## CAROLINE ANNE HOPKINS

# CONTACT

4765 Forbes Ave Pittsburgh, PA 15213 | 302-229-3577 | chopkins@andrew.cmu.edu

Website: <a href="https://sites.google.com/view/carolinehopkins/">https://sites.google.com/view/carolinehopkins/</a>

## **EDUCATION**

Carnegie Mellon University, Pittsburgh, PA

Ph.D. in Economics Expected 2021

M.S. in Economics 2017

Washington and Lee University, Lexington, VA

B.A. in Economics 2012

### TEACHING AND RESEARCH FIELDS

Applied Microeconomics, Environmental Economics, Public Economics, Urban Economics

## RESEARCH

#### PUBLISHED:

Hopkins, Caroline A. "Convergence bids and market manipulation in the California electricity market" *Energy Economics*, Volume 89, June 2020

#### WORKING PAPERS:

"Flood Hazard Mitigation and the Role of Government: A Dynamic Model of Local Government Investment in a Public Good"

Job Market Paper

Federal and local government policies are often interdependent, and therefore changes in one can have significant implications for the other. I study this interdependency in the context of flood hazard mitigation. I first consider the local government's decision to invest in hazard mitigation. To this end, I estimate a homeowner's marginal willingness to pay for the local government's flood hazard mitigation actions and flood insurance based on housing sales in New Jersey from 1998 to 2018. I then use a dynamic discrete choice model of the local government's investment decision to estimate their costs. I find that the spillover effects from mitigation are positive, insurance discounts are valued more than the actual savings, and that large initial perceived costs may prevent investments in hazard mitigation. Finally, I perform counterfactual analyses to consider alternative federal policies. The counterfactuals suggest that either increasing the proportion of homes in federally designated high risk zones or raising the federally set flood insurance rates increase investment in flood hazard mitigation, and implementing a cost subsidy rather than the insurance discount incentive currently used by the federal government may increase investment in municipalities with low property values.

"Combating Hysteresis in the Context of Climate Change: The Role of Information in the Real Estate Market Response to Flood Risk." With Nicholas Z. Muller

Revise and Resubmit at Management Science (Previous version: NBER Working Paper No. 2598)

This study uses hedonic property models to explore how coastal real estate markets subject to heterogeneous information treatments respond to flood risk. We identify reactions to flood risk,

CAROLINE ANNE HOPKINS PAGE 2

distinctly from price effects due to flood damage, by examining non-local flooding events. Utilizing a difference-in-difference methodology, we test whether the coastal real estate market in New Jersey responds to several well-publicized hurricanes that did not strike the Atlantic seaboard. We find that homes in high flood risk zones situated in towns that participate in public flood awareness activities incur a 7 to 16 percent decrease in price after the non-local shock. Further, we show that firms are more responsive to risk information than individuals and that markets exposed to such information are less adversely affected by future disasters.

"Why Local Governments Provide Hazard Mitigation: Evidence from the Community Rating System" *In preparation for submission* 

This paper studies public investment in hazard mitigation through both a theoretical model and an empirical application. First, I build a model of the local government's decision to provide a public good that mitigates hazard risk. Second, I use participation in the Community Rating System in New Jersey to empirically test the hypotheses generated by the theoretical model in the context of flood hazard mitigation. Consistent with the model predictions, the empirical results show that an array of factors affect participation: income, population, housing values, risk, value of amenity access, information, and whether the local jurisdiction type is mayor-council. This paper further contributes to the literature on optimal public good provision by showing that incomplete information, weak government accountability, and lobbying can lead to inefficient levels of hazard mitigation.

#### **WORKS IN PROGRESS:**

"How do risk perceptions change after a disaster? Evidence from a Survey of Hurricane-Prone Counties" With Timothy Hyde

"Housing Values and Changing Information about Air Pollution" With Nicholas Z. Muller.

Research Assistant to Karam Kang	
Carnegie Mellon University, Pittsburgh, PA	2017 - 2018
Research Analyst	
The Brattle Group, Washington, D.C.	July 2012 – July 2015
The Brattle Group, washington, D.C.	July 2012 – July 2013
Research Assistant to Lori Pollock and Sara Sprenkle	
Washington and Lee University and University of Delaware	2009
•	

# TEACHING EXPERIENCE Instructor of Record:

Principles of Microeconomics (Undergraduate) – Rating 4.5 out of 5	2019	
Teaching Assistant:		
Econometrics (Undergraduate)	2020	
Principles of Microeconomics (PhD)	2020	
Principles of Microeconomics (Undergraduate)	2019	
Energy Policy and Economics (Masters)	2019, 2020	
Environmental Policy and Economics (Undergraduate)	2018, 2019, 2020	
Foundations of Microeconomics (Undergraduate)	2018, 2019	

CAROLINE ANNE HOPKINS PAGE 3

# PRESENTATIONS (INCLUDING SCHEDULED)

AERE Sponsored Session at SEA Annual Meeting	November 2020
AERE Annual Meeting	June 2020
AERE Sponsored Session at SEA Annual Meeting	November 2019
UEA Annual Meeting	October 2019
World Congress of Environmental and Resource Economists	June 2018

# AWARDS AND FELLOWSHIPS

William Larimer Fellowship, Carnegie Mellon University	2015-2019
Co-recipient of the Kim Family Prize for Best Senior Capstone in Economics	2012
Co-recipient of the John McKenzie Gunn Scholarship	2011
Robert E. Lee Research Grant (Computer Science)	2009
Distributed Research Experience for Undergraduates Grant	2009

## OTHER

Software: Stata, Python, R, LaTeX, Microsoft Office, ArcGIS, SQL

Citizenship: USA Languages: English

## REFERENCES

Nicholas Z. Muller (Chair)	Karam Kang	Dennis Epple
Tepper School of Business	Tepper School of Business	Tepper School of Business
Carnegie Mellon University	Carnegie Mellon University	Carnegie Mellon University
412-268-8121	kangk@andrew.cmu.edu	epple@andrew.cmu.edu
nzm@andrew.cmu.edu		