

COMMITTEE ON NATURAL RESOURCES
114th Congress Disclosure Form
As required by and provided for in House Rule XI, clause 2(g)(5)

"An Analysis of the Obama Administration's Social Cost of Carbon"

July 22, 2015

For Individuals:

Name: Kevin Davaratna
Address: [REDACTED] Washington DC 20002
Email Address: [REDACTED]
Phone Number: [REDACTED]

For Witnesses Representing Organizations:

Name:
Name of Organization(s) You are Representing at the Hearing:
Business Address:
Business Email Address:
Business Phone Number:

For Nongovernment Witnesses ONLY:

1. Please attach/include current curriculum vitae or resume.
2. Please list any federal grants or contracts (including subgrants or subcontracts) related to the subject matter of the hearing that were received in the current year and previous two calendar years by you or the organization(s) you represent at this hearing, including the source and amount of each grant or contract.

None

3. Please list any contracts or payments originating with a foreign government related to the subject matter of the hearing that were received in the current year and previous two calendar years by you or the organization(s) you represent at this hearing, including the amount and country of origin of each contract or payment.

None

Kevin D. Dayaratna, Ph.D.

Education:

University of Maryland, College Park

Ph.D. in Mathematical Statistics (2014)

- Dissertation title: “Contributions to Bayesian Statistical Modeling in Public Policy Research”
- Adviser: Professor Benjamin Kedem
- Specialty in Bayesian modeling, statistical computing, and economic modeling
- Passed doctoral qualifying exams in Mathematical Statistics, Applied Statistics, and Probability Theory

University of Maryland, College Park

M.A. in Mathematical Statistics (2011)

- Specialty in statistical modeling of real-world phenomena including economics, business, medical outcomes, and professional sports

University of Maryland, College Park

M.S. in Business and Management (2008)

- Specialty in statistical modeling in business and economics
- Winner, Dean’s Summer Fellowship

University of California, Berkeley

B.A. in Applied Mathematics (2005)

- Specialty in mathematical physics
- Significant coursework in Political Science

Experience:

The Heritage Foundation, Washington D.C.

- Senior Statistician and Research Programmer, Center for Data Analysis (June 2014-Present)
 - Updating and refining Heritage Energy Model for understanding the economic impact of various energy policies
 - Researching improvements to Bayesian computation
 - Developed and updated Heritage Foundation Individual Income Tax model, a viable alternative to the CBO’s and JCT’s models, to quantify the effects of various tax policy changes.
 - Performed further sensitivity analysis on Integrated Assessment Models used for estimating the social cost of carbon.
- Research Programmer and Policy Analyst, Center for Data Analysis (January 2013-June 2014)
 - Performed sensitivity analysis on Integrated Assessment Models used for estimating the social cost of carbon.

- Instituted and actively used the Heritage Energy Model, a derivative of the Department of Energy's National Energy Modeling System to quantify the effects of changes in energy policy on the economy
- Used Heritage Foundation Individual Income Tax model to quantify the effects of various tax policy changes
- Research Associate, Center for Data Analysis (September 2012-December 2012)
 - Researched competitive markets in health care with Center for Data Analysis Assistant Director and Research Fellow Rea Hederman
 - Statistically analyzed AFDC and TANF caseloads with Senior Fellow Robert Rector
- Graduate Fellow in Health Policy (May 2012-August 2012)
 - Researched competitive markets in health care with Center for Data Analysis Assistant Director and Research Fellow Rea Hederman
 - Researched comparisons of health outcomes between Medicaid and private insurance
 - Statistically analyzed income inequality data with Senior Fellow Robert Rector
- Intern (January-May 2012)
 - Published five articles on health policy for the Heritage Foundation's *Foundry* on the impact of the Affordable Care Act and market-oriented ways to reform the system
 - Statistically analyzed complicated data sets for welfare/poverty research with Senior Fellow Robert Rector
 - Evaluated and critiqued existing risk adjustment models for Center for Health Policy Studies and Center for Data Analysis

Mathematics Department, The George Washington University

- Lecturer (2015)
 - Currently teaching second semester calculus

Economics Department, University of Maryland

- Lecturer (2014)
 - Taught Computer Methods in Economics (Statistical Computing for Economics Majors)
- Lecturer (2011-2013)
 - Taught Economic Statistics (Statistics for Economics Majors)

Solon Capital - Princeton NJ

- Summer Intern (2010)
 - Worked on computational finance, developed algorithmic trading routines, backtested models on past data

Mathematics Department, University of Maryland

- MATLAB Teaching Assistant (2009-2013)
 - Taught MATLAB mathematical/statistical programming to hundreds of students at the University of Maryland taking math, science, and engineering classes

Investors Capital - New York, NY

- Summer Intern (2009)
 - Helped create and manage customer relationships

Robert H. Smith School of Business, University of Maryland

- Research Assistant (2005-2008)
- Instructor, BMGT 452 Marketing Research (Fall 2007)

Programming Skills:

Highly Proficient in Matlab, R, Winbugs, Stata, Mathematica, Excel VBA, C++, and Intel Visual Fortran

Interests, Activities, Hobbies:

Former Theta Chi Fraternity member, Avid Tennis Player/Enthusiast

Selected Publications:

“Time to End the Federal Subsidy for High Tax States” (with Rachel Greszler) Heritage Foundation Backgrounder. March 26, 2015.

<http://www.heritage.org/research/reports/2015/03/time-to-end-the-federal-subsidy-for-high-tax-states>

“The Obama Administration’s Climate Agenda Will Hit Manufacturing Hard: A State-by-State Analysis” (with Nick Loris and David Kreutzer) Heritage Foundation Backgrounder. February 17, 2015.

<http://www.heritage.org/research/reports/2015/02/the-obama-administrations-climate-agenda-will-hit-manufacturing-hard-a-state-by-state-analysis>

“The Obama Administration’s Climate Agenda Will Hit Manufacturing Hard: A State-by-State Analysis” (with Nick Loris and David Kreutzer) Heritage Foundation Backgrounder. November 13, 2014.

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<http://www.heritage.org/research/reports/2014/11/the-obama-administrations-climate-agenda-underestimated-costs-and-exaggerated-benefits>

“Social Cost of Carbon Statistical Modeling is Smoke and Mirrors” (with David Kreutzer) *Natural Gas and Electricity*. July 2014. 7-11.

“Unfounded Fund: Yet Another EPA Model Not Ready for the Big Game” (with David Kreutzer) Heritage Foundation Backgrounder. May 16, 2014.

<http://www.heritage.org/research/reports/2014/04/unfounded-fund-yet-another-epa-model-not-ready-for-the-big-game>

“Compelling Evidence Makes the Case for a Market-Driven Health Care System” (with Jim Capretta) Heritage Foundation Backgrounder. December 20, 2013.

<http://www.heritage.org/research/reports/2013/12/compelling-evidence-makes-the-case-for-a-market-driven-health-care-system>

“EPA Power Plant Regulations: A Backdoor Energy Tax” (with Nick Loris and David Kreutzer). December 5, 2013. <http://www.heritage.org/research/reports/2013/12/epa-power-plant-regulations-a-backdoor-energy-tax>

“Loaded DICE: An EPA Model Not Ready for the Big Game” (with David Kreutzer) Heritage Foundation Backgrounder. November 21, 2013.

<http://www.heritage.org/research/reports/2013/11/loaded-dice-an-epa-model-not-ready-for-the-big-game>

“Heritage Contributes to the Reopening of the White House's Social Cost of Carbon Discussion” (with David Kreutzer) Heritage Foundation Foundry. November 6, 2013.

<http://blog.heritage.org/2013/11/06/white-house-reopens-the-scc/>

“Scrutinizing the Social Cost of Carbon: Comment to the Energy Department”(with David Kreutzer) Heritage Foundation Foundry. September 16, 2013.

<http://blog.heritage.org/2013/09/16/scrutinizing-the-social-cost-of-carbon-comment-to-the-energy-department/>

“Competitive Markets in Health Care: The Next Revolution” Heritage Foundation Backgrounder #2833. August 19, 2013

<http://www.heritage.org/research/reports/2013/08/competitive-markets-in-health-care-the-next-revolution>

“Cost of a Climate Policy: The Economic Impact of Obama’s Climate Action Plan” (with David Kreutzer and Nick Loris) Heritage Foundation Issue Brief #3978. June 27, 2013. <http://www.heritage.org/research/reports/2013/06/climate-policy-economic-impact-and-cost-of-obama-s-climate-action-plan>

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“Obama Climate Change Plan: War on Coal Would Hike Natural Gas Prices 42 Percent” (with David Kreutzer and Nick Loris) Heritage Foundation Foundry. June 25, 2013. <http://blog.heritage.org/2013/06/25/obama-climate-change-plan-war-on-coal-would-hike-natural-gas-prices-42-percent/>

“Obama’s ‘War on Coal’ Hits American Families Hard” (with David Kreutzer and Nick Loris) Heritage Foundation Foundry. June 24, 2013. <http://blog.heritage.org/2013/06/24/obamas-war-on-coal-hits-american-families-hard/>

“Boxer–Sanders Carbon Tax: Economic Impact.” *Heritage Foundation Issue Brief #3905*. (with David Kreutzer) April 11, 2013. <http://www.heritage.org/research/reports/2013/04/boxer-sanders-carbon-tax-economic-impact>

“Studies Show: Medicaid Patients Have Worse Access and Outcomes than the Privately Insured.” *Heritage Foundation Backgrounder #2740*. November 7, 2012. <http://www.heritage.org/research/reports/2012/11/studies-show-medicaid-patients-have-worse-access-and-outcomes-than-the-privately-insured>

-Study mentioned by the American Medical Association, OneNewsNow.com, National Center for Policy Analysis, Alabama Policy Institute, and Montana Policy Institute

“The Pythagorean Won Loss Formula and Hockey.” (with Steven J. Miller) Forthcoming in *The Hockey Research Journal: A Publication of the Society of International Hockey Research*.

“A Mathematical Reformulation of the Reference Price.” (with P.K. Kannan) *Marketing Letters*. 23(3), 839-849

“First Order Approximations of the Pythagorean Won-Loss Formula for Predicting MLB Teams Winning Percentages.” (with Steven J. Miller) *By the Numbers* of the *Society for American Baseball Research Statistical Committee*. May 2012. http://web.williams.edu/go/math/sjmiller/public_html/math/papers/DM_LinPythag_App.pdf

“Medicare Reform Debate: What Really Works in Health Care Competition.” *Heritage Foundation Foundry*. September 13, 2012. <http://blog.heritage.org/2012/09/13/medicare-reform-debate-what-really-works-in-health-care-competition/>

“The Impact of Obamacare Video Series.” *Heritage Foundation Foundry*. February 29, 2012. <http://blog.heritage.org/2012/02/29/the-impact-of-obamacare-video-series/>

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“Turner Lays Out the Case Against Obamacare.” *Heritage Foundation Foundry*. February 20, 2012. (with Kathryn Nix) <http://blog.heritage.org/2012/02/20/turner-lays-out-the-case-against-obamacare/>

“Health Care Expert Sally Pipes on Repealing, Replacing Obamacare.” *Heritage Foundation Foundry*. February 17, 2012. (with Alyene Segner) <http://blog.heritage.org/2012/02/17/health-care-expert-sally-pipes-on-repealing-replacing-obamacare/>

“Cato’s Michael Tanner Visits Heritage to Talk Obamacare’s Bad Medicine.” *Heritage Foundation Foundry*. February 15, 2012. (with Alyene Segner) <http://blog.heritage.org/2012/02/15/catos-michael-tanner-visits-heritage-to-talk-obamacares-bad-medicine/>

“Side Effects: Obamacare Encourages Employers to Drop Coverage for Sick Workers.” *Heritage Foundation Foundry*, February 8, 2012. (with Kathryn Nix) <http://blog.heritage.org/2012/02/08/obamacare-encourages-employers-to-drop-coverage-for-sick-workers/>

“Closed Form Bayesian Inferences for the Logit Model Via Polynomial Expansions.” (with Steven J. Miller and Eric Bradlow) *Quantitative Marketing and Economics* 4(2), 173-206

Selected Work in Progress:

“A Probabilistic Examination of the Efficacy of Tort Reform via Bayesian Semiparametric Density Ratio Modeling” (with Benjamin Kedem). Preparing for resubmission after one round of review to *Statistical Modelling: An International Journal*

References:

Professor Steven J. Miller. Associate Professor of Mathematics and Statistics. Williams College. steven.j.miller@williams.edu, 413-597-3293

Professor P.K. Kannan, Ralph J. Tyser Professor of Marketing Science, Robert H. Smith School of Business, University of Maryland, pkannan@rhsmith.umd.edu, 301-405-2188

Professor Benjamin Kedem, Professor of Mathematics, University of Maryland, bnk@math.umd.edu, 301-405-5112

Citizenship:

U.S.