

Social Research Call 2020

Selected projects

Title: Climate Change and Economic Challenges for the Spanish Society

Acronym: CC-ECHASS

Project leader: Esther Ruiz

Host organisation: Universidad Carlos III de Madrid

Main purpose of the project: The final goal of CC-ECHASS is to obtain reliable measures of climate change and to analyze the risk effects on economic growth and on the financial sector, especially insurance coverage and banks' exposures in Spain over the next decade.

Design/methodology/approach: Assessment of climate risk is based on the probabilistic forecasts of extreme temperatures (minima and maxima). Measuring the uncertainty of these forecasts permits assigning probabilities to potential future scenarios. We analyze the effects of climate change on the real and financial sectors under different extreme risk scenarios.

Potential results: Design of robust quantitative systems for monitoring key variables (temperatures, precipitations) related to the 2030 Climate and Energy Framework Objectives of the European Commission. Measures of the effects of extreme climate phenomena on macroeconomic aggregates. Design of financial instruments to evaluate and mitigate risks associated with climate change.

Social relevance of the research: Policy makers will adequately measure climate risk and design resilience policies to mitigate extreme shocks as those related to the COVID19 pandemic. The design of sustainable development paths requires taking climate risk into account. For Spain (and other countries), such a path should be able to withstand future shocks.

Originality/value of the project: Development of state-of-the-art quantitative methods to forecast extremes and quantifying their uncertainty. Design of robust tools to monitor climate change and its complex economic effects. Relevance of the analysis for the well-being of the present and future generations.