

Ph.D. Seminar in Empirical and Theoretical Economics WiSe 2024/25 Department of Economics

This semester, the PhD seminar takes place as a block seminar on Friday, January 17. The idea is to foster interaction between PhD students and faculty and have a day with active discussions. The seminar runs from 9am until 4pm. In case you cannot attend all talks, feel free to join for the sessions that you are available.

We will also have a joint lunch where we can continue the discussions. If you plan to attend the lunch, please send me an email by January 10 (<u>ole.wilms@uni-hamburg.de</u>).

Date: 17.01.25 09:00-16:00 **Location**: VMP 9 S07

Format: 25 minutes for presentations, 20 minutes for discussions

Time	Speaker	Title
09:00-09:45	Presenter: Jan Pape	Optimal ESG Investment
9:45-10:30	Presenter: Peter Mihaylovski	Recourse versus Non-recourse Mortgage Debt and Costly State Verification
10:30-10:45	Coffee break	
10:45-11:30	Presenter: Felix Schaumann	More than the sum of its parts: Structural modelling interactions and the social cost of carbon
11:30-12:15	Presenter: Roland von Cample	Quantify Quantitative Easing
12:15-13:45	Lunch break	
13:45-14:30	Presenter: Bodo Neumann	Quantifying Income and Cohesion Effects of European Structural Funds
14:30-15:15	Presenter: Riccardo Vannozzi	Appeasing envy and relieving guilt: When inequality does not hurt
15:15-16:00	Presenter: Josie Oetjen	Portfolio Choice in Heterogeneous Agent Models

Schedule:

Presenter: Jan Pape **Title**: Optimal ESG Investment

Abstract: Recent research by Lyon and Montgomery (2015) highlights a significant rise in information asymmetry regarding firms' environmental commitment. In this context, Flammer (2021) identifies two critical rationales for issuing corporate green bonds: the cost of capital improvement and the strategic use of signaling to enhance a firm's reputation, while being cautious of the potential pitfalls of greenwashing. This paper contributes to the understanding of why firms issue green bonds and how information asymmetry in the issuance process influences a firm's optimal timing for transitioning to green technologies. Specifically, we analyze a firm's decision-making process regarding the optimal timing to invest in green technology using a real options framework. This framework takes into account factors such as information asymmetry between the firm and bondholders: The firm has full information about the environmental quality of its green option while the bondholders face incomplete information. Our model incorporates feedback mechanisms regarding the firm's cost of capital related to the reduction of information asymmetry.

Presenter: Peter Mihaylovski

Title: Recourse versus Non-recourse Mortgage Debt and Costly State Verification

Abstract: This paper examines the impact of deficiency judgments on LTV ratios and mortgage spreads, which in turn has important implications for real house prices and the broader economy. To this end, I develop a two-agent DSGE housing model with strategic default and an endogenous loan-to-value (LTV) ratio to examine the effects of recourse on mortgage debt on the housing market and the broader economy. The analysis shows that real house prices, endogenous LTV ratios, and mortgage debt tend to be positively correlated with the degree of mortgage recourse, while the mortgage spread exhibits a weak but negative correlation. Additionally, the findings strongly suggest that the default rate among borrowers is strongly and positively linked to the LTV ratio. This implies that, despite the higher penalties associated with deficiency judgments, default rates increase. These findings underscore the complex trade-offs of mortgage recourse, offering critical insights into its role in shaping housing and economic stability. Last but not least, unsurprisingly mortgage recourse is found to be welfare-improving only for patient households.

Presenter: Felix Schaumann

Title: More than the sum of its parts: Structural modelling interactions and the social cost of carbon

Abstract: IAMs play a key role in climate policy analysis, not least for estimating the social cost of CO2 emissions (SCC). The recent literature has documented that structural modelling changes—such as updates to Earth system processes, inclusion of tipping points, consideration of limited substitutability of ecosystem services or natural capital, or allowing for the persistence of damages to economic output—are an important driver of SCC estimates. Yet, most existing IAM applications only assess the effect of single modifications. Here, we build a modular IAM that is able to systematically combine several of these modifications. This allows us to study how different structural modelling choices interact in shaping SCC estimates, and other key aspects of climate policy paths, and to compute a compound "structural-interactions SCC". We find that substantial nonlinear interaction effects arise as soon as the model features growth-based damages.

Presenter: Bodo Neumann **Titel**: Quantifying Income and Cohesion Effects of European Structural Funds

Abstract: We investigate the economic effects of European Structural and Investment Funds (ESIF) on regional economic performance on the NUTS-3 level. Employing both the Synthetic Control Method (SCM) and the Augmented Synthetic Control Method (ASCM), the analysis evaluates treatment effects across 15 NUTS-3 regions, experiencing unusually high funding. Results highlight significant variation in ESIF's effectiveness, with positive impacts observed in only a small subset of regions. While SCM provides useful benchmarks, ASCM demonstrates superior capacity to address structural differences and mitigate pre-treatment discrepancies, such as lacking overlap, enhancing the reliability of estimates. To contextualize the need for cohesion funding, we explore historical trends of regional economic divergence, revealing persistent disparities despite convergence efforts. These results underscore the importance of targeted policy design and suggest the need for a reform of the European cohesion policy.

Presenter: Riccardo Vannozzi

Title: Appeasing envy and relieving guilt: When inequality does not hurt

Abstract: The model of inequality aversion presented by Fehr and Schmidt in 1999 had a tremendous impact on varying fields of economics. However, the potential interplay between advantageous and disadvantageous inequality remains unexplored. Drawing on insights from social psychology, I hypothesize that the presence of richer people reduces prosocial behavior towards the poor, while the presence of poorer people mitigates spite towards the rich. In this project, I extend the model by Fehr and Schmidt and investigate how my hypotheses can alter its predictions. Also, I test my hypotheses in an online experiment. My project contributes to the literature on other-regarding preferences by introducing new dynamics and revisiting past estimates of inequality aversion. Moreover, it contributes to the literature on persistent inequality by theorizing pro-cyclical adjustments of inequality aversion.

Presenter: Josie Oetjen **Title**: Portfolio Choice in Heterogeneous Agent Models

Abstract: This paper sets up and solves the portfolio choice problem in continuous time HA models with correlated shocks on labor income and assets. We present a novel solution technique based on finite differences to solve HJB equations with second-order cross-derivatives in the framework of HA models. As an important benchmark for the accuracy of our numerical approach, we provide closed-form analytical solutions for the special case without idiosyncratic shocks on labor income. We show comparative statics for different model parameters and discuss resulting empirical puzzles.