### **BROWN UNIVERSITY**

Placement Director: Toru Kitagawa toru\_kitagawa@brown.edu 401-863-3688 Graduate Administrator: Angelica Spertini angelica\_spertini@brown.edu 401-863-2465

#### Office Contact Information

Department of Economics, Box B Brown University Providence, Rhode Island 02912 phone: +1 (202) 9078734

### References

Professor Andrew Foster
Department of Economics, Box B
Brown University
Providence, Rhode Island 02912
afoster@brown.edu

Professor Matthew Turner
Department of Economics, Box B
Brown University
Providence, Rhode Island 02912
matthew\_turner@brown.edu

Professor Neil Thakral
Department of Economics, Box B
Brown University
Providence, Rhode Island 02912
neil\_thakral@brown.edu

# Job Market Paper

# Optimizing Incentives for Rooftop Solar: Accounting for Regional Differences in Marginal Emissions

Although federal incentives for residential rooftop solar do not discriminate between US states, there is substantial variation in the marginal emission reductions associated with solar across states. This variation indicates potentially large efficiency gains from having flexible state-by-state incentives. In this paper I estimate the supply and demand elasticities for new rooftop solar installations, using state-level incentives as an instrument. I find a demand elasticity of 11% and supply elasticity consistent with the perfectly elastic case. I then use these parameters to show that the state-by-state subsidy scheme that minimizes yearly emissions is 61% more efficient than the uniform incentive. These results can be useful as the Inflation Reduction Act of 2021 includes unprecedented funding allocation for climate policy, including incentives for residential rooftop solar generators.

### **EDUCATION**

Brown University Providence, RI, USA

Ph.D. Candidate in Economics 2018 –present

Expected Completion Date: May 2024

Fundacao Getulio Vargas Sao Paulo, Brazil

M.A. Economics 2015 –2015

University of Sao Paulo, Brazil

B.A. Economics 2012 –2013

### RESEARCH PAPERS

Does Free Childcare Improve Mothers' Careers? Evidence from São Paulo With Marcela Mello and Rafael Latham-Proenca

The Effect of Child Disability on Mothers' Labor Supply: Evidence from the Zika Virus Outbreak With Marcela Mello and Rafael Latham-Proenca

### TEACHING

- Graduate-level: Macroeconomics (Prof. Galor), Econometrics (Prof. Norets)
- MPA: Microeconomics (Prof. Steinberg), Statistics (Prof. Friedman), Econometrics (Prof. Thakral), Public Policy (Prof. Poterack)
- Undergraduate-level: Environmental Economics (Prof. Poterack), Public Economics (Prof. Poterack)
- Teaching excellence award in 2021 for MPA teaching

## **OTHER**

• Conferences: NEUDC 2022, Monash Environmental Economics Workshop 2023 (future event)