

# List of Projects

## Bernhard Schütz

### **Genetic innovation, intermediate goods and energy prices in an agent-based model**

*Anniversary Fund of the Oesterreichische Nationalbank*

*March 2023 - August 2025*

Agent-based models have been receiving ever more attention in recent years. Especially since the crisis of 2008, there have been calls for new research tools. Agent-based models are an interesting option: they allow study of the behaviour of heterogeneous agents and the effects of such heterogeneity on the total economy. We propose introducing three novel extensions to a state-of-the-art agent-based model: First, we allow for rich interactions between industries by incorporating intermediate goods into the production process. Secondly, the model is extended to enable a new way to model technological change (“genetic optimisation”). Thirdly, we propose to account for the biophysical dimension by including energy usage as a factor of production.

Funded by the [Anniversary Fund of the Oesterreichische Nationalbank](#) (Project No. 18830).

### **Fiscal policies in Europe IV**

*Austrian Chamber of Labour*

*January 2023 - November 2024*

In this project, we assess fiscal policies and their macroeconomic effects in the European Union and pay particular attention to Austrian fiscal policy in the European context. Our research is primarily based on using quantitative data and methods, which allows us to take a comparative, European-wide perspective. In three sub-projects, we analyse the cyclical sensitivity of government spending in Austria (sub-project 1), the reform options for fiscal rules in the context of European debates (sub-project 2) and full employment issues linked to fiscal policy in Austria and the EU (sub-project 3).