

Executive training course

Empirical Methods and Sustainable Finance

6-7 February 2025

Introduction

Sustainable finance has become increasingly important for regulators and supervisors, underscoring the need for technical analysis using both existing and new data sources. This course offers an overview of empirical methods that can be applied to explore issues in sustainable finance.

The sessions cover the unique role of banks in ensuring the stability and sustainability of the banking system, the transmission of monetary policy, and the impacts of banking and environmental regulations. Additionally, the course examines the role of collateral in supporting safe lending practices and sustainable banking, as well as ways to promote sustainable lending by banks to households and credit-constrained firms.

Location: EUI Premises in Florence

Core Faculty

- Steven Ongena | University of Zurich
- Andrada Bilan | Swiss National Bank

Format: Residential

Level: Intermediate, Advanced

Approach: Quantitative

Learning Objectives:

- Provide an overview of methods for evaluating regulatory changes and investigating other sustainability-related topics.
- Introduce participants to matching and difference-in-difference methodologies, applied to critically assess the features of sustainable credit markets and the impact of local climate policies.
- Explain key aspects of panel estimation, including saturation and fixed effects methods, used to analyse the relationship between monetary policy, risk-taking behavior, and climate risks.
- Acquaint participants with instrumentation strategies and their application to topics such as climate risk, the real estate market, and new business formation.
- Strengthen participants' practical knowledge through a series of replication exercises.

Programme

Thursday, 6 February

- 9:00 – 9:30 Welcome & coffee
- 9:30 – 11:00 Session 1 – Introduction (Ongena)
- Empirical methods in Sustainable Finance
 - Evaluation of changes in regulation, and exploration of other sustainable topics
- 11:00 – 11:15 Coffee break
- 11:15 – 12:45 Session 2 – Matching, and Difference-in-Differences Part 1 (Ongena)
- Exact versus propensity score matching, difference-in-differences methodology
 - Banks and sustainable loan terms for small firms; sustainable collateral
- 12:45 – 13:55 Lunch
- 13:55 – 14:00 Group Picture
- 14:00 – 15:30 Session 3 – Saturation with Fixed Effects (Bilan)
- Panel estimation
 - Monetary conditions and risk-taking
 - Climate risks and monetary policy
- 15:30 – 16:00 Coffee break
- 16:00 – 17:30 Session 4 – Difference-in-Differences Part 2 (Bilan)
- Intensity of treatment, managing the control sample
 - Towards a sustainable financial system: Macroprudential regulation of banks
 - Effects of local climate policy
- 17:30 – 18:30 Guided Tour of Villa Schifanoia or office hours
- From 20:00 Dinner at the city centre

Friday, 7 February

- 9:00 – 9:30 Welcome & coffee
- 9:30 – 11:00 Session 5 – Instrumentation Part 1 (Bilan)
- Instrumentation strategies
 - Credit constraints and housing collateral
 - Climate risks in real estate
- 11:00 – 11:15 Coffee break
- 11:15 – 12:45 Session 6 – Instrumentation Part 2 and Modelling Dispersion (Ongena)
- Instrumentation with historical land and climate information; heteroskedastic model
 - Wealth inequality and entrepreneurship; sustainable business models
- 12:45 – 14:00 Lunch
- 14:00 – 16:00 Session 7 – Practical session on replication exercises
Closing remarks