Workshop

Introduction to Panel Data Analysis

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Michael Grätz (SPS res 1st year)

with the participation of

Leen Vandecasteele (EUI)

and

Martin Ehlert (WZB Berlin)

Third Term 2011-12

Monday 14 May 2012, 11:00 - 16:00
Tuesday 15 May 2012, 11:00 - 16:00

Seminar Room 3, Badia Fiesolana

(10 credits)

To register, please contact adele.battistini@eui.eu

This workshop offers a basic and practically oriented introduction into the analysis of panel data. Panel data contain repeated measures of variables for every unit of analysis, such as individuals. There are several advantages to using this rich source of data: it allows us to study dynamics, it provides a sounder basis for causal statements, we can study short and longer-term effects, deal more effectively with measurement error etc. In this workshop we will discuss the data structure of a household panel. We will discuss the issue of repeated observations per individual from a statistical point of view and learn how random and fixed effects panel methods as well as robust standard errors can deal with this issue of clustering.
In the workshop we will discuss and work with data from the British Household Panel Survey, the German Socio-Economic Panel and the European Survey of Income and Living Conditions. A basic knowledge of STATA will be assumed.

The aim is to provide a practical and user-oriented workshop. The focus will be on learning-by-doing and the discussion of existing real research projects. Participants with a research project employing panel analysis are explicitly invited to contact the lecturer (Leen Vandecasteele) beforehand in order to discuss their main topics of interest and the potential for active participation in the workshop.

Please bring your laptop for the practical sessions!

### DAY 1 Monday, May 14th

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<th>Activity</th>
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| 11:00-12:30 | In this lecture we will discuss the data structure of a longitudinal household panel.  
* why panel data?  
* data structure  
* clustering of repeated observations per individual  
* robust standard errors. |
| Lunch break |                                                             |
| 13:30-14:45 | We will learn how random and fixed effects panel methods can deal with the issue of clustering in panel data.  
*fixed effects  
*random effects |
| Break |                                                             |
| 15:00-16:00 | Practical: research example with STATA |

### DAY 2 Tuesday, May 15th

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| 11:00-12:30 | Participants’ research examples  
Practical research example with STATA |
| Lunch break |                                                             |
| 14:00-16:00 | Martin Ehler: “The Economic Consequences of Key Life Risks in Germany and the US and their Evolution since the 1980s: Methods and some Results.”  
Discussion: why not random effects? |