Alberto Franco Pozzolo
Dipartimento di Giurisprudenza
Università degli Studi di Roma Tre
e-mail: alberto.pozzolo@uniroma3.it

EMPIRICAL MICRO-ECONOMETRIC METHODS IN ECONOMIC RESEARCH (8-12 HOURS)

COURSE DESCRIPTION

The course is designed to provide students with essential tools and frameworks for initiating, executing, and writing an empirical research project in economics by presenting and discussing a set of seminal empirical contributions. Emphasizing research design rather than specific findings, the course seeks to deepen students' understanding of how empirical research informs policy debates and theoretical advancements in economics.

Special attention will be given to topics aligned with my research expertise, including the role of financial intermediation, firm internationalization, and international trade. Additionally, the course structure will remain flexible to accommodate specific interests expressed by students, thereby tailoring the learning experience to emerging areas of empirical inquiry.

Lectures will be structured as presentations — delivered either by me or by students — focusing on the key methodological aspects of one or two selected papers, followed by a group discussion.

The main methodological topics covered include:

- defining the research question;
- mapping relevant theoretical and empirical contributions;
- constructing a conceptual framework that connects theory with empirics;
- developing testable hypotheses grounded in economic theory and existing evidence;
- identifying sources of endogeneity (e.g., simultaneity, omitted variable bias) and implementing appropriate solutions (e.g., instrumental variables, fixed effects, difference-in-differences, structural models, regression discontinuity design);
- writing the empirical paper.

EXAM (ONLY IF REQUIRED)

24 hours take-home written examination based on an essay on how to address a specific research question.

READING LIST

Reference books

Angrist, J. D. and J. S. Pischke (2008), *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press.

Campbell, J. Y., A. W. Lo and A. McKinley (1997), *The Econometrics of Financial Markets*, Princeton University Press.

Greene, W. H. (2000), *Econometric Analysis, Fourth edition*, Prentice Hall.

Imbens, G. W., Wooldridge, J. M. (2009). Recent developments in the econometrics of program evaluation. *Journal of economic literature* 47, 5-86.

Wooldridge, J. M. (2010), *Econometric Analysis of Cross-section and Panel Data*, MIT Press.

Reference papers

The list of papers will be decided based on the needs of students potentially interested in taking the course. Some examples of the econometric methodologies covered, based on papers in the financial intermediation literature, are listed below.

Allen, F., Covi, G., Gu, X., Kowalewski, O., and Montagna, M. (2022). The interbank market puzzle. CEPR DP n. 17263. (Propensity Score Matching)

Amiti, M., Weinstein, D. E. (2018). How Much Do Idiosyncratic Bank Shocks Affect Investment? Evidence from Matched Bank-Firm Loan Data. *Journal of Political Economy* 126, 525-587. (Granularity)

Focarelli, D., Pozzolo, A. F. and L. Casolaro (2008), The Pricing Effect of Certification on Syndicated Loans, *Journal of Monetary Economics* 55, 335-349. (Event study)

Jiang, L., Levine, R., Lin, C. (2017). Does Competition Affect Bank Risk? NBER Working Paper No. 23080. (Gravity equations)

Jiménez, G., S. Ongena, J.L. Peydrò and J. Saurina (2014), Hazardous Times for Monetary Policy: What do 23 Million Loans Say About the Impact of Monetary Policy on Credit Risk-Taking?, *Econometrica* 82 463-505. (Saturation and identification)

Kashyap, A., R. Rajan, and J.C. Stein, (2002), Banks as Liquidity Providers: an Explanation for the Co-Existence of Lending and Deposit-Taking, *Journal of Finance* 57, 33-73. (Instrumental variables)

Kashyap, A. K., and Stein, J. C. (2000), What do a million observations on banks say about the transmission of monetary policy?, *American Economic Review*, 407-428. (Interactions)

Keys, B., T. Mukherjee, A. Seru and V. Vig (2010), Did Securitization lead to lax screening: Evidence from Subprime Mortgage Backed Securities, *Quartely Journal of Economics*, 307-362. (Regression discontinuity design)

Khwaja, A. I., and A. Mian, (2008), Tracing the impact of bank liquidity shocks: Evidence from an emerging market, *The American Economic Review* 98, 1413-1442. (Difference in differences)