Masterclass on "Panel Factor Models"
Instructor: Prof Lorenzo Trapani (University of Nottingham)

SYLLABUS

Day 1: panel factor models (stationary and nonstationary)

- large factor models: taxonomy, main applications and notation;
- the model and main assumptions;
- estimating the number of common factors:
    - static, stationary panel factor models: information criteria (Bai and Ng, 2002; Alessi, Barigozzi and Capasso, 2010); tests (Onatski, 2009; Ahn and Horenstein, 2013; Trapani, 2017);
    - static, nonstationary panel factor models: information criteria (Bai, 2004); tests (Barigozzi and Trapani, 2018);
- estimating common factors and loadings (Bai, 2003);
- dynamic factor models: a general introduction (Forni et al., 2000);
    - Kalman Filter and the estimation of dynamic factor models.

Day 2: topics in large factor models

- factor augmented regressions (Bai and Ng, 2006);
- forecasting with factor models (Bai and Ng, 2006);
- panel unit root and cointegration (Bai and Ng, 2004);
- applications to finance: the "factor zoo".

References

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