

JEVGENIJS STEINBUKS

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• Citizen of Latvia (European Union) and the United States

CURRENT POSITION

Economist, Energy and Environment Research Team, Development Research Group, the World Bank

OTHER AFFILIATIONS

Center for Robust Decision Making on Climate and Energy Policy, University of Chicago
Energy Policy Research Group, University of Cambridge

EDUCATION

Ph.D in Economics, George Washington University (2008)
M.Sc in Economics, University of Warwick (2002)
B.S.S. in Economics, University of Latvia (2000)

RESEARCH INTERESTS:

Energy and Environmental Economics

Biofuels and bioenergy; Energy demand; Energy efficiency; Financial and energy markets; Inter-fuel substitution; Investment under uncertainty; Land use; Restructured electricity markets; Solar energy

Real Estate and Urban Economics

Bankruptcy and foreclosure laws; Land property rights; Mortgage prepayments and defaults; Predatory lending and mortgage fraud; Regulation of mortgage loans; Subprime mortgages, Urbanization dynamics

TEACHING INTERESTS

Energy and Environmental Economics, Industrial Organization, Real Estate and Urban Economics

ACADEMIC EXPERIENCE:

Research Associate, Center for Global Trade Analysis, Purdue University (2010-2013)
Director of Economic Studies, Sidney Sussex College, University of Cambridge (2008-2010)
Research Associate, Electricity Policy Research Group, University of Cambridge (2008-2010)
Visiting Assistant Professor in Economics, Miami University (2006-2008)
Research Consultant, Sustainable Development Department, World Bank (2005-2007)
Research Economist, Credit Research Center, Georgetown University (2004-2005)
Research Consultant, Investment Climate Department, World Bank (2003-2005)
Research Assistant, Department of Economics, University of Latvia (1998-1999)

FELLOWSHIPS, AWARDS, GRANTS

1. Electricity Availability, Structural Transformation, and Economic Growth (2016-2017, World Bank, \$100,000)
2. Will Global Change Jeopardize the US Forest Carbon Sink? (2015-2017, USDA, \$500,000)
3. Ramping up Deployment of Photovoltaics: Economic and Environmental Consequences (2013-2014, World Bank, \$6,500)

4. Understanding the Economic and Environmental Consequences of Widespread Deployment of Thin Film Solar Photovoltaics (2013-2016, National Science Foundation, \$298,388)
5. Critical Material Hub (2013-2017, U.S. Department of Energy, \$805,000)
6. Global Policy Institute Research Grant (2012-2013, Purdue University, \$39,958)
7. Post-doctoral Research Fellowship (2010-2012, National Science Foundation)
8. FlexNet Fellowship (2008-2010, U.K. Engineering and Physical Sciences Research Council)
9. Global Leaders Fellowship, (2002 – 2006, George Washington University)
10. Fulbright Fellowship (2002 – 2003, Department of State)
11. Departmental acknowledgement of best *MSc* thesis, (2001, University of Warwick)

PUBLICATIONS:

Journal Articles

1. **J. Steinbuks**, G. Satija, and F. Zhao. 2017. “Sustainability of Solar Electricity: The Role of Endogenous Resource Substitution and Cross-Sectoral Responses”, *Resource and Energy Economics*, 49, pp. 218–232.
2. G. Sharafutdinova and **J. Steinbuks**. 2017. “Governors Matter: A Comparative Study of State-Business Relations in Russia’s Regions”, *Economics of Transition*, 25(3), pp. 471-493.
3. Y. Cai, K. Judd, and **J. Steinbuks**. 2017. “A Nonlinear Certainty Equivalent Approximation Method for Dynamic Stochastic Problems”, *Quantitative Economics*, 8(1), pp. 117–147.
4. A. Nikandrova and **J. Steinbuks**. 2017. “Contracting for Second-Best in Dysfunctional Electricity Markets”, *Journal of Regulatory Economics*, 51(1), pp. 41-71.
5. P. Alexander, R. Prestele, P.H. Verburg, A. Arneth, C. Baranzelli, F. Batista e Silva, C. Brown, Adam Butler, K. Calvin, N. Dendoncker, J.C. Doelman, R. Dunford, K. Engström, D. Eitelberg, S. Fujimori, P.A. Harrison, T. Hasegawa, P. Havlik, S. Holzhauser, F. Humpenöder, C. Jacobs-Crisioni, A.K. Jain, T. Krisztin, P. Kyle, C. Lavalley, T. Lenton, J. Liu, P. Meiyappan, A. Popp, T. Powell, R.D. Sands, R. Schaldach, E. Stehfest, **J. Steinbuks**, A. Tabeau, H. van Meijl, M.A. Wise, and M.D.A. Rounsevel. 2017. “Assessing Uncertainties in Land Cover Projections”. *Global Change Biology*, 23(1), pp. 767-781.
6. T. Hertel, **J. Steinbuks**, and W. Tyner. 2016. “What is the Social Value of Second Generation Biofuels?” *Applied Economic Perspectives and Policy*, 38(4), pp. 599-617.
7. **J. Steinbuks** and T. Hertel. 2016. “Confronting the Food-Energy-Environment Trilemma: Global Land Use in the Long Run”, *Environmental and Resource Economics*, 63(3), pp. 545-570.
8. **J. Steinbuks**. 2015. “Effects of Prepayment Regulations on Termination of Subprime Mortgages”, *Journal of Banking and Finance*, 59, pp. 445–456.
9. **J. Steinbuks** and B. Narayanan. 2015. “Fossil Fuel Producing Economies Have Greater Potential for Industrial Interfuel Substitution”, *Energy Economics*, 47, pp. 168–177.
10. **J. Steinbuks** and K. Neuhoff. 2014. “Assessing Energy Price Induced Improvements in Efficiency of Capital in OECD Manufacturing Industries”, *Journal of Environmental Economics and Management*, 68(2), pp. 340–356.
11. **J. Steinbuks** and G. Elliehausen. 2014. “The Economic Effects of Legal Restrictions on High-Cost Mortgages”, *Journal of Real Estate Finance and Economics*, 49(1), pp. 47-72.
12. T. Hertel, **J. Steinbuks**, and U. Baldos. 2013. “Competition for Land in the Global Bioeconomy”, *Agricultural Economics*, 44(s1), pp. 129-138.
13. C. Desai, G. Elliehausen, and **J. Steinbuks**. 2013. “Effects of Foreclosure Laws and Bankruptcy Asset Exemptions on Mortgage Default and Foreclosure Rates”, *Journal of Real Estate Finance and Economics*, 47(3), pp. 391-415.
14. **J. Steinbuks** and T. Hertel. 2013. “Energy Prices Will Play an Important Role in Determining Global Land Use in the 21st Century”, *Environmental Research Letters* 8(1), article 014014.
15. **J. Steinbuks**. 2012. “Firms’ Investment under Financial and Infrastructure Constraints: Evidence from In-House Generation in Sub-Saharan Africa”, *The B.E. Journal of Economic Analysis and Policy*, Vol. 12: Iss. 1 (Topics), article 46.
16. **J. Steinbuks**. 2012. “Interfuel Substitution and Energy Use in the UK Manufacturing Sector”, *Energy Journal* 33(1), pp. 1-29.

17. **J. Steinbuks** and V. Foster. 2010. "When Do Firms Generate? Evidence on In-House Electricity Supply in Africa", *Energy Economics* 32(3), pp. 505-514.
18. G. Elliehausen, M. Staten, and **J. Steinbuks**. 2008. "The Effect of Prepayment Penalties on Pricing of Subprime Mortgages", *Journal of Economics and Business* 60(1-2), pp. 33-46.

Knowledge Notes

1. **J. Steinbuks**, J. de Wit, A. Kochnakyan, and V. Foster. 2017. "Forecasting Electricity Demand: An Aid for Practitioners", *Live Wire* No. 2017/73. World Bank, Washington, DC
2. H. Fleisig, M. Safavian and **J. Steinbuks**. 2006. "Unlocking Dead Capital", *Public Policy for Private Development* 307.

Chapters in Edited Volumes

1. **J. Steinbuks** and G. Timilsina. 2014. Biofuels, Land Use, and Food Supply, in Timilsina, G. and Zilberman, D., (Eds.), *The Impacts of Biofuels on the Energy, Environment, and Poverty: A Global Perspective*, Springer.
2. **J. Steinbuks**. 2011. A Survey of Recent Developments in Energy Demand Modeling, in Jamasb, T. and Pollitt, M., (Eds.), *Electricity and Demand in a Low-Carbon World: Customers, Citizens and Loads*, Cambridge University Press: Cambridge UK.

Works under Revision in Peer Reviewed Journals

1. L. Orea and **J. Steinbuks**. "Estimating Market Power Using a Composed Error Model: Application to the California Electricity Market", *Economic Inquiry* (2nd revision round)
2. M. Hyland and **J. Steinbuks**. "Capital Adjustment and the Optimal Fuel Choice", *Energy Journal*

Works under Review in Peer Reviewed Journals

1. **J. Steinbuks**. "Assessing the Accuracy of Electricity Demand Forecasts in Developing Countries." *World Bank Policy Research Paper 7974*.
2. Y. Cai, H. Selod, and **J. Steinbuks**. "Urbanization and Property Rights." *World Bank Policy Research Paper 7486*.
3. Y. Cai, **J. Steinbuks**, J. Elliott, and T. Hertel. "The Effect of Climate and Technological Uncertainty in Crop Yields on the Optimal Path of Global Land Use", *World Bank Policy Research Paper 7009*

Permanent Working Papers

1. **J. Steinbuks** and T. Hertel. 2013. "Forest, Agriculture, and Biofuels in a Land use model with Environmental services (FABLE)", *GTAP Working Paper 71*, Purdue University
2. **J. Steinbuks**, A. Meshreky, and K. Neuhoff. 2009. "The Effect of Energy Prices on Operation and Investment in OECD Countries: Evidence from Vintage Capital Model." *Cambridge Working Paper in Economics 0933*
3. V. Foster and **J. Steinbuks**. 2009. "Paying the Price for Unreliable Power Supplies: Own Generation of Electricity by Private Firms in Africa," *World Bank Policy Research Paper 4913*
4. **J. Steinbuks** and X. Sun. 2006. "Investment Climate in Jamaica", *FIAS report*, World Bank
5. G. Elliehausen, M. Staten, and **J. Steinbuks**. 2006. "The Effects of State Predatory Lending Laws on the Availability of Subprime Mortgage Credit", *FSRP Research Monograph 38*, George Washington University

RESEARCH IN PROGRESS

1. The Optimal Allocation of the World's Land Resource Base in the Presence of Energy Price Uncertainty (with T. Hertel, Y. Cai, and A. Golub).

2. Politics of Federal Transfers: Which Regions in Russia Win and Why? (with G. Sharafutdinova)
3. Capital Adjustment, Technology Choice, and the Optimal Timing of Climate Policy (with A. Golub and M. Toman)
4. Economic Effects of Hydroelectricity
5. Public Infrastructure, Firm Size, and the Structural Transformation (with F. Perez-Sebastian)
6. Electricity Availability and Structural Transformation in Brazil (with J. Feres and I. Trotter)
7. Urbanization and Climate Change (with Y. Cai and H. Selod)
8. Structural Analysis of Electricity Access Charges in Sub-Saharan Africa (with M. Blimpo and S. McRae)

CONFERENCE AND WORKSHOP PRESENTATIONS

Agricultural and Applied Economics Association Annual Meetings: 2013, 2015
 American Economic Association Annual Meetings: 2010, 2011, 2012
 American Geophysical Union Annual Meetings: 2011, 2014^{***}
 American Real Estate and Urban Economics Association Mid-Year Conference: 2007, 2009*
 AU-GWU-IMF Workshop on Forecasting Issues in Developing Economies: 2017
 Cambridge-Oxford-Warwick Annual Doctoral Conference: 2010^{**}
 Cowles Macroeconomics Summer Conference: 2012
 CSAE Annual Conference on Economic Development in Africa: 2008, 2016*
 Eastern Economic Association Annual Conference 2016^{**}
 Energy Policy Research Group Winter Research Conference: 2008
 European Conference on Financial Regulation and Supervision: 2007^{**}, 2008
 European Economic Association Annual Symposium: 2010
 European Association of Environmental and Resource Economists Annual Conference: 2017*
 Federal Reserve System's Community Affairs Research Conference: 2007*
 Financial Management Association Annual Conference: 2008, 2010
 GTAP Annual Conference on Global Economic Analysis: 2012
 Industrial Organization Society Annual Meetings: 2011, 2014
 Institute for Computational Economics Annual Conference: 2011
 International Conference of Agricultural Economists: 2012*, 2015
 International Association for Energy Economics Annual Conference: 2009, 2010, 2012
 International Workshop on Empirical Methods in Energy Economics: 2010, 2011, 2016, 2017
 Royal Economic Society Annual Meetings: 2010, 2015, 2016
 Spanish Economic Association Annual Meetings: 2011*
 Supergen FlexNet General Assembly: 2009
 Southern Economic Association Annual Meetings: 2009, 2016*
 Sustainable Energy Transitions Initiative Annual Meetings: 2017*
 Urban Economic Association Annual Meetings 2015*
 Urban Economic Association European Meetings 2017*
 Urbanization and Poverty Reduction Annual Research Conference: 2014*
 World Bank Conference on Land and Poverty 2016*
 Young Energy Engineers & Economists Annual Seminar: 2010^{**}

* - presented by co-author; ** - discussed a paper at the conference; *** - poster session

INVITED SEMINAR PRESENTATIONS

2017: George Washington University

2016: World Bank (Macroeconomics/Trade/Finance); Hull Business School; Oxford Institute for Energy Studies

2015: Birkbeck, University of London; University of Alicante

- 2014:** University of Cambridge (Judge Business School); World Bank (Energy and Environment, Applied Micro)
- 2013:** World Bank (Energy and Environment); University College London (Sustainable Resource Institute); University of Cincinnati (Finance and Real Estate)
- 2012:** University of Illinois at Urbana-Champaign (Agricultural and Consumer Economics); Purdue University (Agricultural Economics); Baltic International Center for Economic Policy Studies
- 2010:** Moody's Economy.com; University of Birmingham; University of Cambridge; University of East Anglia; University of Lancaster; Purdue University (Agricultural Economics)
- 2009:** Central European University (Public Policy); Miami University; University of Surrey (Energy Economics Centre); University of Cambridge (Land Economy);
- 2008:** Bank of England (Financial Stability); George Washington University; HSE Russia (International College and Economics and Finance); University of Cambridge; University of Guelph (Marketing and Consumer Studies)
- 2007:** George Washington University; Miami University

REFEREEING EXPERIENCE

Journals: Agricultural Economics, Climatic Change, Ecological Economics, Economic Analysis and Policy, Energy Economics, Energy Efficiency, Energy Journal, Energy Policy, Environmental and Resource Economics, International Forestry Review, International Journal of Energy Sector Management, International Journal of Industrial Organization, Journal of the Association of Environmental and Resource Economists, Journal of Policy Analysis and Management, Nature, Review of Development Economics, Review of Energy and Environmental Policy, Scandinavian Journal of Economics, Scottish Journal of Political Economy

Working Papers: Cambridge Working Papers in Economics, Czech National Bank Working Papers, Inter-American Development Bank Working Papers

Conferences: GTAP Annual Conference on Global Economic Analysis

Grants: World Bank Research Support Grants

DISSERTATION SUPERVISIONS AND EXAMINATIONS

Undergraduate Students

2010: Rupert Harrison (University of Cambridge, BA in Economics, Principal Advisor)

2010: Sarah Robbins (University of Cambridge, BA in Economics, Principal Advisor)

Graduate Students

2016: Weihua Zhao (George Washington University, PhD in Economics, Thesis Examiner)

2012: Gaurav Satija (Purdue University, MS in Materials Engineering, Co-Advisor)

2012: Thibault Normand (Stockholm School of Economics in Riga, Executive MBA, Principal Advisor)

2010: Elizabeth Railton (University of Cambridge, MPhil in Economics, Principal Advisor)

2010: Byron Radford (University of Cambridge, MPhil in Economics, Principal Advisor)

2010: Thanyporn Chankrajang (University of Cambridge, PhD in Land Economy, Proposal Examiner)

Placements of Graduate Students / Research Assistants

2014: Gaurav Satija, PhD program in Agricultural Economics, University of Maryland

2011: Davide Cerutti, PhD program in Agricultural Economics, University of Maryland

INTERNATIONAL RESEARCH PROJECTS:

Report on Climate Policies in Europe (2009, principal sponsor: WWF)

The Baltic Sea Area Studies: Northern Dimension of Europe (2002, principal sponsor: EU Commission)

OTHER PROFESSIONAL EXPERIENCE:

Career Diplomat (economic affairs), Ministry of Foreign Affairs of Latvia (1997-2000)

Assistant to Ambassador (economic affairs), Latvian Embassy in the USA (2002-2003)

PROGRAMMING: EIEWS, GAMS, GEMPACK, Mathematica, MATLAB, Python, R, Stata, SAS

LANGUAGES: Fluent in Russian, English, and Latvian, limited knowledge of French.