

# Fachbereich VWL / Department of Economics

# EconNewsletter

Editorial Contact: Michael Paetz tel: +49 40 42838-5561; e-mail: econ.newsletter.Wiso@uni-hamburg.de

# MAY 5 – MAY 9, 2025

## **NEWSLETTER 2025-9**

## SEMINAR CALENDAR

Quantitative Economics	
Sandra Eickmeier, Bundesbank:	Tuesday May 6
The Environmental Crisis, the Economy, and Consciousness	12:15-13:30
	R. 0079 (VMP 5)
Hamburg Lectures in Law and Economics	
Nada Maamoun, Universität Kiel:	Wednesday May 7
Measuring Compliance with the Paris Agreement	18:15–19:45
	R. 223 (ILE)
	Alsterterrasse 1

This seminar is held in a hybrid format. To register for online participation via Zoom, please send an E-Mail by 11:30 AM at the latest on the day of the lecture to <u>lectures-ile@uni-hamburg.de</u>.

#### Microeconomics

Michel Grabisch, Université Paris 1:	Thursday May 8
Markovian values and their application to the formation of environmental	17:15-18:45
agreements	R. 0079 (VMP 5)

### ABSTRACTS

#### Hamburg Lectures in Law and Economics

Nada Maamoun, Universität Kiel: Measuring Compliance with the Paris Agreement

#### Abstract:

International climate agreements, such as the Paris Agreement, aim to tackle global warming through broad participation, ambitious targets, and high compliance rates. However, assessing their effectiveness remains a challenge. This paper examines the effectiveness of the Paris Agreement by focusing on compliance with its targets. Drawing on a novel compliance index methodology, we analyze the degree of compliance among 52 countries, covering approximately 75% of global CO2 emissions. Our analysis reveals varying levels of compliance across countries, with policies emerging as the predominant instruments. We find higher adherence to adaptation targets compared to mitigation targets and observe that full compliance often takes on average 2 years to materialize. Additionally, we explore potential drivers of compliance, such as income levels. Our findings contribute to understanding the dynamics of international climate agreements and highlight the importance of monitoring and review mechanisms in enhancing compliance.

#### Microeconomics

#### Michel Grabisch, Université Paris 1:

Markovian values and their application to the formation of environmental agreements

#### Abstract:

Cooperative games offer a suitable framework for modelling the formation of coalition and solving the problem of sharing the benefit of cooperation. The Shapley value is a famous solution concept for sharing benefits, however it is restricted to the situation where the final coalition is the "grand" coalition of all players, and moreover, it supposes that the grand coalition has been formed by gathering one by one players, in any order. Scenario values, and more generally Markovian process values, proposed by Faigle and Grabisch, give full flexibility to consider any kind of scenario for forming the grand coalition. Moreover, there is no need to terminate at the grand coalition. Players or groups of players can enter or leave the current coalition, according to a Markov chain, and the sharing of benefit (or cost) is computed from the expected marginal value of the players in all transitions. We apply this technique to the problem of sharing the cost of pollution caused by emissions of different countries, once they have agreed to cooperate in the aim of reducing their costs. The underlying cooperative game is a gamma-cooperative game (Chander and Tulkens) obtained by a strategic game where the actions are the level of emissions. The Markov chain ruling the formation of coalition is based on the incentives of countries to leave or to enter a given coalition. The Markovian process value is well-suited to this problem as there is no guarantee in general that the grand coalition of all countries forms.

## ACTIVITIES OF DEPARTMENT MEMBERS

#### Miscellaneous

We welcome Professors Agnieszka Rusinowska und Michel Grabisch (both at Université Paris 1 Panthéon Sorbonne, and Paris School of Economics) who will visit the department in the week from May 5 to 9. Agnieszka will teach a PhD course "Social Networks and Opinion Dynamics", and Michel will present in the Micro seminar on May 8. Whoever wants to meet with them, please get directly in touch (<u>Agnieszka.Rusinowska@univ-paris1.fr</u> and <u>michel.grabisch@univ-paris1.fr</u>).

The <u>next EconNewsletter</u> will be published on Monday, May 12, 2025. <u>Editorial deadline</u>: Friday, May 9, 2025.

**EconNewsletter** Department of Economics University of Hamburg Von-Melle-Park 5, 20146 Hamburg

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