity across education levels, age, and housing tenure.

## **Future Policy and Information Dissemination: A Natural Language Processing Approach** *(with Alden Porter)*

Which words matter the most in central bank communication? Making use of a rather unique European monetary policy decision setting, we build the first monetary policy dictionary. We train the dictionary on high frequency movements of the stock market around press conferences of the European Central Bank. This allows us to precisely identify which phrases do the market mainly reacts to. We find that phrases such as “Improved economy”, “Market development”, and “Stability of the euro” are associated with positive returns. On the other hand, phrases such as “Heightened uncertainties” and “Growth of loans” are associated with negative returns.

## **A New Keynesian Model with a Rigid Housing Market**

House price changes are strongly correlated in the data following monetary policy shocks. I build a New Keynesian model of the housing market where households choose the optimal amount of housing and mortgages. To accommodate realistic house price movements, I extend the housing market structure to include search frictions and house price rigidity so that the housing market clears through the relative fraction of successful buyers and sellers each period. I show that house price momentum coupled with the loan-to-value constraint forces the indebted households to cut their consumption for several quarters following a contractionary monetary shock.