

FAKULTÄT FÜR WIRTSCHAFTS- UND SOZIALWISSENSCHAFTEN

# **Fachbereich VWL / Department of Economics**

# EconNewsletter

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## **APRIL 11 – APRIL 14, 2023**

## **NEWSLETTER 2023-6**

### SEMINAR CALENDAR

Quantitative Economics	
Christian Proaño, Universität Bamberg:	Tuesday April 11
Who's Afraid of the Zero Lower Bound?	12:15-13:30
	R. 0079 (VMP 5)
Microeconomics Seminar	
Michael Finus, Universität Graz:	Thursday April 13
The Governance Architecture of Climate Agreements in the Light of	17:15-18:45
Solar Radiation Management	R. 0079 (VMP 5)

#### ABSTRACTS

#### **Microeconomics Seminar**

Michael Finus, Universität Graz The Governance Architecture of Climate Agreements in the Light of Solar Radiation Management

#### Abstract:

We analyse how geoengineering in the form of solar radiation management (SRM), associated with the potential of high collateral damages, affects the governance architecture of climate agreements. We clarify under which conditions signatories to a climate agreement can avoid that non-signatories use SRM. We correct and qualify results of Millard-Ball (2012) who claims that if countries perceive the potential collateral damages of SRM to be sufficiently high (lower threshold), a climate change agreement on greenhouse gas emission reductions preventing the deployment of SRM technologies is stable. We show that an additional though a similar condition is necessary to make the avoidance of SRM rational in the first place. Moreover, we also show that such an agreement can only be stable if the threat to deploy SRM is credible which requires that collateral damages are perceived to be sufficiently low (upper threshold). Hence, Millard-Ball is far too optimistic about the prospects of using SRM as a threat in order to stabilize a large climate agreement. We show that our results are robust in two analytical frameworks frequently used in the game-theoretic analysis of international environmental agreements.

# The <u>next EconNewsletter</u> will be published on Monday, April 17, 2023. <u>Editorial deadline</u>: Friday, April 14, 2023.

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