



Departamento de  
Teoría e Historia  
Económica

## **Seminario: Takayuki Oishi (Meiji Gakuin University)**

17/09/2025

Seminarios 2025-2026

**Título:** River-Sharing Problem with Floods

**Sala:** E22

**Hora:** 12:30

**Resumen:** In international river basins, some countries experience droughts while others face floods. Water inflow from upstream neighbors benefits drought-stricken countries but damages flood-stricken countries by reducing their welfare. This situation cannot be addressed by existing river-sharing models (Ambec and Sprumont 2002; Ambec and Ehlers 2008). Here, we generalize these models by considering the effect of flooding.

In our model of the river-sharing problem with floods, we provide two characterizations of benefit function profiles for which the downstream incremental distribution is a unique welfare distribution that satisfies both the welfare upper bound and welfare lower bound of both upstream and downstream countries. Additionally, we propose a strategic bargaining process that implements only this welfare distribution in a subgame perfect equilibrium.

