

# WHO BEARS CLIMATE CHANGE DAMAGES?

## EVIDENCE FROM THE GIG ECONOMY

Anna Papp\*

*Job Market Paper*

October 1, 2024

*Please [click here](#) for the latest version.*

### Abstract

This paper provides the first causal evidence that gig economy platforms enable consumer adaptation to climate change while shifting climate-related damages to workers without incremental compensation. Across diverse markets and climates (UK, Germany, France, and Mexico), I leverage detailed transaction data and labor force surveys and exploit exogenous variation in daily maximum temperatures. On hot days relative to moderate days, I find an 8-16% increase in food delivery expenditures and a similar decline in dine-in restaurant spending, driven primarily by higher-income consumers. On these days, food delivery workers work 1.7 hours more on average, exposing them to material health risks. Yet, I find that their hourly wages do not increase, despite the flexibility of wages in this setting. This combination of results is unique to platform-based work and I provide evidence that future earnings uncertainty related to workers' employment status plays a role in these outcomes. My findings highlight environmental equity concerns from unequal access to climate adaptation and the shift of climate harms and underscore the importance of climate-related risks in regulating gig economy platform work.

---

\*Columbia University, School of International and Public Affairs (ap3907@columbia.edu). I thank Douglas Almond, Suresh Naidu, and Jeffrey Shrader for their continued advice and support. I am also grateful for feedback received at the CU Environmental & Resource Economics Workshop, AERE@WEAI, the SusDeveR Conference, the Virtual Sustainable Development Seminar, the Interdisciplinary PhD Workshop in Sustainable Development (IPWSD), the Shrader Lab, and the Sustainable Development Seminar and Colloquium (Columbia). I thank [Fable Data](#) for access to their product and Anoop Bindra Martinez and Fabio Saia Cereda for assistance with the data and helpful discussions. Beatriz de Lucas, Maram Gadalla, and Ian Cheng provided excellent research assistance. I gratefully acknowledge funding from the Center for Political Economy Labor Lab (Columbia University) and the Center for Environmental Economics and Policy (Columbia University).