Seminario de Microeconomía Aplicada- The value of clean water: Experimental evidence from rural India

Seminarios y talleres

El seminario de Microeconomía Aplicada del Banco de la República es un espacio para discutir los trabajos en progreso en las diferentes áreas de la microeconomía aplicada como economía del trabajo, organización industrial, economía de la salud, economía agrícola, economía de la educación, desarrollo económico, delincuencia, economía pública, economía ambiental, economía regional y urbana, entre otras. Está organizado por las sucursales de Cali, Cartagena y Medellín.

Resumen: Over 2 billion people lack access to clean drinking water, a chief cause of child mortality globally. The two leading responses have faced high costs and unreliable quality (piped water) or persistently low demand (point-of-use treatment). In partnership with a private water provider, we use a cluster-randomized experiment covering approximately 60,000 households in rural Odisha, India, to evaluate an increasingly popular third alternative: decentralized treatment and home delivery of water. We study demand under three treatment arms: varying prices, a free ration (quota), and an exchangeable entitlement, allowing households to either order water for free or forgo (part of) their entitlement for cash rebates. At low or zero prices, home-delivered water extends safe drinking water access to over 90% of households, sustained over the experiment duration. Higher prices reduce demand on the extensive margin, but those households who do buy water purchase enough to plausibly cover their drinking water needs. Clean water leads to self-reported improvements in health outcomes, reducing illness and missed work. We recover revealed-preference measures of household valuation for water from the experiment. The average WTP is INR 132 per month, several times higher than prior indirect estimates. The WTA is over 3 times larger than WTP, exceeding the full variable costs of clean water. On a cost-per-DALY basis, free water delivery is highly cost-effective. At higher prices, water delivery is privately profitable. We conclude that home delivered water could play a critical role in achieving universal access to safe drinking water.

Autores: Fiona Burlig, Amir Jina, and Anant Sudarshan.

Acerca del expositor: Fiona Burlig is an Assistant Professor at the Harris School of Public Policy at the University of Chicago, an NBER Faculty Research Fellow, a BREAD affiliate, and Deputy Faculty Director of EPIC-India. She is an applied microeconomist with research interests in, and at the intersection of, energy, environmental, and resource economics and development economics. She holds a PhD in agricultural and resource economics from the University of California, Berkeley.

Tiempo de exposición: 1 hora

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