

JEVGENIJS STEINBUKS

Address: Gertrudes iela 9, dz. 9, Riga, LV1010, Latvia
Tel: +371 26467791 • E-mail: steinbuk@gwu.edu • Web: <http://www.steinbuds.info>

CURRENT POSITIONS

Research Associate, Center for Global Trade Analysis, Purdue University
Research Associate, Electricity Policy Research Group, University of Cambridge
Research Associate, Baltic International Center for Economic Policy Studies

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:

Carbon pricing and climate change; Energy demand modeling; Energy prices and investment; Financial markets and energy policy; Investment in energy sector in developing countries; Investment under uncertainty in energy sector; Market power in restructured electricity markets

Financial Markets and Institutions:

Bankruptcy and foreclosure laws in real estate markets; Mortgage prepayments and defaults; Predatory lending and mortgage fraud; Regulation of mortgage products; Subprime mortgages; Access to finance and investment; Financial deepening

TEACHING INTERESTS

Energy and Environmental Economics, Financial Economics, Industrial Organization, Real Estate Finance

ACADEMIC EXPERIENCE:

External Director of Economic Studies, Sidney Sussex College, University of Cambridge (2008-2010)
Research Associate, Centre for European and Transition Studies, University of Latvia (2008)
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

FlexNet Research Fellowship (2008-2010, U.K. Engineering and Physical Sciences Research Council)
Global Leaders Fellowship, (2002 – 2006, George Washington University)
Fulbright Fellowship (2002 – 2003, U.S. Department of State)
Departmental acknowledgement of best *MSc* thesis, (2001, University of Warwick)

PUBLICATIONS:

Refereed Journals

- 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.
- 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.
- H. Fleisig, M. Safavian and J. Steinbuks. 2006. "Unlocking Dead Capital", *Public Policy for Private Development* 307, pp. 1-4.

Works under Revision for Refereed Journals

- J. Steinbuks, G. Elliehausen, and M. Staten. 2008. "Credit Regulation the Availability of Subprime Mortgage Credit." *Economic Inquiry*, revised for resubmission.

Peer-reviewed Working Papers

- J. Steinbuks. 2010. "Interfuel Substitution and Energy Use in the UK Manufacturing Sector," *Cambridge Working Paper in Economics* 1032 (under review).
- J. Steinbuks and K. Neuhoff. 2010. "Operational and Investment Response to Energy Prices in OECD Manufacturing Sector", *Cambridge Working Paper in Economics* 1015 (under review)
- 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
- 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
- J. Steinbuks. 2008. "Effects of Regulation on Prepayment and Default of Subprime Mortgages." Paolo Baffi Centre Research Paper No. 2008-25, (under review)
- J. Steinbuks. 2008. "Financial Constraints and Firms' Investment: Results of a Natural Experiment Measuring Firm Response to Power Interruption." *Cambridge Working Paper in Economics* 0844, (under review)

Other Working Papers

- J. Steinbuks. 2010. A Survey of Recent Developments in Energy Demand Modeling (commissioned chapter for forthcoming edited volume, Cambridge University Press, under review)
- 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.
- J. Basarova, V. Proskurovska, and J. Steinbuks. 1999. "The Far-East Asian crisis. Could the same crisis happen in Latvia?" *Selected Student Papers, vol. II*, University of Tartu.

Professional Reports

- J. Steinbuks and X. Sun. 2006. "Investment Climate in Jamaica", *FIAS report*, World Bank
- J. Coolidge, G. Kisunko, and J. Steinbuks. 2004. "Russia's Runaway Investors" *FIAS report*, World Bank

RESEARCH IN PROGRESS

- Effects of Foreclosure Laws and Bankruptcy Asset Exemptions on Mortgage Default and Foreclosure Rates (with G. Elliehausen and C. Desai)
- Welfare Implications of Mortgage Income Documentation Requirements (with L. Corrado)
- Estimating Market Power Using a Composed Error Model: Application to the California Electricity Market (with L. Orea)
- Household Response to Real-Time Electricity Pricing (with M. Pollitt)

CONFERENCE PRESENTATIONS

- 2010:** American Economic Association Annual Meetings, European Economic Association Annual Symposium, Royal Economic Society Annual Meetings, Seventh International Conference on the European Energy Market, Third International Workshop on Empirical Methods in Energy Economics*, Young Energy Engineers & Economists Seminar, University of Cambridge**, Cambridge-Oxford-Warwick Annual Doctoral Conference**
- 2009:** American Real Estate and Urban Economics Association Mid-year conference*, International Association for Energy Economics Annual European Conference, Southern Economic Association Annual Meeting*, Supergen FlexNet General Assembly, University of Manchester
- 2008:** CSAE Conference 2008: Economic Development in Africa, University of Oxford, EPRG Winter Research Conference, University of Cambridge, Financial Management Association at FMA Annual Conference, Third European Conference on Financial Regulation and Supervision
- 2007:** American Real Estate and Urban Economics Association Mid-year conference, The Federal Reserve System's Fifth Community Affairs Research Conference*, "Financial Off-Shoring and Under-Grounding: White, Grey and Black Markets" workshop, Bocconi University*, Second European Conference on Financial Regulation and Supervision**
- 2001:** UNDP conference "Partnership for Development Cooperation"

* - Research presented by co-author; ** - Discussed a paper at the conference

INVITED SEMINAR PRESENTATIONS

Bank of England, Central European University, George Washington University (3), Higher School of Economics (Russia), Miami University (3), Moody's Economy.com, Purdue University, Stockholm School of Economics, Riga (Latvia), University of Birmingham, University of Cambridge (4), University of East Anglia, University of Guelph, University of Lancaster, University of Surrey

REFEREEING EXPERIENCE:

Ecological Economics, Energy Economics, Energy Policy

DISSERTATION SUPERVISIONS AND EXAMINATIONS

Dissertation Director: 2 Undergraduate Students, 2 MPhil Students (University of Cambridge)
Dissertation Examiner: 1 PhD Student, University of Cambridge

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)

PROFESSIONAL AFFILIATIONS:

American Economic Association, American Real Estate and Urban Economics Association, European Economic Association, International Association for Energy Economics, Royal Economic Society

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)

STATISTICAL SOFTWARE: STATA, SAS, EVIEWS, MATLAB, SPSS, R

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

REFERENCES:

Anthony M. Yezer

Professor of Economics

George Washington University
2115 G St., N.W.
Monroe Hall #320
Washington, D.C. 20052
United States
Tel: 1-(202) 994 6755
Fax: 1-(202) 994 6147
E-mail: yezer@gwu.edu

David M.G. Newbery

Professor of Economics

University of Cambridge
Austin Robinson Building
Sidgwick Avenue
Cambridge, CB3 9DD
United Kingdom
Tel: 44-(0) 1223 335248
Fax: 44-(0) 1223 335299
E-mail: dmgm@econ.cam.ac.uk

Gregory Eliehausen

Associate Research Professor for
Real Estate and Urban Economics
George Washington University
2201 G Street, N.W.
Duquès Hall, Suite 551
Washington, D.C. 20052
United States
Tel: 1-(202) 994 0905
Fax: 1-(202) 994 0907
E-mail: elliehau@gwu.edu

Karsten Neuhoff

Research Director
Climate Policy Initiative
DIW, Berlin
Mohrenstr. 58, 10117
Berlin,
Germany
Tel: +49 30 89789-471
Fax: +49 30 89789-170
E-mail:
karsten.neuhoff@cpiberlin.org

Michael Pollitt

Reader in Business Economics
University of Cambridge
Judge Business School
Trumpington Street
Cambridge, CB2 1AG
United Kingdom
Tel: 44-(0) 1223 339615
Fax: 44-(0) 1223 339701
E-mail: m.pollitt@jbs.cam.ac.uk

George Davis

Professor of Economics
Miami University
Department of Economics
208 Laws Hall
Oxford OH 45056
United States
Tel: 1-(513) 529-2842
Fax: 1-(513) 529-8047
E-mail: davisgk@muohio.edu

SELECTED RESEARCH PAPERS:

“Effects of Foreclosure Laws and Bankruptcy Asset Exemptions on Mortgage Default and Foreclosure Rates (with G. Eliehausen and C. Desai, in progress)”

This paper investigates the effects of foreclosure laws and bankruptcy asset exemptions on mortgage defaults and foreclosures. Theoretical considerations suggest that foreclosure laws and bankruptcy asset exemptions should matter, because they increase the delay resulting from a bankruptcy filing, and make foreclosure more attractive to a borrower, or induce a lender to be more receptive to resolving a default outside of foreclosure. We examine state-level effects across different mortgage products (fixed and adjustable-rate), and market segments (prime and subprime). The empirical model used for this paper improves on previous models by recognizing that loan terms are endogenous in explaining default and possible foreclosure. More complete specification of the legal framework and the improvement in econometric methods provides more reliable evidence on the effects of foreclosure laws and bankruptcy asset exemptions in mortgage markets.

“Interfuel Substitution and Energy Use in the UK Manufacturing Sector” (submitted)

This paper investigates interfuel substitution in the UK manufacturing sector. Econometric models of interfuel substitution are applied to energy inputs aggregated by their energy use, and separately for thermal heating processes, where interfuel substitution is technologically feasible. Compared to aggregate data, estimated own-price fuel demand elasticities for all fuels and cross-price elasticities for fossil fuels are considerably higher for thermal heating processes. Nonetheless, electricity is found to be a poor substitute for other fuels based on both aggregate data and separately for the heating process. This study also finds that an increase in real fuel prices resulted in higher substitution elasticities based on aggregate data, and lower substitution elasticities for the heating process. The results of counterfactual decomposition of change in the estimated elasticities indicate that technological change was the major determinant of the differences in observed elasticities before and after the energy price increase.

“The Effect of Energy Prices on Operation and Investment in OECD Manufacturing: Evidence from Vintage Capital Model” (with K. Neuhoff, submitted)

This paper analyzes the effect of energy prices on energy efficiency, separately accounting for operational and investment choices in different sectors. Our model incorporates both possibility of substitution between inputs for production (labour, energy and materials), and the potential for more efficient use of these inputs by choosing more efficient technologies at the time of investment. The model is estimated for 19 OECD countries across five manufacturing industries over the period 1990-2005. Vintage representation of capital stock significantly improves the explanatory value of the model at the industry level. Estimated own-price operational elasticities of energy demand vary between 0.26 and 1.00 and are economically sound. Estimated own-price investment elasticities of energy efficiency of capital stock vary between 0.03 and 0.9. The results of policy simulations for the U.K. petrochemical industry (the most energy-intensive industry in the sample) indicate that total own-price elasticity of energy demand is close to one.

“Financial Constraints and Firms' Investment: Results of a Natural Experiment Using Power Interruption” (submitted)

A substantial literature has attempted to measure the relation between deepening of the financial services industry and economic development. Some papers have focused on the effects of deepening on firm investment decisions. Such research is confounded by the general difficulty of modeling the demand for capital. This paper uses a natural experiment in which power outages indicate shifts in the derived demand for investment in private generators. A theoretical model demonstrates that firms with better access to credit are more likely to invest in generators. The analysis of firm-level data from Sub-Saharan Africa confirms the theory. Controlling for other factors, firms with better access to credit are more likely to invest in generators when public power supply fails.

“Effects of Regulation on Prepayment and Default of Subprime Mortgages” (submitted)

This study examines the effects of restrictions on prepayment penalties on prepayments and defaults of subprime mortgages from theoretical and empirical perspectives. The theoretical model suggests that, if lenders substitute points for prepayment penalties, prepayment rates will rise and default rates fall. Empirical results are consistent with predictions of the theoretical model. Controlling for other factors, estimated probabilities of prepayment were higher in the states that have restricted prepayment penalties. Though no definite conclusions could be drawn regarding the effect of state laws on subprime defaults, there is evidence that early defaults decreased as regulation expanded.

“Credit Regulation and the Availability of Subprime Mortgage Credit” (with G. Eliehausen and M. Staten, Economic Inquiry, revise and resubmit)

This study investigates the effects of state predatory mortgage lending laws on the availability of subprime mortgage credit. Using the Rothschild-Stiglitz approach to model credit markets under asymmetric information, restrictions on prepayment penalties are shown to reduce the use and attractiveness of mortgage credit. Consistent with model predictions, empirical results indicate that originations of high-cost mortgages subject to tighter restrictions were generally significantly less than predicted in states with more restrictive laws but that this difference of predicted and actual was not significant in states with less restrictive laws. These differences were not found for originations of non-high-cost loans. Thus credit regulation was differentially associated with reduction in originations of high-cost mortgages and non-high-cost lending did not expand in areas where high-cost mortgages were restricted.

“When Do Firms Generate? Evidence on In-House Electricity Supply in Africa.” (with V. Foster, Energy Economics 2010)

This paper attempts to identify the underlying causes and costs of own generation of electric power in Africa. Rigorous empirical analysis of 8,483 currently operating firms in 25 African countries shows that the prevalence of own generation would remain high (at around 20%) even if power supplies were perfectly reliable, suggesting that other factors such as firms' size, emergency back-up and export regulations play a critical role in the decision to own a generator. The costs of own-generation are about three times as high as the price of purchasing (subsidized) electricity from the public grid. However, because these generators only operate a small fraction of the time, they do not greatly affect the overall average cost of power to industry. The benefits of generator ownership are also substantial. Firms with their own generators report a value of lost load of less than US\$50 per hour, compared with more than US\$150 per hour for those without. Nevertheless, when costs and benefits are considered side by side, the balance is not found to be significantly positive.

“The effect of prepayment penalties on the pricing of subprime mortgages” (with G. Eliehausen and M. Staten, Journal of Economics and Business 2008)

This paper investigates the effect of prepayment penalties on the pricing of subprime residential mortgages. The paper is the first to consider that mortgage price and prepayment penalty may be chosen jointly, making single-equation estimates of the effect of prepayment penalty on price biased. Using a model that accounts for endogeneity of price, loan to value, and prepayment penalty, we find that prepayment penalties are associated with lower loan prices. This finding is important because perceptions that prepayment penalties harm borrowers have led many states to restrict their use, regulation that may reverse the gains in credit availability achieved over the last decade.