Fundamentals and methods for impact evaluation of public policies

Course programme

9-14 March 2020

Palazzo Franchetti, Venice (Italy)
MONDAY 9 MARCH

09.00-12.30   Ugo Trivellato
10.30-11.00 coffee break
- Introduction to impact evaluation.
- Potential outcomes and the fundamental problem of causal inference.
- Conditions for learning about the causal effects of a programme.
- Causal parameters and selection bias.

12.30-14.30 lunch and break

14.30-18.00   Ugo Trivellato
16.00-16.30 coffee break
- A taxonomy of selection processes and identification strategies: selection bias as a heterogeneity problem; random assignment; selection on observables; selection on unobservables.
- Internal and external validity of an evaluation design.
- Evaluation strategies and data requirements: prospective vs. retrospective evaluation, data requirements.

TUESDAY, 10 MARCH

09.00-12.30   Enrico Rettore
10.30-11.00 coffee break
- Impact evaluation in an experimental setting: design and implementation of randomized experiments; minimum detectable effects.
- Impact evaluation in an observational setting, selection on observables (I): stratification and matching; curse of dimensionality.

12.30-14.30 lunch and break

14.30-18.00   Enrico Rettore
16.00-16.30 coffee break
- Impact evaluation in an observational setting, selection on observables (II): propensity score and matching.
- Impact evaluation in an observational setting, selection on observables (III): operationalising matching.
**WEDNESDAY, 11 MARCH**

09.00-12.30  *Enrico Rettore*

10.30-11.00 coffee break
- The linear model: orthogonality condition and omitted variable bias formula.
- Instrumental variables: first stage and exclusion restrictions.

12.30 lunch

*Free afternoon*

**THURSDAY, 12 MARCH**

09.00-12.30  *Keynote speaker: Paolo Pinotti*

10.30-11.00 coffee break

12.30-14.30 lunch and break

14.30-16.00  *Margherita Fort*
- Instrumental variables, continued: over-identifying conditions test; heterogeneity of the causal effect and characterization of compliers.

16.00-16.30 coffee break

16.30-18.00  *Martina Bazzoli*
- *Training session* – OLS and IV regression.

**FRIDAY, 13 MARCH**

09.00-12.30  *Margherita Fort*
- Regression discontinuity designs: Sharp and fuzzy designs, graphical analysis, parametric and non-parametric estimation, the bias-variance trade-off, placebo and falsification tests.
10.30-11.00 coffee break

12.30-14.30 lunch and break

14.30-18.00  **Margherita Fort**

16.00-16.30 coffee break

- Exploiting longitudinal variation: panel and difference-in-differences models; parallel trends assumption; standard error issues.
- Synthetic control methods: relationship with difference-in-differences, testing through placebos.

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**SATURDAY, 14 MARCH**

09.00-12.30  **Sergiu Burlacu**

10.30-11.00 coffee break

- *Training session*: RDD, difference-in-differences and synthetic control methods

12.30-14.00 lunch and break

14.00-16.00  **Margherita Fort, Enrico Rettore & Ugo Trivellato**

- Questions & Answers session.
- Closing