DEVIN INCERTI

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EDUCATION

Princeton University, Woodrow Wilson School of Public & International Affairs

Ph.D. Pubic Affairs (Political Economy)   2015
Dissertation: "Essays in Health Economics and Political Economy"
M.A. Public Affairs   2013

University of California, San Diego
magna cum laude

B.A. Mathematics and Economics   2009
B.A. Political Science (with highest honors)   2009

RESEARCH INTERESTS

Public policy, health economics, political economy, demography, quantitative methods

JOB MARKET PAPER

An Assessment of Long-term Healthcare Expenditure Risk Using a Dynamic Bayesian Model
Studies have shown that healthcare expenditures are highly concentrated, difficult to predict, and create considerable financial burdens for many Americans in a single year. However, much less is known about spending over longer periods, even though it is critical for evaluating the implications of different forms of health insurance. This paper uses 16 years of longitudinal data from the Health and Retirement Survey to estimate a Bayesian model of spending and mortality, which is then used to analyze out-of-pocket expenditures that accumulate over an individual's lifetime. Out-of-pocket expenditures remain highly unequal over extended periods as the top 5 percent of spenders account for 38 percent of all spending over a 16-year timeframe and 28 percent of simulated spending over 26 years. Long-term out-of-pocket costs are also often high relative to income, especially for the poor. Finally, most of the variation in long-term out-of-pocket expenditures is due to transitory shocks and unobserved heterogeneity, and only about 10 percent of the variation is explainable; welfare calculations consequently suggest gains from further reductions in financial risk, but these must be weighed against efficiency losses due to moral hazard.

WORKING PAPERS

- *Racial, Ethnic and Educational Disparities in Pharmaceutical Expenditures*
  Identified differences in prescription drug use as a potential mechanism for racial/ethnic and educational disparities in health outcomes. Showed that disparities occur due to differences in both diagnosis rates and use conditional on diagnosis. Estimated that less than 30 percent of differences can be attributed to access-related factors like income and insurance status.

- *The Optimal Allocation of Campaign Funds in House Elections*
  Calculated optimal campaign strategies for the Democratic and Republican parties by estimating an expected utility model using Bayesian state-space forecasts of House elections. Showed that parties pursue strategies consistent with seat maximization rather than maximizing their probability of winning a majority of seats.

- *Political Instability and Firm Performance: Evidence from Financial Markets*
  Used event studies and time series models to quantify the effect of political instability on stock prices.

WORKS IN PROGRESS

- *The Effect of Medicare Part D on Mortality*

PROFESSIONAL EXPERIENCE

Precision Health Economics, Oakland, CA
Associate Research Economist   2016
Research Economist Intern   2015 - 2016

NERA Economic Consulting, Los Angeles, CA
Research Associate   2009 - 2010

- Conducted economic research in litigation matters under short deadlines with a particular focus on healthcare and life science firms.

- Analyzed and cleaned large datasets; extensive use of Stata and Excel.

TEACHING

Princeton University, Princeton, NJ
Teaching Assistant   2013 - 2014

- Led 6 sections in statistics courses over 2 semesters.

- Reviewed statistical concepts from lectures and taught students how to use R and Stata.

- Students noted my ability to explain complex concepts simply.

PROJECTS

Data Analytics Website   2015

- Portion of my personal website that contains analyses with fully integrated code showing how to implement a number quantitative techniques for applied purposes.

- Examples include machine learning algorithms to predict high spending diabetes patients, Bayesian hierarchical models to capture heterogeneity and uncertainty in health expenditures, and mathematical models for cost-effectiveness analysis.

R Shiny App for Skeletal Dysplasias   2015

- Partnered with UCSF physicians to create an R Shiny app that aids diagnosis of skeletal dysplasias based on clinical features. Currently available at `http://skeletor.radiology.ucsf.edu`.

HONORS AND AWARDS

Centennial Fellowship, Princeton University   2010 - 2015

The Award for Excellence in Joint Mathematics-Economics granted to the most outstanding   2009
graduating Senior in Joint Mathematics-Economics, UCSD Department of Economics

DeWitt Higgs Award granted to the outstanding graduating Senior in the area of law   2009
and public policy, UCSD Department of Political Science

Michael Addison Award for the most outstanding Senior research paper, Warren College   2009
(graduating class of 950 students)

Warren College Honors Program   2005 – 2009

SKILLS AND INTERESTS

Computing	Experienced: R, Stata, LATEX, Excel Some experience: Python, MySQL, Stan, JAGS, HTML
Statistics	Bayesian statistics, machine learning, multilevel models, forecasting/prediction, time series, causal inference, data visualization
Athletics	UCSD Varsity Baseball Letterman, shortstop and centerfield, 2004 – 2006