The Great Lockdown and the Big Stimulus: Tracing the Pandemic Possibility Frontier for the U.S.*

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Abstract

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We provide a quantitative analysis of the trade-offs between health outcomes and the distribution of economic outcomes associated with alternative policy responses to the COVID-19 pandemic. We integrate an expanded SIR model of virus spread into a macroeconomic model with realistic income and wealth inequality, as well as occupational and sectoral heterogeneity. In the model, as in the data, economic exposure to the pandemic is strongly correlated with financial vulnerability, leading to very uneven economic losses across the population. We summarize our findings through a *distributional pandemic possibility frontier*, which shows the distribution of economic welfare costs associated with the different aggregate mortality rates arising under alternative containment and fiscal strategies. For all combinations of health and economic policies we consider, the economic welfare costs of the pandemic are large and heterogeneous. Thus, the choice governments face when designing policy is not just between lives and livelihoods, as is often emphasized, but also over who should bear the burden of the economic costs. We offer a quantitative framework to evaluate both trade-offs.

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