Title
Pandemic Lockdown: The Role of Government Commitment

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Abstract
This note studies optimal lockdown policy in a model in which the government can limit a pandemic's impact via a lockdown at the cost of lower economic output. A government would like to commit to limit the extent of future lockdown in order to support more optimistic investor expectations in the present. However, such a commitment is not credible since investment decisions are sunk when the government makes the lockdown decision in the future. The commitment problem is more severe if lockdown is sufficiently effective at limiting disease spread or if the size of the susceptible population is sufficiently large. Credible rules that limit a government's ability to lock down the economy in the future can improve the efficiency of lockdown policy.

Data description
We assemble a dataset of initial lockdowns and lockdown extensions across states in the U.S. We use these data to motivate our theoretical analysis of the role of government commitment in designing optimal lockdown policies during a pandemic.

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Keywords
Coronavirus, COVID-19, SIR Model, Optimal Policy, Rules, Commitment and Flexibility

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