



European
University
Institute



ROBERT
SCHUMAN
CENTRE FOR
ADVANCED
STUDIES

PANEL DATA FOR BANKING SECTOR ANALYSTS

Online executive training course

05 - 26 March 2021



THE COURSE

The course will cover the basics of panel data analysis and some more advanced extensions, focusing mainly on microeconomic settings with a large number of cross-sectional observations. The statistical package Stata will be used to illustrate all of the methods, including applications to the banking sector.

The common estimators – random effects, fixed effects, and first differencing will be discussed, with emphasis on robust inference and specification tests. During the course modules, the instructor will present in details:

- The extensions that allow heterogeneous slopes and trends
- Instrumental variables methods
- Estimation of dynamic models also will be covered.
- Fixed effects estimation and inference with a large number of time periods, applicable to more aggregated data.
- The problem of unbalanced panels and how to test for nonrandom sample selection

The panel data methods will be applied to estimate bank cost functions as well as estimating the effect of foreign ownership on market power, as in Delis, Kokas, and Ongena (2016, JMCB). Also, difference-in-differences methods will be illustrated by studying the effects of changes in banking regulations, such as the European Bank Recovery and Resolution Directive, on credit default swaps.

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The course was brilliant and very useful to me. I liked a lot the teaching style of prof. Wooldridge. I will most certainly recommend it to my colleagues and will keep an eye on the courses offered by FBF.

Participant of the 'Panel Data for Banking Sector Analyst' online course, September 2020



PLACE

Online course

DATES

05 - 26 March 2021

AREA

Statistical and Econometric Methods

LEVEL

Advanced

TARGET

EU Officials (ECB, SSM, SRB, ESRB, EBA, ESM), National Supervisory Authorities, Financial Stability officers, Economics Departments And Forecasting Departments of Central Banks, Ph.D. and Post-doctoral researchers, Research department officers of private banks.

KEY INFO

COURSE DIRECTOR



Jeffrey Wooldridge is University Distinguished Professor of Economics at Michigan State University. He is a Fellow of the Econometric Society and the Journal of Econometrics. He is the author of two textbooks in econometrics: *Introductory Econometrics: A Modern Approach*, 6e; and *Econometric Analysis of Cross Section and Panel Data*, 2e. He has served on several editorial boards, including as editor for the *Journal of Business and Economic Statistics* as co-editor of *Economics Letters*. While an assistant professor at MIT, he won the graduate teacher-of-the-year award three times. He has given dozens of econometrics short courses around the world.

KEY TOPICS

- Random Effects, Fixed Effects, First Differencing
- Robust Inference and Robust Specification Tests
- Instrumental Variables
- Heterogeneous Trend and Slope Models
- Dynamic Models
- Large-T Panels
- Correlated Random Effects Approaches to Panel Data
- Unbalanced Panels and Detecting Sample Selection Problems
- Nonlinear Panel Data Models
- Bank Cost Functions
- Effect of Foreign Ownership on Market Power
- Difference-in-Differences Methods

WHAT YOU WILL LEARN

You will learn to use Stata to estimate basic linear panel data models by random effects, fixed effects, first differencing, and instrumental variables versions of these.

You will learn how to use robust specification tests to choose among estimation methods.

You will learn what happens when additional heterogeneity is introduced into the basic model.

You will be introduced to large T panel data sets.

You will understand the consequences of unbalanced panel data sets.

You will understand the tradeoffs between pooled and joint estimation methods for nonlinear models

You will learn about the effects of the Bank Recovery and Resolution Directive(BRRD) on Credit Default Swap (CDS) spreads.

FORMAT OF THE COURSE

This course consists in a balanced mix between self-paced material and live online activities. This format will bring to your own devices the course material and interactions with instructors, teaching assistants and other participants.

During the first and the second week in the course, you will be guided in the course material via video lectures and live classes with the course instructor. In addition, you will apply the theory into practice through homework assignments.

The third week of the course will consist in lab sessions, in which the instructor and teaching associate will guide you in practical exercises in STATA, during a set of live online events.

The course format will give ample room to question times and collaboration. You will benefit from close guidance and throughout the whole course, with multiple occasions for individual feedback and interactions with the instructor and teaching assistants.

The course will require 18 hours to be completed.



Video Lectures



Lab Sessions



Direct Interactions



Discussions

Study	Log Risk-Ratio	95% Conf. Interval	N weight
Ferguson & Simes, 1989	-0.209	-2.008	0.229
Rosenthal et al., 1990	-1.585	-2.450	-0.723
Hare & Sutherland, 1977	-1.340	-2.811	-0.085
Freund-Müller et al., 1973	-1.462	-1.739	-1.164
Stein & Broome, 1993	-0.218	-0.441	0.226
Vandiviere et al., 1973	-0.766	-0.860	-0.673
IPT Nadra, 1989	-1.423	-2.540	-0.695
Confine & Borjka, 1980	0.812	-0.111	0.135
Rosenthal et al., 1991	-0.489	-0.935	-0.064
Comstock et al., 1974	-1.375	-1.991	-0.842
Comstock & Webster, 1969	-0.239	-0.250	-0.221
Comstock et al., 1976	0.446	-0.984	1.876
Comstock et al., 1976	-0.827	-0.541	0.506
theta	-0.715	-1.067	-0.362

COURSE SCHEDULE

05 MARCH

Opening of the course

12 - 26 MARCH

Live online sessions

all held 3:00 PM – 5:00 PM (CET)

12/03 First live class: recap of modules 1-6

19/03 Second live class: recap of modules 7-16 + Q&A

23/03 Third live class:

- Lab 1

- Office hours (5-6.30 PM)

25/03 Fourth live class:

- Lab 2

- Office hours (5-6.30 PM)

26 MARCH

Closing of the course

05 - 26 MARCH

Self-paced progression throughout lectures and homework exercises

(total time approximately required: 10 hours)

READINGS

Delis, M. D., Kokas, S. and Ongena, S. (2016)

Foreign ownership and market power in banking: Evidence from a world sample.

Journal of Money, Credit and Banking, 48(2-3), pp. 449-483.

Pancotto, L. and ap Gwilym, O. and Williams, J. (2019)

The European Bank Recovery and Resolution Directive: a market assessment.

Journal of Financial Stability, 44. 100689. ISSN 1572-3089



ABOUT EUI AND RSCAS

The European University Institute (EUI) is a unique international centre for doctorate and post-doctorate studies and research, situated in the Tuscan hills overlooking Florence.

Since its founding in 1972 by the six original members of the then European Communities, the EUI has earned a reputation as a leading international academic institution with a European focus. The four departments – Economics, History and Civilization, Law, and Political and Social Sciences – host scholars from more than 60 countries.

The EUI hosts also the Max Weber Programme, the largest postdoctoral programme in social sciences in Europe, and the School of Transnational Governance (STG), which trains tomorrow's leaders on the concepts, methods and practices of governance beyond the state.

Furthermore, the EUI is the home of the Robert Schuman Centre for Advanced Studies (RSCAS), focused on interdisciplinary, comparative and policy research on the major issues affecting European societies.



FBF will bring the EUI experience on your devices



ABOUT FBF

The Florence School of Banking & Finance (FBF) is a European platform bringing together practitioners and academics from the Banking and Finance sector to develop a common culture of regulation and supervision in the European Union.

Established in January 2016 as part of the EUI's Robert Schuman Centre for Advanced Studies, the FBF organises training and policy dialogue activities, in close interaction with its network of leading academic institutions, both in the residential and online formats.

Together with its partners, the School helps experts and decision-makers to take informed decisions in the medium and long-term, critically accompanying the economically and socially sound functioning of the European banking sector.

Training participants since 2016

75+ courses
2500+ participants
170+ instructors
75+ countries represented
369 organisations of origin

Types of Trained Institutions

National Central Banks **35%**
European Central Bank **21%**
National Supervisory Authority **12%**
Academics **11%**
Other EU **5%**
European Banking Authority **3%**
Single Resolution Board **3%**
International Organisation **2%**

FBF ONLINE ACTIVITIES

Since 2016 FBF developed online activities attracting
+8000 attendees to the online seminars and
+750 participants for the online courses.

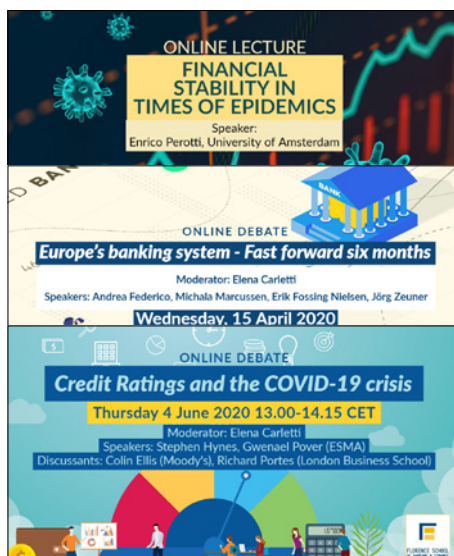
During the COVID-19 lockdown, we increased the capacity of our online activities, resulting in a growth of
+127% in the number of participants.

+10
Online debates

+30
High level speakers

+17.2%
Users on the Website

+22.6%
Sessions on the Website



Collaborations with:

European Commission, European Central Bank, European Securities and Markets Authority, Bruegel, Oliver Wyman, Pierre Werner Chair, Center for Economic Policy Research and more.

ELIGIBILITY

Prerequisite

MA degree in business, economics, or statistics. Or, a BA in economics with training in linear algebra and multivariable calculus.

A knowledge and understanding of ordinary least squares, generalized least squares, instrumental variables (using matrix algebra), some asymptotic theory is required to follow the course.

Technical Prerequisite

Participants are required to have the STATA software installed on their own devices.

FEES AND INFO

1050€ – Private Sector.

950€ – Public Authorities

(e.g. National Competent Authorities, Central Banks and European Institutions).

750€ – Academics

(Full-time Professors, full-time PhD Students and full-time Research Associates).

Please submit a certificate attesting your status of Professor, PhD Student or Research Associate to fbf@eui.eu before registering. FBF secretariat will provide you with a code to register.

**Seats for academics are limited and assigned by the FBF secretariat on a case-by-case basis.*

Registration deadline: 22 February 2021

Please note that the payment must be settled one week before the start of the course.

A certificate of attendance will be provided to all participants after the course.

CONTACTS

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For more information on this course, see:

<https://fbf.eui.eu/panel-data-banking-sector-analysts-2021/>