Yiwei Wang

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Dyson School of Applied Economics and Management

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EDUCATION

Cornell University, Dyson School of Applied Economics and Management   Ithaca, NY
Ph.D in Applied Economics   May 2016 (expected)

- Fields: Applied Econometrics and Quantitative Analysis, Environmental Economics and Policy, Economics of Transportation, Public Finance.
- Dissertation: "The economics of environmental and transportation policy"
- Committee: William Schulze (Chair), Shanjun Li, Ricardo A Daziano

University of Michigan, Gerald R. Ford School of Public Policy   Ann Arbor, MI
Master of Public Policy   May 2009

Fudan University   Shanghai, China
Bachelor of Science, Biology   June 2002

AWARDS

Richard D. Aplin Teaching Excellence Fund	2013, 2014, 2015
Neil Staebler Fund for Political Education, University of Michigan	2008
Ford School Award, Ford School of Public Policy, University of Michigan	2007, 2008

WORKING PAPERS

"The Impact of the CAFE Standards on Automobile Innovation in the US"
Abstract:

The Obama administration seeks to tighten the fuel economy standards in the US and the target is to almost double the miles per gallon (MPG) of vehicles by 2025 compared to that of 2010. With this new aggressive movement, there is an ongoing discussion about whether auto makers could meet the new standards without providing consumers with vehicles that are much lighter and less powerful. In this paper, I investigate how historical changes in the fuel economy standards impacted innovation in the automobile industry and estimate the induced innovation in response to the changes in the standards. By decomposing innovation growth into natural growth and standard induced growth, I not only show that standard changes can induce innovation but also quantify the induced innovation with respect to the rate of changes in standards. I also estimate that with the induced innovation, automakers can meet the new 2025 target with modest changes in vehicle attributes in cars and small changes in trucks. Such method can provide a more precise prediction of future innovation under new performance standards.

"Introducing a VMT tax: Potential Impacts on Vehicle Choices and Usage"
Abstract:

In this paper, I use vehicle attribute data and NHTS data to study households' vehicle usage in response to fuel cost changes depending on the types of vehicles in households. I first assess households' sensitivity of miles driven with respect to the changes in their driving costs, which includes fuel costs

and taxes. I then simulate the effect of a uniform VMT tax structure that does not discriminate vehicle type and would generate the same amount of tax revenue as a gasoline tax does. My results suggest that households respond to fuel cost changes differently depending on their revealed vehicle choices and number of vehicles owned in a household. A uniform VMT tax replacing gasoline tax would decrease the use of high MPG vehicles and increase the use of SUVs. A VMT tax would also affect households' choice of new vehicle purchases in the long run. In particular, high MPG vehicles, including hybrid and electric vehicles (EV), would become less attractive in terms of driving costs. This research aims to inform the ongoing policy discussion on using a VMT tax as an infrastructure funding mechanism to offset the losses of revenue generated from gasoline taxes, due to increasingly fuel-efficient vehicles. This issue has become particularly urgent, as the current CAFE standards set by the Obama administration which seek to almost double the MPG of vehicles by 2025 are expected to further bolster the usage of fuel-efficient vehicles.

PAPERS IN PROGRESS

"Weight Dispersion of New Vehicles Induced by Tight Standards: Cars that Kill" (with Antonio Bento (USC), Kevin Roth (UC Irvine), Kenneth Gillingham (Yale))

"Gasoline Tax Incidence among different income groups in the US" (with Antonio Bento (USC), Benjamin Leard (RFF))

PRESENTATIONS

2015 Agriculture & Applied Economics Association (AAEA) & Western Agricultural Economics
     Association (WAEA) Joint Annual Meeting, San Francisco,   CA, July 2015
Association of Environmental and Resource Economists Summer Conference, San Diego, CA, June 2015
Association for Public Policy Analysis and Management Fall Conference, Albuquerque,   NM, Nov 2014

TEACHING EXPERIENCE

Behavioral Economics (Cornell AEM 4140)	2010, 2011, 2012, 2014, 2015
Strategic Pricing (Cornell AEM 4160)	2011, 2012
Introduction to Business Regulation (Cornell AEM 3310)	2015

MEMBERSHIP

American Economic Association (AEA)
Association for Public Policy Analysis and Management (APPAM)
Association of Environmental and Resource Economists (AERE)

PROFESSIONAL EXPERIENCE

Municipal Analytics   Ann Arbor, MI
Consultant   July 2009-April 2010
- Developed analytical decision-making tools for local-level public financial management.

Detroit Department of Health & Wellness Promotion   Detroit, MI
Public Health Policy Intern   May 2008-July 2008
- Reviewed the City of Detroit public health code and made updating recommendations.
- Conducted public health policy analysis using quantitative methods including matrix and statistics.

Shanghai Foson Pharmaceutical Development Co., Ltd   Shanghai, China
  Researcher & Technical Support Specialist   Oct 2002- June 2007
  - Diagnosis reagent product development.
  - Provided technical support to hospitals and government users.

SKILLS
  Languages: English (proficient), Chinese (native)
  Computer Applications: STATA, R, Matlab, SAS

PERSONAL INFORMATION
  Gender: Male
  Citizenship: China

REFERENCES
  Prof. William Schulze (Chair)
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  Cornell University
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  Prof. Shanjun Li
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  Cornell University
  Phone: (607) 255-1832
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  Prof. Ricardo A Daziano
  School of Civil and Environmental Engineering
  Cornell University
  Phone: (607) 255-2018
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PROESSIONAL REFERENCES
  John Kaczor
  Founder and Principal Consultant
  Municipal Analytics, Ann Arbor, Michigan
  Phone: (734) 623-8033
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