

Macroeconomic and redistributive policy in the times of pandemic

The COVID-19 pandemic is a great challenge for health policy. In response to it, most countries implemented a number of drastic measures to contain the spread of the virus. These policies included social distancing, lockdowns, and shutting down of some industries. They were often accompanied by an unprecedented fiscal and monetary stimulus.

All of this poses an unprecedented challenge for economic policy. The virus itself and the containment measures taken result in a severe economic downturn and a large redistribution of wealth. For example, the health risk is more severe for the elderly, while lockdowns hurt more the younger. More skilled and educated workers can adapt to online work better than most unskilled workers. Some industries are affected by a lockdown, while some others may even thrive on it.

Overall, the current pandemic created high demand for research on optimal policy responses to this kind of developments, and our project aims at contributing to filling this gap. The goal of our project is to develop a model that simultaneously incorporates (i) macroeconomic developments, (ii) agents who differ in vulnerability to lockdown restrictions (iii) the development of the epidemic. The model will take into account the two-way relationship between the epidemic and economic developments. For example, the disease influences people's willingness to work or buy goods, which in turn affects the speed at which the virus spreads.

The model will be then used to answer questions about the optimal policy measures to be taken during the epidemic. We will consider policy measures like lockdowns, monetary stimulus, fiscal stimulus, or fiscal redistribution. Our assessment of optimality will take into account the following consequences of various policy measures:

- epidemiological consequences (how fast the epidemic is contained),
- social consequences (e.g. the number of fatalities),
- their economic cost (depth of economic downturn, impact on economic inequalities).

All in all, our project will deepen our understanding of how public authorities should react to pandemic developments in the best possible manner.