

Call for expressions of interest

PhD Fellowships in Economics

The <u>University of Barcelona School of Economics</u> invites applications for three 4-year full-time PhD Fellowships starting in March 2025 (tentative). Successful applicants would work as part one of the following projects:

1. Non-stationary time series and panel data econometrics analysis with structural breaks.

Principal Investigator (PI): Dr. <u>Josep Lluís Carrion-i-Silvestre</u>.

Summary: The project focuses on developing econometric techniques for non-stationary time series and panel data analysis, accounting for structural breaks and cross-section dependence. For non-stationary time series, it aims to detect parameter instabilities, co-breaking testing, and cointegration analysis. For panel data, it designs techniques to handle cross-section dependence with heterogeneous parameters. This involves interactive effects, common factors, and structural breaks. The selected doctoral candidate will contribute by extending these research topics.

Specific requirements: Grant candidates must have a solid theoretical background in time series and [macro] panel data econometrics. They should be advanced users of econometric programming languages such as Gauss, Matlab, or R, which will be used for conducting Monte Carlo and bootstrapping simulation analyses. Advanced knowledge of LaTeX typesetting is also required.

2. Allocation problems in coalitional games, networks and markets.

Principal Investigator (PI): Marina Núñez.

Summary: The project explores agents' decision-making from a cooperative perspective, considering strategic interactions. It focuses on equitable distributions in rationing problems (e.g., CO2 emission permits), coalitional games, networks, and the allocation of indivisible goods (auctions and matching). We approach these issues using game theory and social choice theory, seeking axiomatic characterizations of solutions based on fairness, stability, non-manipulability, and efficiency. The selected candidate will contribute by extending these research topics and addressing some of the project objectives. Strong skills in mathematical economics are required.

3. The political consequences of financial and trade shocks: historical evidence from individual level panel-data in Catalonia, 1920-1950

Principal Investigators (PIs): Francesc Amat and Enrique Jorge-Sotelo.

Summary: The project explores the political consequences of income and wealth shocks, with a focus on the changing democratic attitudes of elites during periods of economic instability. It focuses on the crucial years of 1919–1950, which include some of history's main episodes of financial and real economic distress against the background of a rapidly changing political environment, including the Spanish Civil War and its aftermath. The project addresses address key research questions for current scholarly debates in Political Science, Economic History and Political Economy, related to the effects of wealth and income

shocks on political elites' and individuals' stance towards democracy, incumbent political institutions and their role in democratisation processes, as well as their legacies. The selected doctoral candidate will contribute by extending these research topics.

Specific requirements: grant candidates must have a background in quantitative Political Science, Economic History and/or Economics. Working knowledge of statistics and econometrics software such as Stata or R is required, and familiarity with OCR and data digitalization software, as well as ArcGIS is desirable.

Remuneration is commensurate with a PhD grant under the Spanish government fellowship system (contratos de formación de personal investigador predoctoral). The the annual gross salary ranges from approximately €17,800 in the first year to €23,800 in the fourth year. The work contract comes with public benefits and health insurance coverage.

The <u>University of Barcelona</u> is a leading centre in southern Europe, 1st university in Spain, deeply committed to excellence in research. Within this framework, the <u>UB School of Economics</u> serves as a pivotal platform for research and graduate education in Economics. <u>According to IDEAS</u>, the UB School of Economics is ranked 113th in the world, making it a top 10% economics department.

The successful candidates will be required to apply for the <u>PhD in Economics programme</u> at the UB School of Economics, so a strong quantitative background in Economics is expected.

The PhD in Economics programme has been awarded the distinction of Excellence following a comprehensive and rigorous external evaluation conducted by the Catalan University Quality Assurance Agency (AQU). This recognition acknowledges the quality and impact of the research conducted within the framework of the PhD programme.

Submission instructions

Interested candidates should submit their expression of interest by sending their [i] CV, [ii] a letter of interest, and [iii] a piece of recent academic work (e.g., Master's thesis, ongoing research paper, etc. - optional) to school.economics@ub.edu before September 9, 2024.

The letter of interest (500 words max) should detail your past experience, interest in the project's areas, and why you would be an outstanding candidate for this pre-doctoral position.

Please indicate the name of the project you are applying for in your email.