

Course Plan Impact Evaluation

This four-day workshop is part of the “PEP support program”. It is addressed to a selection of research teams who could potentially benefit from PEP founding. The objective is to provide researchers with basic knowledge of the main impact evaluation techniques that they can use to conduct their projects. The course will cover topics that can also be useful in future research endeavours.

Description

This workshop is an applied and participative training. Each daily session is divided into three parts. The first part takes place in the morning and focuses on theoretical notions. Conceptual and methodological problems are presented and solutions that have been proposed to overcome them are discussed in details. The second part takes place in the early afternoon and provides hands-on experience with computer software (Stata) and survey data. These sessions focus on the theoretical notions presented in the morning sessions. The third part consists in short team presentations on participants' current projects.

The workshop begins by reviewing topics such as endogeneity issues and instrumental variables estimators. We next build upon previously covered material to study particular techniques that can be used to address endogeneity or selectivity issues: difference-in-difference estimators, propensity score matching, and regression-discontinuity design.

During this workshop participants will:

- Review the key components of a judicious impact evaluation
- Apply theoretical concepts to real data
- Practice their communication strategies to both academic and nonacademic audiences

Agenda

Wednesday April 29: INTRODUCTION

9:00 -10:30 Theory:

- Introduction
- Causal Inference and counterfactuals
- Randomized control trials (RCT) principles
- The selection bias

10:30 -11:00 Coffee break

11:00 -12:30 Introduction to Stata: survey data, macros, loops and programs, ATE.

12:30 -2:00 Lunch

2:00 -2:45 Stata practice: ITT

2:45 -3:00 Coffee break

3:00 -4:30 Team presentations (6 teams – max 15 minutes each):

(a) UTOS

- Units of analysis
- Treatment to be evaluated
- Outcome(s)
- Setting

(b) What would be an ideal RCT for your impact evaluation?

Thursday April 30: DD and IV

9:00 -10:30 Theory:

- Introduction to logit and probit models
- IV assumptions and estimators
- DD assumptions and estimators

10:30-11:00 Coffee break

11:00-12:30 Stata practice: TOT(IV) and DD

12:30-2:00 Lunch

2:00-2:45 Stata practice: logit and probit models

2:45-3:00 Coffee break

- 3:00 -4:30 Team presentations (5 teams – max 15 minutes each):
- (a) UTOS
- Units of analysis
 - Treatment to be evaluated
 - Outcome(s)
 - Setting
- (b) What would be an ideal RCT for your impact evaluation?

Friday May 1: PSM

- 9:00-10:30 Theory:
- Propensity Score Matching (probit, logit, hazard, bootstrap)
 - Essential heterogeneity models
- 10:30-11:00 Coffee break
- 11:00-12:30 Theory: Investigation of the CIA assumption
Stata practice : ATT and HET packages
- 12:30-2:00 Lunch
- 2:00-2:45 Stata applicaiton PSM
- 2:45-3:00 Coffee break
- 3:00-4:30 Team presentations (6 teams - max. 15 minutes):
- Describe your potential selection bias problem
 - Describe and justify your selected impact evaluation method

Saturday May 2: RDD

- 9:00-10:30 Theory: Fuzzy vs Sharp designs
- 10:30-11:00 Coffee break
- 11:00-12:30 Stata practice : RD package
- 12:30-2:00 Lunch
- 2:00-2:45 Stata applicaiton of RD estimates
- 2:45-3:00 Coffee break
- 3:00-4:30 Team presentations (5 teams - max. 15 minutes):
- Describe your potential selection bias problem
 - Describe and justify your selected impact evaluation method

Instructor

Maria Adelaida Lopera

Requirements

Prior to the workshop, each team needs the equivalent of one-day preparation. Participants are responsible for a number of short presentation prepared in collaboration with the rest of research team. They should also revise the related literature suggested by the instructors.

In order to perform computer based exercises each participant is required to have a laptop with the software Stata (release 10 or higher).

The workshop will be held in English, but participants are free to ask questions in French or Spanish. For the benefit of all, instructors will respond in English.

Last update: April 23, 2015