Departamento
de Estadística e
Investigación
Operativa

Instituto de
Matemática
Interdisciplinar

SEMINARIO

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Statistical Inference for Panel Data

We consider N panels with T observations in each panel. The panels are time series, the dependence between the panels is modeled by unobservable common factors. We discuss tests to detect changes in the means of the panels. Assuming that a change has been detected, we also provide a CUSUM (cumulative sum) type estimator for the location of the change in the means of the panels. We obtain several limit theorems for the difference between the true value of the time of change and its estimator. Our results provide a full description of the asymptotic theory for the estimator of the time of change. The norming and the form of the limit distribution depends on the sizes of changes and the dependence between the panels. We apply the limit results to construct confidence intervals for the time of change in the exchange rates of the currencies of 23 countries with respect to the US dollar and for the change in the GDP/capita in 113 countries.

Organizado por el Departamento de Estadística e Investigación Operativa y el Instituto de Matemática Interdisciplinar.

Fecha: día 17 de octubre de 2014 a las 13:00 horas.
Lugar: Aula 215 (Semianrio Sixto Ríos).
Facultad de CC Matemáticas, UCM