Crop shocks significantly increase child labor and decrease school enrollment—but households with assets can almost entirely offset these effects

What are the links between crop shocks, household assets, and child labor? In a new article, Beegle, Dehejia, and Gatti analyze the extent to which income shocks increase child labor and decrease enrollment, and whether household assets mitigate the effects of these shocks.

Child labor has traditionally been viewed as a consequence of poverty, but some recent country studies have called that assumption into question. The article examines the role that child labor plays as a buffer against crop losses—and suggests that insurance or access to credit might reduce its extent.

The authors also explore how assets affect household responses to income shocks such as crop losses. As such, the article relates to recent development research examining how credit constraints affect child labor.

Child labor entails a tradeoff for households between immediate benefits and, to the extent it interferes with the development of a child’s human capital, potential long-run costs. When faced with a transitory shock, households would ideally use asset holdings—either as a buffer or as collateral to obtain credit—to offset it.

The article also relates to the broader development literature on the permanent income hypothesis and consumption smoothing. If households succeed in smoothing their consumption but lack buffer stocks or are credit constrained, they must use other mechanisms to cope with income shocks.

Using four rounds of household panel data from the Kagera region of Tanzania, the authors find that income shocks increase child labor by 50 percent. Households in Kagera use almost no purchased inputs and rudimentary technology, and wage labor is limited. When hit by a shock, households tend to increase their use of child labor—typically by having children substitute for adults in household activities such as gathering firewood and water. The data also show that shocks cause a 20 percentage point drop in school enrollment (compared with an average enrollment rate of 70 percent).

Households with assets can offset income shocks to a substantial degree: at the mean level of asset holdings, households can offset more than 80 percent of the effect of income shocks. The article finds that household assets decrease in response to shocks but that wealthier households draw down assets to a lesser extent—suggesting that they may be borrowing in response to shocks. The results also suggest that poorer households use assets as a buffer stock, drawing them down in times of need, whereas wealthier households’ behavior is consistent with access to credit.

Beegle, Dehejia, and Gatti present a range of evidence to corroborate this interpretation of their results. They show that households are more likely to take loans when they experience a shock and when they hold durable assets. Moreover, the probability of taking a loan in response to a shock is higher for households with durable assets.

But the authors acknowledge that there are different possible interpretations of their results. The effect of shocks on households could be explained by myopia or by an extremely high
discount rate relative to the interest rate. Still, the authors believe that they offer the most plausible interpretation of their findings.

Regardless of how the empirical results are interpreted, the fact remains that households increase child labor in response to crop losses. Child labor is a major policy problem—not only for moral reasons but also because it slows the accumulation of human capital and is inimical to development. The findings of this article imply that child labor could be reduced with policies that insure agricultural households against crop losses and other shocks. Increasing household access to credit in response to crop shocks would also reduce child labor and raise household welfare.