# The American Economic Review

## **ARTICLES**

## SETH D. ZIMMERMAN

Elite Colleges and Upward Mobility to Top Jobs and Top Incomes

## CHIARA CRISCUOLO, RALF MARTIN, HENRY G. OVERMAN, AND JOHN VAN REENEN

Some Causal Effects of an Industrial Policy

## MARIANA GARCÍA-SCHMIDT AND MICHAEL WOODFORD

Are Low Interest Rates Deflationary? A Paradox of Perfect-Foresight Analysis

## MICHELA GIORCELLI

The Long-Term Effects of Management and Technology Transfers

## DONALD R. DAVIS AND JONATHAN I. DINGEL

A Spatial Knowledge Economy

## JOHN M. ABOWD AND IAN M. SCHMUTTE

An Economic Analysis of Privacy Protection and Statistical Accuracy as Social Choices

## BHAVEN SAMPAT AND HEIDI L. WILLIAMS

How Do Patents Affect Follow-On Innovation? Evidence from the Human Genome

## ADNAN Q. KHAN, ASIM IJAZ KHWAJA, AND BENJAMIN A. OLKEN

Making Moves Matter: Experimental Evidence on Incentivizing Bureaucrats through Performance-Based Postings

## SEBASTIAN DI TELLA

**Optimal Regulation of Financial Intermediaries** 

## OLIVIER COIBION, YURIY GORODNICHENKO, AND GEE HEE HONG

The Cyclicality of Sales, Regular and Effective Prices: Business Cycle and Policy Implications: Reply

JANUARY 2019

## THE AMERICAN ECONOMIC ASSOCIATION

## Founded in 1885

## • Typeset by American Economic Association Publications, Pittsburgh, Pennsylvania, USA

- Printed at LSC Communications, Owensville, Missouri, USA
- Registered in the US Patent and Trademark Office®
- •Copyright© 2019 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 2019, Vol. 109, No. 1. The AER is published 12 times a year by the American Economic Association, 2014 Broadway, Suite 305, Nashville, TN 37203. Annual fees for regular membership are: \$22.00, \$32.00, or \$42.00, 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/. 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

BEN S. BERNANKE, The Brookings Institution

President-elect

JANET L. YELLEN, The Brookings Institution

Vice Presidents

LAWRENCE F. KATZ, Harvard University

DAVID H. ROMER, University of California, Berkeley

Members

NICHOLAS BLOOM, Stanford University

ERICA FIELD, Duke University

ADRIANA LLERAS-MUNEY, University of California, Los Angeles

BETSEY STEVENSON, University of Michigan

MARTHA BAILEY, University of Michigan

SUSANTO BASU, Boston College

Ex Officio Members

ALVIN E. ROTH, Stanford University

OLIVIER BLANCHARD, Peterson Institute for International Economics

## **Appointed Members**

Editor, The American Economic Review

ESTHER DUFLO, Massachusetts Institute of Technology

Editor, The American Economic Review: Insights

AMY FINKELSTEIN, Massachusetts Institute of Technology

Editor, The Journal of Economic Literature

STEVEN N. DURLAUF, University of Chicago

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

SIMON GILCHRIST, New York University

Editor, American Economic Journal: Microeconomics

JOHANNES HÖRNER, Yale University

Secretary-Treasurer

PETER L. ROUSSEAU, Vanderbilt University

## **OTHER OFFICERS**

Editor, Resources for Economists

WILLLIAM 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

Counsei

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	January 2019	
ROLAND BÉNABOU STEFANO DELLAVIGNA LIRAN EINAV JEFFREY ELY MIKHAIL GOLOSOV GITA GOPINATH HENRIK KLEVEN THOMAS LEMIEUX EMI NAKAMURA DEBRAJ RAY	VOLUME <b>109</b> , NUMBER <b>1</b>	
Board of Editors NAGEEB ALI	Elite Colleges and Upward Mobility to Top Jobs	
MANUEL AMADOR DAVID ATKIN MARTHA BAILEY	and Top Incomes  Seth D. Zimmerman	1
HESKI BAR-ISAAC PAUL BEAUDRY		
DANIEL BENJAMIN LEAH BOUSTAN CRAIG BURNSIDE ARIEL BURSTEIN STEVEN CALLANDER ALESSANDRA CASELLA SYLVAIN CHASSANG	Some Causal Effects of an Industrial Policy  Chiara Criscuolo, Ralf Martin,  Henry G. Overman, and John Van Reenen	48
ARNAUD COSTINOT GORDON DAHL		
GEOFFROY DE CLIPPEL MATTHIAS DOEPKE FEDERICO ECHENIQUE MICHAEL GRUBB MARINA HALAC	Are Low Interest Rates Deflationary? A Paradox of Perfect-Foresight Analysis  Mariana García-Schmidt and Michael Woodford	86
BÄRD HARSTAD GUIDO IMBENS ŞEBNEM KALEMLI-ÖZCAN		
LOUKAS KARABARBOUNIS NAVIN KARTIK BRIAN KNIGHT	The Long-Term Effects of Management and Technology Transfers	
BOTOND KOSZEGI ARVIND KRISHNAMURTHY GUIDO LORENZONI JENS LUDWIG	Michela Giorcelli	121
ELLEN MCGRATTAN ALISDAIR MCKAY MORITZ MEYER-TER-VEHN BRENT NEIMAN PHILIP OREOPOULOS PIETRO ORTOLEVA	A Spatial Knowledge Economy  Donald R. Davis and Jonathan I. Dingel	153
AMANDA PALLAIS JONATHAN PARKER FABRIZIO PERRI THOMAS PHILIPPON RONNY RAZIN ESTEBAN ROSSI-HANSBERG JESSE ROTHSTEIN	An Economic Analysis of Privacy Protection and Statistical Accuracy as Social Choices  John M. Abowd and Ian M. Schmutte	171
EMMANUEL SAEZ RAJIV SETHI VASILIKI SKRETA KATHRYN SPIER CHARLES SPRENGER STEFANIE STANTCHEVA JAKUB STEINER	How Do Patents Affect Follow-On Innovation? Evidence from the Human Genome Bhaven Sampat and Heidi L. Williams	203
TOMASZ STRZALECKI AMIR SUFI JUSTIN SYDNOR BALÁZS SZENTES FRANCESCO TREBBI ALEH TSYVINSKI JOHN VAN REENEN PIERRE YARED	Making Moves Matter: Experimental Evidence on Incentivizing Bureaucrats through Performance-Based Postings	
Managing Editor STEVEN M. STELLING Assistant Managing Editor	Adnan Q. Khan, Asim Ijaz Khwaja, and Benjamin A. Olken	237
Assistant Managing Editor		

The Cyclicality of Sales, Regular and Effective Prices: Business Cycle and Policy Implications: Reply

Olivier Coibion, Yuriy Gorodnichenko, and Gee Hee Hong 314

Information on how to submit a manuscript is available online: https://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.



# ADVANCES IN RESEARCH TRANSPARENCY

The AEA RCT Registry for randomized controlled trials



Now containing 2,100+ studies from over 124+ countries!



2,100+ Studies Registered



4,400+ Monthly Views



In 124+ Countries



Easy 15-20 Minute Registration



With 3,300+
Account Members



With 2,900+ Active Users

FREE ACCESS!

THE CENTRAL SOURCE OF RCTs DEDICATED TO ECONOMICS AND SOCIAL SCIENCES

www.socialscienceregistry.org

