



ALFRED-WEBER-INSTITUT FÜR WIRTSCHAFTSWISSENSCHAFTEN  
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## Upcoming Seminars

**Monday, 13.11.2017**

**Departmental Seminar**

13.30-14.30

AWI 00.010

Rick van der Ploeg, University of Oxford

(invited by Florian Diekert)

"Pricing Carbon Under Economic and Climatic Risks:  
Leading-Order Results from Asymptotic Analysis"

## Abstract

### Departmental Seminar

Rick van der Ploeg

"Pricing Carbon Under Economic and Climatic Risks: Leading-Order Results from Asymptotic Analysis"\*

Leading-order results from asymptotic analysis for the optimal price of carbon under uncertainty are derived from a macro continuous-time DSGE model with AK growth, energy use, adjustment costs, recursive utility and costs of global warming. We consider non-climatic productivity growth uncertainty, atmospheric carbon uncertainty, climate sensitivity uncertainty and climate damage uncertainty. Explicit expressions are derived that show the leading-order dependence of the optimal carbon price on these uncertainties, the various climate betas, risk aversion, intergenerational inequality aversion and convexity of the climate damage specification. Our solution allows for skewness and mean reversion in stochastic shocks to the climate sensitivity and damage coefficients. The resulting rule for the optimal risk-adjusted carbon price incorporates precautionary, risk- insurance and risk-exposure effects to deal with future economic and climatic risks. The stochastic processes are calibrated and used to interpret and calculate the impact of each on the optimal risk- adjusted carbon price.

\*with Ton S. van den Bremer and Frederick van der Ploeg

## Talks and Research Visits

**Zeno Enders** participated in a panel discussion at the inauguration of the new Doctoral Programme on Behavioral Macroeconomics at the University of Bamberg, November 6.

**Andis Sofianos** presented his paper: "Self-reported & Revealed Trust: Experimental Evidence" at the ASSET 2017 in Algiers, Algeria, October 27-29.

## New Publications

Almira Enders, Zeno Enders and Mathias Hoffmann: "International Financial Market Integration, Asset Compositions, and the Falling Exchange Rate Pass-Through" *Journal of International Economics*, forthcoming.

**Editorial deadline for issue 26/2017 of the newsletter:  
Wednesday, November 15, 2017, 12 p.m.  
newsletter@awi.uni-heidelberg.de**

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