Price Shocks and Child Mortality: Evidence from Anti-Drug Policies in Peru

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October 17, 2018
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ABSTRACT: Child mortality is high in the developing world, where income tends to be volatile. In this setting, child survival may be vulnerable to aggregate income shocks as credit constraints and other market imperfections may prevent households from fully smoothing consumption and health investments. Empirical studies on aggregate income shocks and child mortality, however, have produced mixed results. In this paper, I exploit quasi-exogenous variation in the price of coca leaves to study how sharp decreases in coca revenues affect child mortality in coca-producing sites. I use an abrupt decline in the price of coca leaves induced by an anti-drug policy to compare survival rates across cohorts and areas with different levels of baseline coca cultivation. I document that price drops increase mortality rates and establish that deaths take place both in-utero and during the first years of life. To do this, I use both direct mortality records and a “missing children” approach that infers survival rates by comparing relative cohort sizes in census and survey data. The effects are large: for the average coca district, the 50 percent price drop caused by the policy is associated with an effect equivalent to a 6-11 percent increase in under 5 mortality. Although I find evidence of behavioral responses among households to cope with the price shock, health is vulnerable to income losses. This analysis and its results contribute to both a literature on aggregate income shocks and health and a growing body of research on illegal markets and law enforcement efforts. Furthermore, this paper suggests that anti-drug policies can impose important costs to the weakest links involved in drug trade.

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