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Seminario Aleatorio
Sesión 378

Local Projections vs. VARs: Lessons From Thousands of DGPs

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Abstract

We conduct a simulation study of Local Projection (LP) and Vector Autoregression (VAR) estimators of structural impulse responses across thousands of data generating processes (DGPs), designed to mimic the properties of the universe of U.S. macroeconomic data. Our analysis considers various structural identification schemes and several variants of LP and VAR estimators, and we pay particular attention to the role of the researcher's loss function. A clear bias-variance trade-off emerges: Because our DGPs are not exactly finite-order VAR models, LPs have lower bias than VAR estimators; however, the variance of LPs is substantially higher than that of VARs at intermediate or long horizons. Unless researchers are overwhelmingly concerned with bias, shrinkage via Bayesian VARs or penalized LPs is attractive.

Working paper: https://scholar.princeton.edu/sites/default/files/lp_var_simul.pdf

Viernes 12 de noviembre de 2021, 13:00 hora de CDMX

https://itam.zoom.us/j/99731087252?pwd=Y2JvSklVZGJFUGhxVm5EbFpGcDdzdz09
Meeting ID: 997 3108 7252
Passcode: 279419

El Seminario Aleatorio del Departamento de Estadística del ITAM está destinado tanto a profesores como a estudiantes, por lo que se agradece a los profesores que colaboren invitando a sus alumnos a estas sesiones.