Department
Seminars

Specification testing with Grouped Fixed Effects

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Seminar Room Bruguier Pacini, DEM
+ Online via Teams

ABSTRACT

We propose a Hausman-like test for the correct specification of unobserved heterogeneity in both linear and nonlinear fixed-effects panel data models. We consider as null hypotheses a scenario in which the unobserved heterogeneity is time-invariant or, symmetrically, described by homogeneous time effects only. We contrast the standard fixed-effects estimator with the recently developed two-way Grouped Fixed Effects estimator, that is consistent in the presence of time-varying heterogeneity (or heterogeneous time effects) under minimal specification and distributional assumptions for the unobserved effects. The Hausman-like test compares jackknife corrected estimators, removing the leading term of the incidental parameters and approximation biases, and exploits bootstrap to obtain the variance of the vector of contrasts. Monte Carlo evidence shows that the test has correct size and good power properties. We provide an empirical application to illustrate the proposed test about a linear model for the determinants of the wage of working women.

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