Jorge Arenas Amorós
Spanish nationality, male

Mail : jorgearenasamoros@gmail.com
Tel. : +34 619 58 16 51

Research Interests

Applied Macroeconomics; Monetary Economics; Expectations and Information Shocks; Time Series Econometrics; Energy Markets.
My research focuses on applied macroeconometric methods, including high-frequency identification of monetary policy and information shocks, Bayesian and set-identified SVARs, local projections, and the analysis of macro-financial spillovers from energy market disruptions.

Research

Revisiting Fundamentals of the European Gas Market: The Role of Supply Substitution.
Working paper.
New measures of market-based monetary policy surprises in macroeconomic outcomes.
Work in progress.
Nonlinear Price Dynamics in Gas and Electricity Spot Markets.
Work in progress.

Education

2023-present University of Alicante. PhD in Economics.
Research track in Macroeconomics and Econometrics. Advisor: Iván Payá. Dep. de Fundamentos del Análisis Económico

2021-2023 University of Alicante. Master in Quantitative Economics.
Master Thesis: *Impact of Natural Gas and Crude Oil shocks on European stock returns*; consisted in measuring whether natural gas and crude oil markets are determining the European stocks.
2 years master.

2017-2021 Complutense University of Madrid. Bachelor of Economics. Economic Analysis Specialization.
4 years degree.

Professional Experience

2023-present University of Alicante. Fundamentos del Análisis Económico.
T.A. Introduction to Statistics. '22-23 & '23-24 (probability theory and statistics), undergraduate.
T.A. Introduction to Macroeconomics. '23-24 & '24-25 (introductory course in macroeconomics), undergraduate.
T.A. Mathematics I. '25-26 (introductory course in algebra and calculus), undergraduate.
T.A. Statistics. '24-25 graduate course in statistics.
Instructor: M. Dolores Collado
T.A. Econometrics. '25-26 graduate course in econometrics.
Instructor: M. Dolores Collado

2025-present Journal of European Economic Association.
Data Replicator The role involves ensuring that the code and data provided by authors in the Replication Package of accepted papers run correctly and reproduce the reported results.

Other Experience

2019-2020	Complutense University of Madrid. Análisis Económico I. *Research Assistant.* Teaching the elective course of Mathematics Group 0 for first-year students (calculus and linear algebra), undergraduate.

Skills

English	Advanced
Spanish	Native ***Able to teach and translate in these two languages, including scientific manuscripts.***
Programming Languages/Statistical Software	`MATLAB` (Proficient), `Python` (Proficient), `R` (Proficient), `STATA` (Proficient) and `SQL` (Intermediate)
Other tools	LaTeX, Excel, Power Point and Microsoft Word

Additional Training

Bayesian Models and Forecasting	Italian Econometrics Association provided a postgraduate course focus on Bayesian multivariate models and forecasting in economics and finance. The course is advanced and covers state-of-the-art techniques and recent developments in Bayesian Multivariate Models, for structural analysis and forecasting, nonparametric methods and forecast combinations with a broad range of applications in economics and finance. The methods introduced in the lectures were illustrated with hands-on applications in MATLAB. Instructors: Marta Banbura, Roberto Casarin, Matteo Ciccarelli and Francesco Ravazzolo
Financial Econometrics	Graduate course on Econometric Methods for Financial and Macroeconomic Time Series, with a strong emphasis on both frequentist and Bayesian approaches to statistical inference and modeling. The frequentist part covers estimation and hypothesis testing with dependent observations, focusing on extremum and pseudo-maximum likelihood estimators (PMLE), their identification, asymptotic properties, and efficiency. It also includes classical hypothesis tests (likelihood ratio, Wald, and Lagrange multiplier), specification tests, and the estimation of autoregressive and dynamic regression models, addressing issues such as unit roots, spurious regressions, and cointegration, as well as continuous-time modeling. The Bayesian part introduces prior–posterior analysis, the likelihood principle, decision theory, and simulation-based inference (Gibbs sampling and Metropolis–Hastings). Applications include mean–variance efficiency tests, risk measures (VaR, CoVaR), dependence modeling, and Bayesian SVARs, linking theory to empirical work in financial and macroeconomic contexts. Instructor: Dante Amengual
Causal Inference with VARs	The training school from EABCN covered the theoretical foundations of VAR and SVAR models, structural identification challenges, and leading methods such as short- and long-run restrictions, Cholesky decomposition, sign restrictions, heteroskedasticity-based identification, and instrumental-variable (proxy-SVAR) approaches. It combined lectures and practical sessions focused on the empirical analysis of economic shocks, their propagation, and applications to monetary policy. Instructor: Giovanni Ricco

Selected PhD Coursework

Macro-econometrics	Forecasting and Bayesian macroeconometrics, with emphasis on state-space methods, principal components, stochastic volatility, threshold VARs, and time-varying VARs. Instructor: Gabriel Pérez Quirós
Adv. Macro. II	Applied macroeconometrics and identification in SVARs (short-run, long-run, sign restrictions, and heteroskedasticity), plus local projections and external instruments. Instructor: Iván Payá
Time Series	Time-series econometrics with univariate and multivariate models, including VARMA and GARCH specifications. Instructor: M. Angeles Carnero
Adv. Econometrics	Modern econometric methods (GLS, LASSO, and introductory machine learning), plus database tools and text-mining techniques. Instructor: Pedro Albarrán