

# The American Economic Review

## ARTICLES

**JULIEN GAGNON AND SANJEEV GOYAL**

**Networks, Markets, and Inequality**

**JEFFREY C. ELY**

**Beeps**

**DARON ACEMOGLU, ASUMAN OZDAGLAR,  
AND ALIREZA TAHBAZ-SALEHI**

**Microeconomic Origins of Macroeconomic Tail Risks**

**FARUK GUL, WOLFGANG PESENDORFER, AND TOMASZ STRZALECKI**

**Coarse Competitive Equilibrium and Extreme Prices**

**PAOLO PINOTTI**

**Clicking on Heaven's Door: The Effect of Immigrant Legalization on Crime**

**MARK EGAN, ALI HORTAÇSU, AND GREGOR MATVOS**

**Deposit Competition and Financial Fragility: Evidence from the US Banking Sector**

**ERIC ZWICK AND JAMES MAHON**

**Tax Policy and Heterogeneous Investment Behavior**

SHORTER PAPERS: Y. Gorodnichenko and O. Talavera; A. Cavallo

**JANUARY 2017**

# THE AMERICAN ECONOMIC ASSOCIATION

Founded in 1885

- Typeset by American Economic Association Publications, Pittsburgh, Pennsylvania, USA

- Printed at RR Donnelley Company, Jefferson City, Missouri, USA

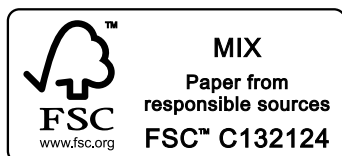
- Registered in the US Patent and Trademark Office®

- Copyright© 2017 by the American Economic Association. Permission to make digital or hard copies of part or all of American Economic Association publications for personal or classroom use is granted without fee provided that copies are not distributed for profit or direct commercial advantage and that copies show this notice on the first page or initial screen of a display along with the full citation, including the name of the author. Copyrights for components of this work owned by others than AEA must be honored. Abstracting with credit is permitted. The author has the right to republish, post on servers, redistribute to lists and use any component of this work in other works. For others to do so requires prior specific permission and/or a fee. Permissions may be requested from the American Economic Association, 2014 Broadway, Suite 305, Nashville, TN 37203.

- No responsibility for the views expressed by authors in this *Review* is assumed by the editors or the publishers, The American Economic Association.

Correspondence relating to advertising, business matters, permissions to quote, back issues, subscriptions, and changes of address, should be sent to the American Economic Association, 2014 Broadway, Suite 305, Nashville, TN 37203. Change of address notice must be received at least six (6) weeks prior to the publication month. A membership or subscription paid twice is automatically extended for an additional year unless otherwise requested.

*THE AMERICAN ECONOMIC REVIEW* (ISSN 0002-8282), January 2017, Vol. 107, No. 1. The *AER* is published 12 times a year (monthly, January through December) by the American Economic Association, 2014 Broadway, Suite 305, Nashville, TN 37203. Annual fees for regular membership are: \$20.00, \$30.00, or \$40.00, depending on income; for an additional fee, you can receive this journal, or any of the Association's journals, in print. Further information on subscriptions and the American Economic Association can be found at [www.vanderbilt.edu/AEA/](http://www.vanderbilt.edu/AEA/). Periodical postage paid at Nashville, TN and at additional mailing offices. POSTMASTER: Send address changes to *The American Economic Review*, 2014 Broadway, Suite 305, Nashville, TN 37203. Printed in the USA.



## EXECUTIVE COMMITTEE

### Elected Officers and Members

#### *President*

ALVIN E. ROTH, Stanford University

#### *President-elect*

OLIVIER BLANCHARD, Peterson Institute for International Economics

#### *Vice Presidents*

ALAN B. KRUEGER, Princeton University

VALERIE A. RAMEY, University of California at San Diego

#### *Members*

DAVID H. AUTOR, Massachusetts Institute of Technology

RACHEL E. KRANTON, Duke University

JOHN Y. CAMPBELL, Harvard University

HILARY HOYNES, University of California at Berkeley

NICHOLAS BLOOM, Stanford University

ERICA FIELD, Duke University

#### *Ex Officio Members*

RICHARD H. THALER, University of Chicago

ROBERT J. SHILLER, Yale University

### Appointed Members

#### *Editor, The American Economic Review*

ESTHER DUFLO, Massachusetts Institute of Technology

#### *Editor, The Journal of Economic Literature*

STEVEN N. DURLAUF, University of Wisconsin

#### *Editor, The Journal of Economic Perspectives*

ENRICO MORETTI, University of California at Berkeley

#### *Editor, American Economic Journal: Applied Economics*

ALEXANDRE MAS, Princeton University

#### *Editor, American Economic Journal: Economic Policy*

MATTHEW D. SHAPIRO, University of Michigan

#### *Editor, American Economic Journal: Macroeconomics*

RICHARD ROGERSON, Princeton University

#### *Editor, American Economic Journal: Microeconomics*

JOHANNES HÖRNER, Yale University

#### *Secretary-Treasurer*

PETER L. ROUSSEAU, Vanderbilt University

### OTHER OFFICERS

#### *Editor, Resources for Economists*

WILLIAM GOFFE, Pennsylvania State University

#### *Director of AEA Publication Services*

JANE EMILY VOROS, Pittsburgh

#### *Managing Director of EconLit Product Design and Content*

STEVEN L. HUSTED, University of Pittsburgh

#### *Counsel*

TERRY CALVANI, Freshfields Bruckhaus Deringer LLP

Washington, DC

### ADMINISTRATORS

#### *Director of Finance and Administration*

BARBARA H. FISER

#### *Convention Manager*

GWYN LOFTIS

# THE AMERICAN ECONOMIC REVIEW

## Editor

ESTHER DUFLO

## Coeditors

MARK AGUIAR  
ROLAND BÉNABOU  
MARIANNE BERTRAND  
STEFANO DELLAVIGNA  
JEFFREY ELY  
PINELOPI KOUJIANOU  
GOLDBERG  
JOHN LEAHY  
LUIGI PISTAFERRI  
DEBRAJ RAY

## Board of Editors

NAGEEB ALI  
MANUEL AMADOR  
HESKI BAR-ISAAC  
MARCO BASSETTO  
PAUL BEAUDRY  
SIMON BOARD  
LEAH BOUSTAN  
CRAIG BURNSIDE  
ARIEL BURSTEIN  
STEVEN CALLANDER  
ALESSANDRA CASELLA  
SYLVAIN CHASSANG  
ARNAUD COSTINOT  
MATTHIAS DOEPKE  
DAVE DONALDSON  
DIRK ENGELMANN  
ROLAND FRYER  
GAUTAM GOWRISANKARAN  
VERONICA GUERRIERI  
ERIK HURST  
SEEMA JAYACHANDRAN  
NAVIN KARTIK  
BRIAN KNIGHT  
ARVIND KRISHNAMURTHY  
GILAT LEVY  
BART LIPMAN  
HAMISH LOW  
JENS LUDWIG  
GIUSEPPE MOSCARINI  
TED O'DONOGHUE  
PHILIP OREOPOULOS  
JONATHAN PARKER  
PARAG PATHAK  
NINA PAVCNIK  
FABRIZIO PERRI  
JESSE ROTHSTEIN  
EDWARD SCHLEE  
RAJIV SETHI  
JÓN STEINSSON  
TOMASZ STRZALECKI  
AMIR SUFI  
CHRISTOPHER TIMMINS  
SARAH TURNER  
JOHN VAN REENEN  
ERIC VERHOOGEN  
LEEAT YARIV

## Managing Editor

STEVEN M. STELLING

## Associate Managing Editor

KELLY MARKEL

## Assistant Managing Editor

MATTHEW A. ROBERSON

## January 2017

VOLUME 107, NUMBER 1

## Articles

- Networks, Markets, and Inequality  
*Julien Gagnon and Sanjeev Goyal* 1
- Beeps  
*Jeffrey C. Ely* 31
- Microeconomic Origins of Macroeconomic Tail Risks  
*Daron Acemoglu, Asuman Ozdaglar, and Alireza Tahbaz-Salehi* 54
- Coarse Competitive Equilibrium and Extreme Prices  
*Faruk Gul, Wolfgang Pesendorfer, and Tomasz Strzalecki* 109
- Clicking on Heaven's Door: The Effect of Immigrant Legalization on Crime  
*Paolo Pinotti* 138
- Deposit Competition and Financial Fragility: Evidence from the US Banking Sector  
*Mark Egan, Ali Hortaçsu, and Gregor Matvos* 169
- Tax Policy and Heterogeneous Investment Behavior  
*Eric Zwick and James Mahon* 217
- ## Shorter Papers
- Price Setting in Online Markets: Basic Facts, International Comparisons, and Cross-Border Integration  
*Yuriy Gorodnichenko and Oleksandr Talavera* 249
- Are Online and Offline Prices Similar? Evidence from Large Multi-Channel Retailers  
*Alberto Cavallo* 283

Information on how to submit a manuscript is available online:  
<http://www.aeaweb.org/aer/submissions.php>

It is the policy of the *American Economic Review* to publish papers only if the data used in the analysis are clearly and precisely documented and are readily available to any researcher for purposes of replication. Details of the computations sufficient to permit replication must be provided. The Editor should be notified at the time of submission if the data used in a paper are proprietary or if, for some other reason, the requirements above cannot be met.

# ECONOMICS RESEARCH STARTS HERE

## ***Easily Access An Essential Economics Library:***

>> 1.4 million bibliographic records spanning  
130 years, with nearly 70,000 additions per year

>> Optional full-text of over 500 economics  
journals including all journals published  
by the American Economic Association

>> Indexes of journal articles, working papers,  
PhD dissertations, book reviews, conference  
proceedings, and collective volume articles

>> International coverage includes journals  
published in 74 countries

...includes data sets, JEL classifications,  
and frequent updates of all the latest  
economics research.



**EconLit™**  
AMERICAN ECONOMIC ASSOCIATION  
[www.econlit.org](http://www.econlit.org)

# The *JOE Network* fully automates the hiring process for the annual economics job market cycle.

*For:*

## JOB CANDIDATES

- Search and Save Jobs
- Create a Custom Profile
- Manage Your CV and Applications
- Get the Attention of Hiring Committees
- Apply for Multiple Jobs from One Site
- Request Reference Letters

## EMPLOYERS

- Post and Manage Job Openings
- Search Candidate Profiles
- Manage Applications and Materials
- Collect Reference Letters
- Download Applicant Data
- Share Candidate Materials

## FACULTY

- Manage Letter Requests
- Upload Custom or Default Letters
- Track Task Completion Status
- Assign Surrogate Access
- Minimize Time Investment

**NEW!**  
CANDIDATE  
VIDEOS  
&  
INTERVIEW  
SCHEDULING

This hiring season, take advantage of the AEA's enhanced JOE (Job Openings for Economists) targeted to the comprehensive needs of all participants in the annual economics job market cycle.

The *JOE Network* automates the hiring process. Users share materials, communicate confidentially, and take advantage of new features to easily manage their files and personal data. Everything is securely maintained and activated in one location. The JOE Network is accessible right from your desktop at the AEA website.

*Experience the same great results with more features, more time savings, and a beginning-to-end process.*



*Try the JOE Network today!*

[www.aeaweb.org/JOE](http://www.aeaweb.org/JOE)