

# THE QUARTERLY JOURNAL OF ECONOMICS

FOUNDED 1886

---

Volume CXXVI    February 2011    Issue 1

---

## ARTICLES

**VALERIE A. RAMEY**

Identifying Government Spending Shocks: It's All in the Timing 1

**ROBERT J. BARRO AND CHARLES J. REDLICK**

Macroeconomic Effects From Government Purchases and Taxes 51

**DAVID CARD AND GORDON B. DAHL**

Family Violence and Football: The Effect of Unexpected Emotional Cues  
on Violent Behavior 103

**MICHAEL KREMER, JESSICA LEINO, EDWARD MIGUEL,**

**AND ALIX PETERSON ZWANE**

Spring Cleaning: Rural Water Impacts, Valuation,  
and Property Rights Institutions 145

**SUSAN ATHEY, JONATHAN LEVIN, AND ENRIQUE SEIRA**

Comparing Open and Sealed Bid Auctions: Evidence from Timber Auctions 207

**PATRICK BOLTON, TANO SANTOS, AND JOSE A. SCHEINKMAN**

Outside and Inside Liquidity 259

**TØRE ELLINGSEN AND EIRIK GAARD KRISTIANSEN**

Financial Contracting Under Imperfect Enforcement 323

**ULRIKE MALMENDIER AND STEFAN NAGEL**

Depression Babies: Do Macroeconomic Experiences Affect Risk Taking? 373

**JUAN CARLOS HALLAK AND PETER K. SCHOTT**

Estimating Cross-Country Differences In Product Quality 417

**GIOVANNI MAGGI AND ROBERT W. STAIGER**

The Role of Dispute Settlement Procedures in International Trade Agreements 475

**BRIAN T. MELZER**

The Real Costs of Credit Access: Evidence from the Payday Lending Market 517

**OXFORD**  
UNIVERSITY PRESS

QJE 126(1) 1–555 (2011)

Print ISSN 0033-5533; Online ISSN 1531-4650

No. 505

# The Quarterly Journal of Economics

## *Board of Editors*

Robert J. Barro   Elhanan Helpman   Lawrence F. Katz

## *Associate Editors*

George Akerlof	Stephen Coate	Erzo F.P. Luttmer
Alberto Alesina	Janet Currie	Robert Margo
Pol Antràs	Glenn Ellison	Edward Miguel
Andrew Atkeson	Ernst Fehr	Edward O'Donoghue
Marianne Bertrand	Drew Fudenberg	Esteban Rossi-Hansberg
Timothy Besley	Claudia Goldin	Bruce Sacerdote
David Card	Charles Jones	Jeremy C. Stein
Francesco Caselli	Peter Klenow	Michael Waldman

In association with the Harvard Department of Economics and Invited Readers.

---

## *Assistant Editor*

Trina Ott

Volume 126, Number 1 (February 2011)

© The Author(s) 2011. Published by Oxford University Press, on behalf of President and Fellows of Harvard College. All rights reserved. For Permissions, please email: journals.permissions@oup.com.

**Statement on dissemination of data:** The QJE strongly urges authors to make their data available for public use, and the QJE web site can be used for this purpose. This availability is important for replication and extension of research findings. We also recognize that good incentives for generating and assembling data entail an interval of private use and that sometimes this private use extends beyond the first application of the data in an initial article. However, in the longer run, the creator of a data set is also benefited by wide dissemination use, and citation of the data that have been generated.

## Subscriptions

A subscription to *The Quarterly Journal of Economics* comprises 4 issues. Prices include dispatch by Standard Air. Airmail rates are available on request. *The Quarterly Journal of Economics'* Advance Access contains papers that have recently been accepted but have not yet been included within an issue. Advance Access is updated daily.

Annual Subscription Rate (Volumes 126, 4 issues, 2011)

### Corporate

Print and online access: £464.00/\$713.00/€533.00

Print edition only: £425.00/\$653.00/€488.00

Site-wide online access only: £386.00/\$594.00/€444.00

### Institutional

Print and online access: £371.00/\$570.00/€426.00

Print edition only: £340.00/\$523.00/€391.00

Site-wide online access only: £309.00/\$475.00/€355.00

Please note: UK£ rate applies to UK and Rest of World, except US and Canada (US\$) and Europe (Eur€). There are other subscription rates available; for a complete listing, please visit [http://www.oxfordjournals.org/our\\_journals/qje/access\\_purchase/price\\_list.html](http://www.oxfordjournals.org/our_journals/qje/access_purchase/price_list.html).

Full prepayment in the correct currency is required for all orders. Payment should be in US dollars for orders being delivered to the USA or Canada; Euros for orders being delivered within Europe (excluding the UK); GBP Sterling for orders being delivered elsewhere (i.e., not being delivered to USA, Canada, or Europe). All orders should be accompanied by full payment and sent to your nearest Oxford Journals office. Subscriptions are accepted for complete volumes only. Orders are regarded as firm, and payments are not refundable. Our prices include dispatch by Standard Air. Claims must be notified within four months of despatch/order date (whichever is later). Subscriptions in the EEC may be subject to European VAT. If registered, please supply details to avoid unnecessary charges. For subscriptions that include online versions, a proportion of the subscription price may be subject to UK VAT. Subscribers in Canada, please add GST to the prices quoted. Personal rate subscriptions are only available if payment is made by personal cheque or credit card, delivery is to a private address, and is for personal use only.

The current year and two previous years' issues are available from Oxford Journals. Previous volumes can be obtained from the Periodicals Service Company, 11 Main Street, Germantown, NY 12526, USA. E-mail: [psc@periodicals.com](mailto:psc@periodicals.com). Email: [psc@periodicals.com](mailto:psc@periodicals.com). Tel: (518) 537-4700. Fax: (518) 537-5899.

## Contact information

Journals Customer Service Department, Oxford Journals, Great Clarendon Street, Oxford OX2 6DP, UK. E-mail: [jnls.cust.serv@oxfordjournals.org](mailto:jnls.cust.serv@oxfordjournals.org). Tel: +44 (0)1865 353907. Fax: +44 (0)1865 353485. **In the Americas, please contact:** Journals Customer Service Department, Oxford Journals, 2001 Evans Road, Cary, NC 27513, USA. E-mail: [jnlorders@oxfordjournals.org](mailto:jnlorders@oxfordjournals.org). Tel: (800) 852-7323 (toll-free in USA/Canada) or (919) 677-0977. Fax: (919) 677-1714. **In Japan, please contact:** Journals Customer Service Department, Oxford Journals, 4-5-10-8F Shiba, Minato-ku, Tokyo, 108-8386, Japan. E-mail: [custservjp@oxfordjournals.org](mailto:custservjp@oxfordjournals.org). Tel: (81) 3 5444 5858. Fax: (81) 3 3454 2929.

## Methods of payment

Payment should be made: by cheque (to Oxford Journals, Cashiers Office, Great Clarendon Street, Oxford, OX2 6DP, UK); by bank transfer [to Barclays Bank Plc, Oxford Office, Oxford (bank sort code 20-65-18) (UK); overseas only Swift code BARC GB22 (GB£ Sterling Account no. 70299332, IBAN GB89BARC20651870299332; US\$ Dollars Account no. 66014600, IBAN GB27BARC20651866014600; EU€ EURO Account no. 78923655, IBAN GB16BARC20651878923655]; or by credit card (MasterCard, Visa, Switch, or American Express).

## Postal information

*The Quarterly Journal of Economics* (ISSN: 0033-5533) is published in quarterly by Oxford University Press, 2001 Evans Road, Cary, NC 27513-2009, USA. Periodicals Postage Paid at Cary, NC and additional mailing offices. Send address changes to *Clinical Infectious Diseases*, Journals Customer Service Department, Oxford University Press, 2001 Evans Road, Cary, NC 27513-2009.

## Oxford Journals environmental and ethical policies

Oxford Journals is committed to working with the global community to bring the highest quality research to the widest possible audience. Oxford Journals will protect the environment by implementing environmentally friendly policies and practices wherever possible. Please see <http://www.oxfordjournals.org/ethicalpolicies.html> for further information on Oxford Journals' environmental and ethical policies.

## Digital object identifiers

For information on dois and to resolve them, please visit [www.doi.org](http://www.doi.org).

## Permissions

For information on how to request permissions to reproduce articles or information from this journal, please visit [www.oxfordjournals.org/permissions](http://www.oxfordjournals.org/permissions).

## Advertising

Advertising, inserts, and artwork enquiries should be addressed to Advertising and Special Sales, Oxford Journals, Oxford University Press, Great Clarendon Street, Oxford, OX2 6DP, UK. Tel: +44 (0)1865 354767; Fax: +44 (0)1865 353774; E-mail: [jnlsadvertising@oxfordjournals.org](mailto:jnlsadvertising@oxfordjournals.org).

## Disclaimer

Statements of fact and opinion in the articles in *The Quarterly Journal of Economics* are those of the respective authors and contributors and not of *The Quarterly Journal of Economics* or Oxford University Press. Neither Oxford University Press nor *The Quarterly Journal of Economics* make any representation, express or implied, in respect of the accuracy of the material in this journal and cannot accept any legal responsibility or liability for any errors or omissions that may be made. The reader should make her or his own evaluation as to the appropriateness or otherwise of any experimental technique described.

Copyright © 2011. Published by Oxford University Press, on behalf of President and Fellows of Harvard College. All rights reserved.

## Submission Guidelines

All material to be considered for publication in *The Quarterly Journal of Economics* should be submitted in electronic form via the journal's online submission system at

Full instructions for manuscript preparation and submission can be found at

[http://www.oxfordjournals.org/our\\_journals/qje/for\\_authors/](http://www.oxfordjournals.org/our_journals/qje/for_authors/).

## Indexing/Abstracting.

All rights reserved; no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without prior written permission of the publisher or a license permitting restricted copying issued in the UK by the Copyright Licensing Agency Ltd, 90 Tottenham Court Road, London W1P 9HE.

Typeset by TNQ Books and Journals Pvt. Ltd., Chennai, India.

Printed by Edwards Brothers, Lillington, NC, USA.

Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide.

THE  
QUARTERLY  
JOURNAL OF  
ECONOMICS

FOUNDED 1886

VOLUME CXXVI

*Board of Editors*

Robert J. Barro   Elhanan Helpman   Lawrence F. Katz

*Assistant Editor*

Trina Ott

---

PUBLISHED FOR HARVARD UNIVERSITY BY  
OXFORD UNIVERSITY PRESS

2011