

# JACOB BRADT

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# HARVARD UNIVERSITY

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## Education

### Harvard University

Ph.D. Public Policy, 2018 to 2024 (expected)

A.B. Environmental Science and Public Policy with a Secondary in Economics, 2016

## Fields

Primary: Environmental Economics

Secondary: Industrial Organization

## References

Professor Joseph E. Aldy  
617-496-7213, joseph\_aldy@hks.harvard.edu

Professor Myrto Kalouptsi  
617-496-0832, myrto@g.harvard.edu

Professor Ariel Pakes  
617-495-5320, apakes@fas.harvard.edu

Professor Robin S. Lee  
617-495-2997, robinlee@fas.harvard.edu

## Fellowships & Awards

2018 to present     Harvard Environmental Economics Program Pre-Doctoral Fellow  
2022     Pre-Doctoral Fellowship on Carbon Pricing and Alternative Instruments in  
Future U.S. Energy and Climate Policy, Harvard University  
2021     Vicki Norberg-Bohm Fellowship, Harvard University  
2020, '21, '22     Certificate of Teaching Excellence, Derek Bok Center, Harvard University  
2016     Harvard Environmental Economics Program Prize for Best Thesis

## Teaching

August 2022     Ph.D. Math Camp Instructor, Harvard Public Policy, Health Policy, and  
Business Administration Programs  
Spring 2021, '22     Economics of Climate Change and Environmental Policy, Harvard University,  
teaching fellow for Professor Robert N. Stavins  
Fall 2020, '21     American Economic Policy, Harvard University, teaching fellow for  
Professors Jeffrey Liebman and Larry Summers  
Fall 2020, '21, Spring 2021     Climate Change Policy: Economics and Politics, Harvard Kennedy School,  
Executive Education Program, teaching fellow for Professor Robert N. Stavins

## Employment

2016 to 2018     Booz Allen Hamilton  
2015     White House Council on Environmental Quality  
2014     U.S. Environmental Protection Agency, National Center for Environmental  
Economics

## Research

2019 to 2020     Wharton Risk Management and Decision Processes Center, University of  
Pennsylvania, research assistant to Dr. Carolyn Kousky

## Job Market Paper

### A Policy by Any Other Name: Unconventional Industrial Policy in the US Residential Solar Industry

Consumer subsidies are a common policy tool for supporting the adoption of clean, energy-efficient technologies as illustrated by the Inflation Reduction Act of 2022. In addition to increasing take-up of new technologies, policymakers often justify consumer subsidy programs as a means of stimulating

infant industries, arguing that the presence of learning-by-doing and inter-firm knowledge spillovers reduce barriers to entry. This argument ignores the fact that potential knowledge transfers also make cost reductions—in part—a public good, thereby reducing the incentives for firms to expand output, reduce costs, and lower potential barriers to entry. To explore these tradeoffs, I estimate a dynamic structural model of the market for residential solar PV installations in California that endogenizes installation firms' entry and exit decisions and allows for learning-by-doing (LBD) with incomplete spillovers. I estimate that a 1% increase in a firm's experience leads to a 0.5% reduction in installation-specific costs and that industry experience is approximately 85% as effective at reducing costs as appropriable, own-firm experience. I use the model to determine the effect of several state and federal consumer subsidy programs on PV installer market structure and find that these programs can increase installer entry by as much as 20%.

## Publications

**Bradt, J.T.**, C. Kousky and O.E.J. Wing. 2021. "Voluntary Purchases and Adverse Selection in the Market for Flood Insurance." *Journal of Environmental Economics and Management*, 110.

Stock, J.H. and **J.T. Bradt**. 2020. "Analysis of Proposed 20-year Mineral Leasing Withdrawal in Superior National Forest." *Ecological Economics*, 174.

Keenan, J.M. and **J.T. Bradt**. 2020. 'Underwaterwriting: From Theory to Empiricism in Regional Mortgage Markets in the US.' *Climatic Change*, 162: 2043-2067.

**Bradt, J.T.** 2019. "Comparing the Effects of Behaviorally Informed Interventions on Flood Insurance Demand: An Experimental Analysis of 'Boosts' and 'Nudges.'" *Behavioural Public Policy*, 6(3): 485-515.

## Working Papers

Private Benefits from Public Investment in Climate Adaptation and Resilience (w/ Joseph E. Aldy)

Flood protection infrastructure investments, such as Army Corps of Engineer levees, can enhance resilience to flood risks amplified by climate change. We estimate the benefits from levees by exploiting repeat residential property transactions. In areas protected by levees, home values increase 3 percent. Levees impose adverse spillover flood risks to nearby areas that reduce affected home values by 1 percent. Capitalized benefits in protected areas are progressive, but adverse spillover impacts are regressive. While there is little variation across race in capitalized benefits at levee construction, racial sorting occurs post-construction. Capitalized residential property benefits do not exceed levee construction costs.

## Papers in Progress

Two Birds, Two Stones" Complementarities and Optimal Targeting of Electric Vehicle and Solar PV Subsidies (w/ Frank Pinter)

Increasing the Adoption of Rooftop Solar in Madhya Pradesh (w/ Teevrat Garg and Meera Mahadevan)

Spatial Sorting, Agglomeration Economies, and Travel Cost Endogeneity in Recreation Demand Models

Clearing the Air: The Welfare Effects of the Clean Air Act's Regional Haze Rule

Hashtags for Hotelling: User-generated Social Media Data and Recreation Demand Models

## Seminars & Conferences

2023 National Bureau of Economic Research (NBER) Environmental and Energy Economics Summer Institute; Columbia University Managed Retreat Conference; Association of Environmental and Resource Economists (AERE) Summer Conference; University of California (UC) Virtual Environmental Economics Seminar; UC San Diego; Stanford University; Department of the Treasury; American Economic Association (AEA) Annual Meeting

	2022	The Workshop in Environmental Economics and Data Science (egg timer); Northeast Workshop on Energy Policy and Environmental Economics (egg timer); AERE Summer Conference
	2021	AERE Summer Conference; First Street Foundation Flood Lab
	2020	Federal Housing Finance Authority
<b>Academic Service</b>		Referee for: Environmental & Resource Economics, Climate Risk Management, Behavioural Public Policy, Natural Hazards, Economic Inquiry
		Co-organizer of Harvard Environmental Economics Graduate Research Lunch, 2020-2022
<b>Memberships</b>		American Economic Association, Association of Environmental and Resource Economists
<b>Software skills</b>		R, Julia, Stata, Matlab, LaTeX
<b>Personal information</b>		US Citizen, Married