

Seonmin (Will) Heo

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Education

2026 (Expected)	University of California, Santa Barbara (<i>with distinction</i>)	Ph.D.	Economics
2020	University of Chicago (<i>with honors</i>)	M.P.P.	Public Policy
2014	New York University Abu Dhabi (<i>cum laude</i>)	B.A.	Economics, Music

Working Papers

1. “International Spillover Effects of Air Pollution: Evidence from Mortality and Health Data” (with Koichiro Ito and Rao Kotamarthi), January 2023. NBER Working Paper 30830. *Submitted*.

We study the international spillover effects of air pollution by developing a framework that integrates recent advances in atmospheric science into econometric estimation with microdata on mortality and health. Combining transboundary particle trajectory data with the universe of individual-level mortality and emergency room visit data in South Korea, we find that transboundary air pollution from China significantly increases mortality and morbidity in South Korea. Using these estimates, we show that a recent Chinese environmental policy “war on pollution” generated a substantial international spillover benefit. Finally, we examine China’s strategic pollution reductions and provide their implications for the potential Coasian bargaining.

Research Experience

Bren School of Environmental Science & Management Jun 2022 – present
Graduate Student Researcher

- Work on a project evaluating Cape Town’s local tax and utilities programs (water and electricity). Conducted empirical analyses, cleaned and harmonized large administrative datasets stored remotely, and designed and implemented the research regression models.

Energy Policy Institute at the University of Chicago Jul 2019 – Jun 2020
Bartlett Fellow

- Worked with Associate Professor Koichiro Ito to evaluate attribute-based regulations and test international spillovers of fuel economy regulation in the global automobile industry.

The World Bank Jun 2019 – Aug 2019
Intern *Manila, Philippines*

- Collected, cleaned, and merged data to evaluate three major judicial reforms undertaken by the Supreme Court of the Philippines using econometric tools such as regression discontinuity design, difference-in-differences estimation, and propensity score matching.
- Created an interactive mapping application using R that identifies heavily congested lower-level courts and generates reports to provide timely assistance to the Court Administrator of the Supreme Court.

Teaching Experience

Environmental Economics taught by Kyle Meng and Antony Millner – TA <i>University of California, Santa Barbara</i>	Winter, Spring 2022
Intermediate Microeconomics taught by John Hartman – TA <i>University of California, Santa Barbara</i>	Fall 2021
Principles of Microeconomics taught by Kelly Bedard, Ryan Oprea – TA <i>University of California, Santa Barbara</i>	2020 – 2021
Program Evaluation taught by Jeffrey Grogger – Teaching Assistant <i>University of Chicago, Harris School of Public Policy</i>	Fall 2019
Advanced Statistics I taught by Dan Black – Teaching Assistant <i>University of Chicago, Harris School of Public Policy</i>	Fall 2019
2019 Math Camp – Teaching Assistant <i>University of Chicago, Harris School of Public Policy</i>	September 2019
Creating an Application in R – Instructor <i>Office of the Court Administrator, Supreme Court, The Philippines</i>	August 2019
Economic Analysis of Law taught by Jim Leitzel – Teaching Assistant <i>University of Chicago, Department of Economics</i>	Spring 2019
Public Policy Analysis taught by Jim Leitzel – Teaching Assistant <i>University of Chicago, Department of Public Policy</i>	Winter 2019

Awards

Gretler Fellowship (\$5,000)	2022
EPIC James Bartlett Fellowship	2019 – 2020
EPIC James Bartlett Summer Fellowship	Summer 2019
Harris Midway Fund (\$3,000), University of Chicago	2019 – 2020
Harris School of Public Policy Scholarship	2018 – 2020
Korea University Graduate School of Policy Studies Scholarship	2016 – 2018
New York University Abu Dhabi Scholarship (full ride for 4 years)	2010 – 2014

Additional

Programming	R, Stata, Python
Languages	Korean (Native), Arabic (Proficient), Chinese (Proficient), Spanish (Basic)
Military Service	Interpreting Officer (O-2), Intelligence Unit, Korea-US Combined Forces Command