



The COVID epidemic and the economic activity with acquired immunity

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AUTHOR OR EDITOR Juan Esteban Carranza Juan David Martin Álvaro José Riascos

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Abstract

We calibrate a macroeconomic model with epidemiological restrictions using Colombian data. The key feature of our model is that a portion of the population is immune and cannot transmit the virus, which improves substantially the fit of the model to the observed contagion and economic activity data. The model implies that government restrictions and the endogenous changes in individual behavior saved around 15,000 lives and decreased consumption in 2020 by about 4.7%. The results suggest that most of this effect was the result of the government policies