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Research Statement

My research is at the intersection of international trade and development economics, studying how different forms of market integration, both across and within countries, affect the economic livelihoods of households in developing countries. Methodologically, my work combines empirical evidence from experimental or quasi-experimental variation with quantitative evaluations through the lens of a theoretical structure. Using these methods, my research aims to explore the economic implications of rapidly growing but so far less studied drivers of globalization in the developing world, with an interest in both average and distributional effects. These include market integration through the internet and the growth of e-commerce trading (1), trade in local services due to tourism (2), the arrival of foreign retail chains (3) and within-country market integration due to investments in transport infrastructure (4).

A second objective of my work has been to push our understanding of globalization’s consequences beyond the effects on employment, nominal wages or incomes, by paying careful attention to changes in household cost of living in the denominator of real income. Such effects have traditionally been hard to capture empirically, as they require detailed information on changes in household expenditures, product prices, attributes and availability. My work has addressed this challenge by bringing to bear newly available consumption microdata for China (1), Mexico (3) and the US (5). In (6), we develop a methodology when such detailed microdata are not available for the full consumption basket. We show that, under a broad class of preferences that are quasi-separable, we can recover theory-consistent and unbiased estimates of price index and welfare changes across the income distribution using widely available expenditure survey microdata.

In ongoing research, my coauthors and I are working on quantifying the general equilibrium implications of scaling up small-scale policy interventions in developing country agriculture (7). This project develops a model of farm-level production and trading, and a new solution method in this environment. These allow us to use rich but widely available administrative microdata from Uganda to compare the average and distributional effects from local interventions to the welfare implications if the policy were to be scaled up to the national level. In a second project (8), we are completing the collection of a new panel database for broadband and mobile internet (using smartphones and apps) usage in China covering the period 2000-2018, using newly digitized archival government records and proprietary transaction microdata from large Chinese e-commerce firms. This new database provides the basis for our study on quantifying the contribution of online integration for Chinese economic growth over this period. The project uses natural experiments for the spread of broadband and mobile internet use across roughly 2000 Chinese county-level units to identify the relative regional impacts of online integration, including on inter-regional e-commerce trade flows. These estimates are then used to inform the calibration of a quantitative spatial equilibrium model of trade and migration to investigate the aggregate implications that are consistent with the observed regional effects in the data.
References

(1) “Connecting the Countryside via E-Commerce: Evidence from China”, with Victor Couture (Berkeley), Yizhen Gu (Jinan) and Lizhi Liu (Georgetown), Conditionally accepted at American Economic Review: Insights.


(6) “A New Engel on Price Index and Welfare Estimation”, with David Atkin (MIT), Thibault Fally (UC Berkeley) and Marco Gonzalez-Navarro (UC Berkeley), Working Paper.

(7) “Scaling Up Agricultural Policy Interventions: Theory and Evidence from Uganda”, with Lauren Falcao Bergquist (U Michigan), Thibault Fally (UC Berkeley), Matthias Hoelzlein (UC Berkeley), Ted Miguel (UC Berkeley) and Andres Rodriguez-Clare (UC Berkeley), Work in Progress.

(8) “The Gains from Online Integration: Theory and Evidence from China”, with Victor Couture (UC Berkeley), Cecile Gaubert (UC Berkeley) and Yizhen Gu (Jinan University), Work in Progress.