

Ph.D. Students Seminar

WiSe 2021/22

Department of Economics

The seminar meets (bi-)weekly on Thursdays, **12:15-13:15**.

Due to the corona pandemic, in January 2022, the seminar exclusively takes place online via Zoom.

Ph.D. students are invited to present their work, if their supervisor is a member of the economics department (“Erstmitglied” or “Zweitmitglied”). The paper should be at an advanced stage at the time of presentation (this is, ready for presentation at a conference). The supervisor is required to attend the presentation.

If you have questions, please contact **Melanie Krause** (melanie.krause@uni-hamburg.de).

Presenter information: Please keep your presentation under **35 minutes** in order to have enough time for questions and discussions.

Date	Speaker	Title
18.11.2021	Presenter: Christina Maaß Supervisor: Straubhaar	Shedding Light on Dark Figures: Steps Towards a Methodology for Estimating Actual Numbers of COVID-19 Infections in Germany
13.01.2022	Presenter: Lorenzo Romero Supervisor: Lange	The Spatial Distribution of Green Innovation in Germany
27.01.2022	Presenter: Clara Silva Coelho Supervisor: Posch	Monetary policy and regional inequality

Abstracts:

18.11.2021, Christina Maaß, “Shedding Light on Dark Figures: Steps Towards a Methodology for Estimating Actual Numbers of COVID-19 Infections in Germany”

In order to shed light on immeasurable real-world phenomena, we investigate the actual number of COVID-19 infections in Germany based on big data. The true occurrence of infections is not visible, since not everyone infected is tested. This paper demonstrates that coronavirus-related search queries issued on Google can depict true infection levels appropriately. We find significant correlation between search volume and national as well as federal COVID-19 cases as reported by RKI. Additionally, we discover indications that the

queries are indeed causal for infection levels. Finally, this approach can replicate varying dark figures throughout different periods of the pandemic.

13.01.2022, Lorenzo Romero, "The Spatial Distribution of Green Innovation in Germany"

In our fight against climate change, green innovation plays a fundamental role in the capacity of societies to minimize pollution and use of resources. Its distribution has been studied across countries, as well as their drivers and the effects of national policies on it. Unfortunately, not much is known about within-country location of green innovation, and whether regional policies can also affect it. In this study, I investigate whether there are green innovation hubs in Germany and compare them to other innovation hubs known to exist in the country. Later, I look into potential drivers for the spatial distribution of green innovation and their policy relevance.

27.01.2022, Clara Silva Coelho, "Monetary Policy and Regional Inequality"

In this paper an endogenous growth model with spatial component is developed, based on Desmet and Rossi-Hansberg (2014), adding savings technology and a Central Bank following a Taylor rule. The model is numerically solvable, and can endogenously determine the formation of clusters of firms, i.e. regional inequality. The addition of a monetary authority allows the model to further replicate recent findings of the literature regarding long term consequences of monetary policy on regional inequality: relatively poorer regions respond more strongly to the policy change and take longer to go back to the balanced growth path than regions with higher output per capita.