



## Internal Seminar

**TIME:**

Wednesday, July 15, 12.15 - 13.15

**PLACE:**

Virtual seminar room

Yilong Xu

"Does mining fuel bubbles? An experimental study on cryptocurrency market"\*

Recent years have seen an emergence of decentralized cryptocurrencies that were initially devised as a payment system, but are increasingly recognized as investment instruments. The price trajectories of cryptocurrencies have raised questions among economists and policy makers, especially since such markets can have spillover effects on the real economy. We focus on two key properties of cryptocurrencies that may contribute to their pricing. In a controlled lab setting, we test whether pricing is influenced by costly mining, as well as entry barriers to mining technology. Our mining design resembles the proof-of-work algorithm employed by the majority of cryptocurrencies, such as bitcoin. In our second treatment, half of the traders have access to the mining technology, while the other half can only participate in the market. This is designed to resemble the high entry cost to initiate cryptocurrency mining. In the absence of mining, no bubbles or crashes occur. When costly mining is introduced, assets are traded at prices more than 300% higher than fundamental value and the bubble peaks relatively late in the trading periods. When only half of the traders can mine, prices surge much earlier and reach values of more than 400% higher than fundamental value at the peak of the market. Overall, the proof-of-work algorithm seems to fuel overpricing, which in conjunction with entry barriers to mining is intensified.

\*with Marco Lambrecht and Andis Sofianos

## Talks and Research Visits

**Zeno Enders** presented the paper "Firm expectations and economic activity" (joint work with Franziska Hünnekes and Gernot Müller) virtually at Osaka University, Japan on July 9.

**Christian Conrad** presented the paper "The role of information and experience for households' inflation expectations" (joint with Zeno Enders and Alexander Glas) at the virtual workshop on "Determinants of Saving", Bayreuth, July 01, 2020.

At the 25th Annual and 1<sup>st</sup> entirely virtual *Conference of the European Association of Environmental and Resource Economists (EAERE)* from 23 June to 3 July, 2020, the following papers by members of the AWI were presented (in alphabetical order of authors, presenters in bold): "Date Marks, Valuation, and Food Waste: An In-Store 'Eggsperiment'" (**Alessio D Amato**, Timo Goeschl, Luisa Lorè, Mariangela Zoli); "Where the wind blows: Using wind direction to assess the impact of air pollution on the long-term health consequences of Indian children" (Anca Balietti, Souvik Datta, **Stefanija Veljanoska**); "Basis Risk Effects on the Demand for Index Insurance. Experimental Games with Colombian Coffee Growers" (Stephen Boucher, **Santiago Gomez Cardona**, and Andres Moya); "How to Design the Ask? Funding Units vs. Giving Money" (**Johannes Diederich**, Raphael Epperson, and Timo Goeschl); "The Creation of Social Norms under Weak Institutions" (Florian Diekert, **Tillmann Eymess**, Joseph Luomba, and Israel Waichman); "The Nature of Experience" (Florian Diekert, **Timo Goeschl**, and Christian König-Kersting); "Early Warning Signals" (**Florian Diekert**, Daniel Heyen, and Frikk Nesje); "Restrictive quotas, risk, and income smoothing" (Florian Diekert and **Robbert Schaap**); "Pricing carbon" (Moritz A. Drupp, Frikk Nesje, and **Robert C. Schmidt**); "Climate economics support for the UN climate targets" (Martin C. Hänsel, Moritz A. Drupp, Daniel J.H. Johansson, Frikk Nesje, Christian Azar, Mark C. Freeman, Ben Groom, and **Thomas Sterner**); "The Effectiveness of Prosocial Air Quality Alerts: An Empirical Study of a Particulate Matter Alert System" (Timo Goeschl, **Alexander Janosch (Dangel)**, and Julia Zyder); "Cross-dynastic intergenerational altruism" (**Frikk Nesje**).

## New Publications

Axel Dreher's paper with Andreas Fuchs, Bradley Parks, Austin Strange, and Michael Tierney, "Aid, China, and Growth: Evidence from a New Global Development Finance Dataset," has been accepted by the *American Economic Journal: Economic Policy*.

Jan Potters and Yilong Xu: "Social information and selfishness", *Journal of Economic Behavior & Organization*, Volume 177, Pages 327-340, September 2020 (find paper [here](#)).

Sebastian K. Rütth: "Shifts in Monetary Policy and Exchange Rate Dynamics: Is Dornbusch's Overshooting Hypothesis Intact, After all?", *Journal of International Economics*, Vol 126, September 2020.

Rüdiger Bachmann and Sebastian K. Rütth: "Systematic Monetary Policy and the Macroeconomic Effects of Shifts in Residential Loan-to-Value Ratios" in *International Economic Review*, Vol. 61, Issue 2, p. 503-530, May 2020.

Geir B. Asheim and Frikk Nesje: "Intergenerational altruism: A solution to the climate problem?", *Handbook on the Economics of Climate Change* (G. Chichilnisky and A. Rezai, eds.), Edward Elgar (find paper [here](#)).

Benjamin E. Hilbig, Isabel Thielmann, Sina A. Klein, Morten Moshagen, and Ingo Zettler (in press): "The dark core of personality and socially aversive psychopathology", *Journal of Personality*.

## **New and Leaving Staff**

Illia Pasichnichenko, who was a Humboldt Postdoctoral Research Fellow hosted by Jürgen Eichberger since July 2018, will join the University of Sussex as a Research Fellow, July 15.

Frikk Nesje, research fellow at Research Center for Environmental Economics since 2018, will join the University of Copenhagen as an Assistant professor (on a tenure-track) on August 1<sup>st</sup>.

Christopher Cops, Post Doctoral Researcher, Chair of Economic Theory I since 2017, will join the University of Maastricht as a Junior Professor, September 1<sup>st</sup>.

## **Miscellaneous**

Jörg Oechssler has been named an Advisory Editor for "Games and Economic Behavior".

Frikk Nesje, working at the Research Center for Environmental Economics with Florian Diekert since 2018, has successfully defended his PhD theses at the University of Oslo on "Assessing climate change" (supervised by Geir Asheim and Ben Groom), June 23.

Axel Dreher's chair has successfully received two grants from the German Science Foundation (DFG). The first grant is for research on emerging donors and greater competition in the area of development aid. The second grant is for research on the labor market and cultural effects of migration.

Stay in good health during the summer break

Editorial deadline for issue 10/2020 of the newsletter:  
Wednesday, October 28, 2020, 12 p.m.  
[newsletter@awi.uni-heidelberg.de](mailto:newsletter@awi.uni-heidelberg.de)

