SYLLABUS

Non-experimental Impact Analysis

Introduction

It has become increasingly important to use evidence-based criteria in the policymaking process. Impact Evaluation methods are empirical research tools that can be used to determine which policies, interventions and programs work, for whom, and in what circumstances. Impact evaluation methods can be used for program design and policy formulation as well as for strategic learning, transparency and accountability.

Course objectives

This course provides practical guidelines for designing and implementing non-experimental impact evaluations. We introduce various evaluation methods: matching, regression discontinuity, instrumental variables, switching regression, difference-in-differences, synthetic control method, coefficient stability, and machine learning. We discuss why and how each method can produce a valid estimate of a program impact, how to select the appropriate method for the context, and their main limitations.

This course generally takes an applied, non-technical approach. We focus on the principles behind the methods rather than their mathematical properties. For each method, we provide some applications using the Stata software and we review specific examples from the scientific literature, mostly in development.

Methodology

This course is offered in English and French. It requires a working knowledge of basic statistics, in particular key concepts such as regression analysis. Knowledge of the Stata software and basic economic principles is recommended but not strictly required. Lectures are given in English. Exams and homework can be submitted in English or French. The course includes 2 live Q&A sessions where participants can interact directly with the instructors and other participants.

Supervision strategy

FORUMS

The forums allow you to ask questions and discuss the course content with the lecturer and other participants. Be aware that the answer to a question posed in a discussion forum will not be instantaneous. In this course, the lecturer will usually respond on Tuesdays and Thursdays. In order to avoid additional delays, it is recommended to be explicit in your questions and comments.

The use of the forums must be done in the respect; no abuse of language will be tolerated.

EMAILS

Prefer the forum to ask questions. Use email only to discuss personal issues and emergencies. The lecturer will respond to emails within 2 working days.

Pedagogical Approach

You should plan an average of 6 hours per week in your personal schedule to revise the theory and complete the mandatory activities. Of course, there are certain factors that can cause a participant to spend more or less time.

The content of this course is intermediate-advanced. The subject is not easy to assimilate for everyone, this course is demanding and requires rigor and constant efforts throughout the session. It is your responsibility to be disciplined in your study to be up to date. Distance learning requires a lot of autonomy since you are largely responsible for managing your time.

The course content is delivered in different forms:

- Capsules of courses designed to communicate the main theoretical aspects of the concepts studied.
- Scientific articles and book chapters. The readings in each module are essential and they are subject to evaluation.
- Animated examples related to the presented subject provide a method for solving practical problems. Practical exercises on Stata are also subjects of evaluation. You must understand the examples used in this course before solving the exercises of a module.

Naturally, your study is not limited to doing the exercises and completing the quizzes, you should aim to understand the content.

Content and activities