



Course Code & Title	LISS247 Time Series Econometrics and Dynamic Panels		
Convenor(s)	Dr Michela Vecchi , Associate Professor in Economics, Middlesex University		
Institution	King's College London	Department	LISS DTP
Academic Year	2018-19	Term	Summer
Number of Sessions	2	Length of Session(s)	7 Hours
Day, Date		Start : End	Room Location
Monday 3 June 2019 Tuesday 4 June 2019		0900 - 1700	King's, 4.02 Bush House (South Wing), WC2R 1ES
Enrolment Link:	https://goo.gl/79TyD9 You may be prompted to log into SkillsForge		

Course Description:

The course is a two-day STATA workshop on time series econometrics and dynamic panel analysis. It will include both taught and practical exercises using data series distributed by the module leader. The taught component will begin with a review of time series econometrics, stationarity and cointegration tests. It will then focus on stationarity issues in panel data and on the various econometric techniques that researchers use to estimate dynamic relationships with panel data. The course will use practical examples in the taught component and in the lab session to provide students with an overview of applications. The emphasis in the practical component is on interpreting results using secondary data series. The course will show students the main STATA commands and new users-developed commands that can be downloaded from the STATA website. By the end of the two sessions students should have a good understanding of how to test for stationarity and cointegration in time series and panel data and run a variety of regression model using STATA.

Course Outline:

Day 1 Morning

Stationarity in regressions with time series data

Test for stationarity and cointegration

Error correction models

Extensions to panel data sets

Day 1 Afternoon

Time series analysis using STATA

Day 2 Morning

Dynamic Panels: various options

Mean Group and Pooled Mean Group estimator

Cross-sectional dependence

Day 2 Afternoon

Dynamic panel data analysis using STATA, examples and exercises



Reading List:

Damodar N. Gujarati and Dawn C. Porter, *Basic Econometrics*, 5/e

Marno Verbeek, *A Guide to Modern Econometrics*, 3/e (more advanced text)

Arellano, M., Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*, 58, 277–97.

Pesaran, M. H., Shin, Y., Smith, R. (1999) Pooled mean group estimation of dynamic heterogeneous panels. *Journal of the American Statistical Association*, 94, 621-34.

Mary O'Mahony, Michela Vecchi (2005). Quantifying the impact of ICT capital on output growth: a heterogeneous dynamic panel approach, *Economica*, 615-633.

Eligibility:

Students at any stage of their PhD who have either taken KISS 244 Panel Data and Introduction to STATA or can demonstrate that they have taken an equivalent module elsewhere. Prior knowledge of using STATA is essential.

Pre-course preparation:

Students should read chapter 21 of Gujarati and Porter (see above list).

Number of students: 15