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Education

B.S. Optics and Electronics Engineering, Huazhong University of Science and Technology, Wuhan, 2006-2010.

M.A. Economics, Central University of Finance and Economics, Beijing, 2011-2014.

Ph.D. Economics, Universidad Carlos III de Madrid (UC3M), Madrid, 2014-2021.

Exchange, The Pennsylvania State University, State College, 2019.3-2019.6.

Research Interests

Program Evaluation, Spatial Econometrics, Labor Economics

Research Papers

Working Paper:

"Test IV Validity For Marginal Treatment Effects" (with Pedro Sant'Anna)
In this paper, we develop the specification test for instrument validity in the framework of heterogeneous treatment effects with a continuous instrument. This continuous instrument allows us to test the identification conditions on marginal treatment effects (MTE). This finding extends the recent literature (Kitagawa, 2015) on testing the local average treatment effects (LATE) assumptions. We build our statistics on the testable implication of the monotonicity restrictions on the outcome densities (Heckman and Vytlacil, 2005). This test does not require any smooth estimation and thus could detect local alternatives to the null at the root n rate. The finite sample performance is examined by a Monte-Carlo experiment. We revisit the study of estimating marginal return of education (Carneiro et al., 2011).

"Counterfactual Analysis Based on Grouped Data: Application to Poverty and Material Deprivation"(with Antonio Raiola and Miguel Delgado)
In this article we analyze the estimation of "standardized" Kitagawa-Oaxaca-Blinder (KOB) decomposition based on appropriate grouping of the data. We propose to generate the partition trough data-driven approach such as CART algorithm or Nearest-Neighbor Clustering. The estimator build

in such a way can deal with troublesome setting with numerous non-ordered characteristics and sparsity in the data. Together with the estimator we provide large sample theory for the standardized decomposition. We apply the newly proposed methodology to the analysis of AROPE (At Risk of Poverty or Social Exclusion) rates in Spain across the period 2008-2020.

"Regional Policy Evaluation: The Size Distortion Of The Matching Estimator"
Spatial dependence among local units leads the size distortion issue in regional policy evaluation. In this paper, we analyze this kind of size distortion based on the matching estimator. Firstly, we propose an asymptotic valid variance estimator under spatial heteroskedasticity and autocorrelation consistent (SHAC) framework. Secondly, we propose two valid bootstrap procedures under the spatial autocorrelated disturbance and SHAC framework, respectively. We construct Monte Carlo experiments to compare these inference approaches in small samples. As an empirical illustration, we reevaluate one immigration policy on the unemployment rate of German local labor markets.

Other Professional Activities

Referee Service

Journal of Business and Economic Statistics

Conference Presentations

Asian Meeting of the Econometrics Society, (AMES 2019, Xiamen), China meeting of the Econometrics Society, (CMES 2019, Guangzhou), Madrid Econometrics Workshop, (Madrid 2018), ENTER Jamboree (London 2017, Discussant)