Title: Saving under a pandemic risk

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Abstract: We study how and by how much the presence of a pandemic risk influences households’ saving behavior. In order to do that, we use an overlapping generations, incomplete-market, general equilibrium model with a household sector composed by two generations (young workers and elderly retirees), in which the young individuals have heterogeneous productivities and the wealth distribution is an endogenous object. The pandemic risk is modeled as an unlikely aggregate shock that eliminates individuals but also disrupts the productivity of the young. The presence of this risk influences the level of saving in the economy through different channels such as life cycle and precautionary motives, willingness to work, and (factor) prices. Further, different groups of individuals (across wealth and generations) will be affected differently. For calibrating both the size of the shock and its frequency we use data on past pandemics as well on the recent Covid-19 outbreak.

Data description: not applicable.

JEL codes: E21, D15, J1, I10

Keywords: Pandemic risk; saving; heterogeneous agents; general equilibrium model; aggregate shock