HELLENIC REPUBLIC
National and Kapodistrian University of Athens
DEPARTMENT OF ECONOMICS

Research Seminar Series in Economic Sciences, 2025 – 2026

Speaker: Eduardo Amaral Haddad, *Department of Economics, University of Sao Paulo*

Title: "Modeling Spatial and Economic Impacts of Disasters"
Date & Time: Monday, March 30th, 2025, 14:00 - 15:30
Place: Grypario Megaro (Sofokleous 1) | 4th floor | Lecture Hall "Kosmas Psychopedis" (416)
Live streaming of the event: https://uniflix.uoa.gr/events/
Url: https://www.econ.uoa.gr/ereynitika_seminaria_research_seminars/

Abstract:
How do disasters reshape economies across sectors and regions?
This seminar presents analytical approaches to modeling the spatial and economic impacts of natural and man-made disasters. Drawing on interregional input-output systems and spatial computable general equilibrium (CGE) models, the discussion showcases a collection of selected case studies that explore multisectoral and multiregional interactions, allowing localized shocks to propagate through production, trade, income, and network linkages. The emphasis is on ex-ante structural simulation as a complement to ex-post causal inference methods, enabling anticipatory evaluation of systemic and macroeconomic consequences.
Through diverse international applications, including climate change impacts on agriculture, water scarcity and adaptation, urban floods, transport network disruptions, conflict-related shocks, deforestation dynamics, and post-earthquake reconstruction, the seminar illustrates how disaster-related shocks generate heterogeneous regional outcomes and distinct adjustment mechanisms. The evidence highlights the importance of backward and forward linkages, regional exposure, price adjustments, factor substitution, and network effects in shaping total economic losses and recovery trajectories. The presentation also addresses uncertainty in model structure, parameters, and data, emphasizing the compounding effects that may arise in integrated modeling exercises. Finally, it advances a probabilistic perspective on systemic risk assessment by linking conventional hazard-based loss estimation with economy-wide modeling of indirect and cascading effects. By moving beyond direct asset losses to incorporate systemic interactions and regional equity-efficiency trade-offs, the selected applications provide insights for disaster risk assessment, resilience planning, and recovery policy design.

Organizers: Dimitris Kenourgios, *Professor*
George Dotsis, *Professor*
Frago Kourandi, *Assoc. Professor*

Thank you.

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