Optimization Theme Wisconsin Institute for Discovery

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Degrees

PhD 1987, Stanford University (Operations Research, Supervisor: Alan S. Manne) BS 1977, Yale University. (Engineering and Applied Science)

Experience

The University of Wisconsin, Madision. Professor of Agricultural and Applied Economics, 2012–present.

The Swiss Federal Institute of Techology (ETH), Zürich. Chair in Energy Economics, 2008–2011.

Freelance Professional Economist, 2005–2008.

University of Colorado.

Professor of Economics, 2003-2005.

Associate Professor, 1997–2002.

Assistant Professor, 1992–1996.

University of Western Ontario. Assistant Professor of Economics, 1987–1992.

Yale University. Postdoctoral research associate and lecturer, 1986–1987.

Norwegian School of Economics. Researcher. 1982–1983.

Peace Corps, Nepal. Rural suspension bridge engineer. 1977–1979.

Academic Honours and Awards

GTAP Hall of Fame Award, User Community of the *Global Trade Analysis Project*, 2007.

Daeyang Prize (with Glenn W. Harrison and David G. Tarr), *Journal of Economic Integration*, 1997.

Cowles Foundation Post-Doctoral Research Fellowship, Yale University, 1986. Yale College McCloskey award in mechanical engineering, 1977.

Foreign Languages

Nepali

Articles in Refereed Journals

- Carbon policy and the structure of global trade, with Edward Balistreri and Christoph Böhringer, *The World Economy* 41(1), 194–221, 2018.
- Embodied Carbon Tariffs, with Christoph Böhringer and Jared C. Carbone, *Scandinavian Journal of Economics* 120(1), 183–210, 2018.
- Catastrophic Thresholds, Bayesian Learning And The Robustness Of Climate Policy Recommendations, with Wonjun Chang, *Climate Change Economics* 8(04), 1750014, (2017).
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- GTAPinGAMS: Multiregional and Small Open Economy Models, with Bruno Lanz, *Journal of Global Economic Analysis* 1(2), 1–77, 2016.
- A Traffic Equilibrium Model with Paid-Parking Search, with Renger van Nieuwkoop and Kay Axhausen, *Journal of Transport Economics and Policy*, 50(3), 262–286, 2016.
- The Strategic Value of Carbon Tariffs, with Christoph Böhringer and Jared Carbone, *American Economic Journal: Economic Policy*, 8(1), 28–51, 2016.
- Market Structure and the Environmental Implications of Trade Liberalization: Russia's Accession to the World Trade Organization, with Christoph Böhringer, David Tarr and Natalia Turdyeva, *Review of International Economics* 23(5), 897–923, 2015.
- Sharing the burden for climate change mitigation in the Canadian federation, with Christoph Böhringer, Nicholas Rivers, and Randall Wigle, *The Canadian Journal of Economics* 48 (4), 2015.
- Optimal emission pricing in the presence of international spillovers: decomposing leakage and terms-of-trade motives, with Christoph Böhringer and Andreas Lange, in *Journal of Public Economics* 110, 101–111, 2014.

Clean-development investments: an incentive-compatiable CGE modelling framework, with Christoph Böhringer and Marco Springman,d in *Environmental and Resource Economics*, 60(4), 633–651, 2014.

- Transition Towards A Low Carbon Economy: A Computable General Equilibrium Analysis for Poland, with with Christoph Böhringer, *Energy Policy*, 55, 16–26, 2013.
- Piecewise smooth approximation of bottom-up abatement cost curves, with Olga Kiuila, in *Energy Economics*, 40(c), 734–742, 2013.
- The cost of reducing CO2 emissions: Integrating abatement technologies into economic modeling, *Ecological Economics*, 87(c), 62–71, 2013.
- Subglobal climate agreements and energy-intensive activities: An evaluation of carbon leakage in the copper industry, with Bruno Lanz and John Tilton, in *The World Economy* 36(3):254–279, 2013.
- Services Liberalization in the Regions of Russia under WTO Accession: Regional Household and Poverty Effects, with David Tarr, *International Journal of Services and Economic Management* 17:(2/3/4), 181–204, 2012.
- Green jobs and renewable electricity policies: employment impacts of Ontario's feed-in tariff, with Christoph Böhringer, Nicholas J. Rivers and Randall Wigle in *The Berkley Electronic Journal of Economic Analysis & Policy*, 12(1), 1–38, 2012.
- The role of border carbon adjustment in unilateral climate policy: overview of an energy modeling forum study (EMF 29), with Edward J. Balistreri and Christoph Böhringer, *Energy Economics* 34 (Supplement 2), S95–S250, 2012.
- Subglobal carbon policy and the competitive selection of heterogeneous firms, with Edward J. Balistreri, *Energy Economics* 34 (Supplement 2), S190–S197, 2012.
- Unilateral climate policy design: efficiency and equity implications of alternative instruments to reduce carbon leakage, with Christoph Böhringer and Jared Carbone, *Energy Economics* 34 (Supplement 2), S208–S217, 2012.
- Structural estimation and solution of international trade models with heterogeneous firms, with Edward J. Balistreri and Russell H. Hillberry, *Journal of International Economics*. 83 (2), 95–104, 2011.
- Modeling Services Liberalization: The Case of Tanzania, with Jesper Jensen and David G. Tarr, *Journal of Economic Integration*, 25 (4), 644-675, 2010.
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- Computation of equilibria in OLG models with many heterogeneous households, with Sebastian Rausch, *Computational Economics*. 36 (2), 171–189, 2010.
- The efficiency of fiscal measures in preventing out-migration from North Finland, with Hannu Törmä, *Regional Studies*. 44(4), 465–475, 2010.

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- Technological Change and Uncertainty in Environmental Economics, with Christoph Böhringer and Tim Mennel, Editorial, *Energy Economics*, 31(Supplement 1), S1-S3, 2009.
- The costs of compliance: a CGE assessment of Canada's policy options under the Kyoto Protocol, with Christoph Böhringer, *The World Economy*, 33(2), 177–211, 2009.
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- Feasible climate targets: The roles of economic growth, coalition development and expectations, with Geoffrey J. Blanford and Richard G. Richels, *Energy Economics*, 31(2):S82–S93, 2009.
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- Decomposing integrated assessment of climate change, with Christoph Böhringer and Andreas Löschel, *The Journal of Economic Dynamics and Control* 31:683–702, 2007.
- The importance of telecommunications reform in Russia's accession to the WTO, with Jesper Jensen and David Tarr. *Eastern European Economics* 44(1):25–58, 2006.
- The economic effects of border measures in subglobal climate agreements, with Mustafa H. Babiker, *The Energy Journal* 26(4):101–128, 2005.
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- Regional, multilateral and unilateral trade policies of Mercosur for growth and poverty reduction in Brazil, with Glenn W. Harrison, David Tarr and Angelo Gurgel. *The World Bank Economic Review* 18(4):289–317, 2004.
- Modeling overlapping generations in a complementarity format, with Tobias N. Rasmussen. *Journal of Economic Dynamics and Control* 28(7):1383–1409, 2004.
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- Quantifying the Uruguay round, with Glenn W. Harrison and David Tarr. *Economic Journal* 107, 1405–1430, 1997.
- Opciones de política comercial para Chile: una evaluación cuantitiva, with Glenn W. Harrison and David Tarr. *Cuadernos de Economía* 101–137, 1997.
- Economic implications for Turkey of a customs union with the European Union, with Glenn W. Harrison and David Tarr. *European Economic Review* 41(3-5):861–870, 1997.

Morocco's free trade agreement with the EU: a quantitative assessment, with David Tarr and Elizabet Rutström. *Economic Modelling* 14(2):237–269, 1997.

- Carbon taxes with exemptions in an open economy: a general equilibrium analysis of the German tax initiative, with Christoph Böhringer. *Journal of Environmental Economics and Management* 32(2):189–203, 1996.
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- Unilateral CO_2 reductions and carbon leakage: the effect of international trade in oil and basic materails, with Stefan Felder. *Journal of Environmental Economics and Management* 25(2):162–176, 1993.
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- An empirical database for a general equilibrium model of the European communities, with Glenn W. Harrison and Ian Wooton. *Empirical Economics* 16:95–120, 1991.
- Capitalization, conditionality and dilution: land prices and the U.S. wheat program, with John Whalley and Randy Wigle. *Journal of Policy Modelling* 12(3):605–622, 1990.
- Vemod: a model of world trade, with Jan Haaland, Victor Norman, and Tor Wergeland. *Scandinavian Journal of Economics* 89(3):705–721, 1987.

Articles in Edited Volumes and Proceedings

- Computing General Equilibrium Theories of Monopolistic Competition and Heterogeneous Firms, with Edward J. Balistreri in *Handbook of Computable General Equilibrium Modeling* (ISBN: 9780444595683), Peter B. Dixon and Dale W. Jorgenson (eds.), Elsevier, 1513–1570, 2012.
- Solution Software for Computable General Equilibrium Modeling, with Mark Horridge, Alex Meeraus and Ken Pearson in *Handbook of Computable General Equilibrium Modeling* (ISBN: 9780444595683), Peter B. Dixon and Dale W. Jorgenson (eds.), Elsevier, 1331–1381, 2012.
- Introduction to the EMF 29 special issue on the role of border carbon adjustment in unilateral climate policy with Christoph Böhringer, Edward J. Balistreri, and John Weyant, in *Energy Economics* 34 (Supplement 2), S95–S96, 2012.

Revised emissions growth projections for China: why post-Kyoto climate policy must look east, with Geoffrey J. Blanford and Richard G. Richels, in *Post-Kyoto International Climate Policy: Implementing Architectures for Agreement*, Robert Stowe and Robert Stavins (eds.), Cambridge University Press, 822–856, 2010.

- Extending general equilibrium to the tariff line: U.S. dairy in the Doha development agenda, with Jason H. Grant and Thomas W. Hertel, in *Contributions of Agricultural Economics to Critical Policy Issues*, International Association of Agricultural Economists, 271–280, 2007.
- The Impact on Russia of WTO Accession and The Doha Agenda: the importance of liberalization of barriers against foreign direct investment in services for growth and poverty reduction, with David Tarr and Oleksandr Shepotylo, in L. Alan Winters (ed.), *The WTO and Poverty and Inequality*, Edgar Elgar Publishing, Cheltenham, UK, 2007.
- Taxation and Economic Efficiency in Armenia, with Miles Light, in *The Caucasian Tiger Sustaining Economic Growth in Armenia*, The World Bank, Washington, D.C., 243–282, 2007.
- Russia's Accession to the WTO: Macroeconomic, Sector, Labor Market and Household Effects, with David Tarr, in David Tarr (ed.), *Trade Policy and Accession to the WTO for Development of Russia and Countries of the CIS, A Handbook*, Ves Mir, Moscow, (World Bank Institute), 2006.
- Efficiency gains from "what"-flexibility in climate policy an integrated CGE assessment, with Christoph Böhringer and Andreas Löschel, in *Multi-Greenhouse Gas Mitigation and Climate Policy, The Energy Journal Special Issue #3*, 402–424, 2006.
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- Equity and efficiency costs of raising tax revenue in Colombia, with Miles K. Light. In *Fiscal Reform in Colombia, Problems and Prospects*, Richard M. Bird, James M. Poterba and Joel Slemrod editors, MIT Press, 2005.
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- Tax policy in a computable model of economic and political equilibrium, with Stanley Winer. In *Democratic Choice and Taxation*, Walter Hettich and Stanley L. Winer, Cambridge University Press, 153–192, 1999.

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