

RISIS



RESEARCH INFRASTRUCTURE FOR SCIENCE
AND INNOVATION POLICY STUDIES



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RISIS TRAINING – CALL FOR APPLICATION



POLITECNICO
MILANO 1863

Panel Data Methods and Applications

Politecnico di Milano, Department of Management, Economics and Industrial
Engineering, Via Lambruschini 4/b, 20156 Milano.

ONLINE COURSE. November 19th – 26th, 2020

COURSE PRESENTATION

Panel data (a.k.a. longitudinal or cross-sectional time-series data) are repeated measures on the same entities over time. The entities could be, e.g., countries, companies, universities or individuals. The use of panel data allows for richer models and estimation methods as well as the identification of causal effects under weaker assumptions compared to cross-sectional data.

In RISIS, a number of dataset are characterized by a panel data structure (e.g., the firm level datasets, CWTS on publications, ETER on universities...), therefore a better understanding on the main issues related to the analysis of this kind of data could be of interest of internal RISIS users, as well as policy makers and external researchers that might be interested in using the RISIS infrastructure.

OBJECTIVES:

The course objective is to introduce the main features of panel data econometric models and present use cases and examples based on the VICO dataset.

Topics covered in the course include specification, estimation, and inference in the context of models that take into account unobserved heterogeneity and individual effects (e.g. fixed-effects vs. random-effects models).

The course is delivered online.



EXPECTED OUTCOMES:

The course will cover the following topics:

- Conceptual bases on panel data methods
- Overview of the empirical literature that employed panel data methods
- Training on panel data analysis in STATA
- Practical computer session

After the course, students are expected to be able to apply panel data regression techniques and to interpret the results from panel-data regression estimates.

TARGET AUDIENCE:

Target audience include PhD students, early career researchers, policy analysts. We expect 20 participants.

Course prerequisites: participant should be already familiar with applications of econometric models and they should have at least a basic knowledge about statistical tools (STATA).

PROGRAM OF COURSE

Day 1 – November 19th, 2020

10:00-10:30 – Introduction to panel data structure

10:30-11:45 – Main panel data estimators

11:45-12:00 – Break

12:00-13:00 – Examples of applications based on VICO

Day 2 – November 20th, 2020

10:00-11:30 – Practical session using STATA and VICO dataset (I)

11:30-11:45 – Break

11:45-12:45 – Practical session using STATA and VICO dataset (II)

12:45-13:00 – Introduction to group assignment

Remote workgroup

Students will have 1 week to work remotely on the assignment. During this week, groups will have 1 hour dedicated session of tutoring with course instructors.

Day 3 – November 26th, 2020

10:00-11:30 – Group presentations

11:30-12:00 – Closing Remarks



CONDITIONS FOR PARTICIPATION

SELECTION CRITERIA:

- Research track-record, with a preference for quantitative studies.
- Basic knowledge of econometrics.
- Knowledge of STATA.

ORGANISATIONAL DETAILS:

- The course is offered online.
- The course is entirely free of charge.
- The course will include theoretical and training sessions on panel data analysis and participants will take part in a workgroup.
- Each participant needs to have the statistical software STATA installed on his/her PC for the practical parts of the training.
- Before the beginning of the course, we will provide participants with scientific articles and additional materials introducing the topic.

HOW TO APPLY:

Please fill the course's format application and send it to francesca.tenca@polimi.it.

The deadline for application is October 15th, 2020.

ORGANISING COMMITTEE AND CONTACT DETAILS

Massimo G. Colombo, Politecnico di Milano

Massimiliano Guerini, Politecnico di Milano

Francesca Tenca, Politecnico di Milano, francesca.tenca@polimi.it