

Panel Data Lectures

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This document and the lectures are available at the bottom of my homepage at
<http://cep.lse.ac.uk/people/bio.asp?id=1358>

Introduction/Motivation

Static models

OLS, GLS(random effects), within groups, first differences; specification tests

Dynamic Models

GMM-DIF, Anderson-Hsiao, Arellano-Bond

Correlated fixed effects with explanatory variables that are (i) pre-determined, (ii) endogenous; (iii) strictly exogenous

Uncorrelated fixed effects with explanatory variables that are (i) pre-determined, (ii) endogenous; (iii) strictly exogenous

System GMM (Blundell-Bond, Arellano-Bover, Ahn-Schmidt)

Initial conditions and mean stationarity

Monte Carlo Evidence

Other Issues

autocorrelation: MA(q), AR(q)

Specification tests

Practicalities

Application to Production Function

Specific Issues

Growth accounting alternative

functional form

Revenue productivity vs. actual productivity - (i) Klette- Griliches; (ii) Tybout et al, (iii) Haltiwanger et al (2005)

"augmented" - R&D, ICT, human capital, etc.

Olley Pakes and Extensions

model set-up

Extensions (i) zero investment (Levinsohn Petrin), (ii) exact collinearity (Ackerberg et al); (iii) multiple states

Relationship to Blundell-Bond and GMM (Wooldridge (2005))

Doraszelski, U. and J. Jaumandreu (2007) "R&D and productivity: Estimating production functions when productivity is endogenous", Harvard University mimeo, <http://www.economics.harvard.edu/faculty/doraszelski/files/endoprod2.pdf>

[Depending on time]

Nonlinear Panel Data Models

Probit/logit fixed effects

Count data - Blundell, Griffith, Van Reenen (1995, 1999)

Control Function approaches

Relationship of panel data and program evaluation

Long-T estimation

Pesaran and Smith - heterogeneous coefficients

Pseudo Panels

References

[Important ones are starred]

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