

The Consequences of Child Labor

Evidence from longitudinal data in rural Tanzania shows that child labor has consequences that carry over into adulthood

While the popular perception of child labor is strongly negative, it is unclear from a theoretical perspective to what extent child labor is harmful. Most of the world's child labor occurs in the rural areas of developing countries, where it tends to involve moderate-intensity activities rather than the "hazardous" forms emphasized by the International Labor Organization (ILO) and the media. The consequences of this type of child labor are not self-evident. For example, while it may result in less schooling, it may also provide work experience that offsets some of the schooling losses.

Identifying the consequences of child labor is analytically challenging. Simply observing a difference in outcomes for working children does not indicate a causal impact. The decision to send a child to work involves many factors, both observable and unobservable. Moreover, the consequences of child labor may evolve over time. A child working today may not attend less school now, but may be less likely to advance to subsequent grades or levels later. Assessing this link therefore requires longitudinal data.

In a new paper Beegle, Dehejia, Gatti, and Krutikova use unique data from a panel survey in Tanzania to overcome the analytical difficulties in exploring the effects of child labor. The authors use the Kagera Health and Development Survey, spanning 13 years, to study the relationship between working as a child in 1991–94 and outcomes as a young adult in 2004 in a robust causal framework. In contrast with data used in earlier studies, these data provide measures of child labor as it occurs, rather than retrospectively, and outcomes as young adults. To tackle the issue of causality, the authors use information on agricultural shocks and rainfall patterns in the early years to predict child labor.

The population of the overwhelmingly rural Kagera region depends primarily on agriculture for income. Reflecting the region's economic realities, and following the ILO standard for defining child labor, the study measures child labor as the total hours spent working in economic activities and chores in the previous week. Economic activities for children consist mainly of farming, including tending crops in the field, processing crops, and tending livestock. Chores consist of fetching water and firewood, preparing meals, and cleaning the house. Children in the sample work on average 16.8 hours a week, 10 of which are spent on chores. Girls spend on average 2.5 hours more than boys on household chores.

To capture the range of potential impacts, a number of outcomes are analyzed. The two measures of education are years of schooling and an indicator variable for having completed seven or more years of education (primary level). Economic activity indicators include having a salaried job (nonfarm income), farming, and growing a cash crop. In the Kagera region, because the economy is based mainly on extensive farming, earning a salary or being involved in cash cropping (rather than subsistence farming) is an important indicator of success. The study also examines the probability of migrating from the village, since internal migration in Tanzania is associated with large income gains. It is possible that child labor contributes to farm-specific experience and improvements in farm productivity, in which case child labor would be associated with a higher likelihood of farming and lower individual mobility.

Finally, the study explores whether child labor significantly affects age at marriage. Earlier marriage has been shown to be associated with worse outcomes for women and their children, including greater health risks.

The results show that working in childhood has particularly strong effects on education level and marriage patterns. A one-standard-deviation increase in weekly workload (5.7 hours)

in childhood causes a loss of nearly half a year of schooling 10 years later. And working at an average level (16.8 hours a week) as a child reduces the probability of completing primary school by as much as 20 percentage points. In addition, the more children work, the more likely they are to marry at an earlier age. A one-standard-deviation increase in child labor increases the probability of being married 10 years later by 21 percentage points.

The authors also examine gender-specific effects of child labor. While establishing these robustly is more challenging, because the empirical framework emphasizes the whole sample, some interesting trends emerge. The negative effect of child labor on educational outcomes appears to be predominantly relevant to boys. Working in childhood has another occupational impact for boys: working an average amount (16.8 hours a week) as a child increases the probability of farming as the main occupation 10 years later by 40 percentage points.

Earlier marriage occurs for both working boys and working girls. Strikingly, however, working as a child has no significant effects on education or labor market activities for young women. A possible explanation for this finding is that, in response to shocks, girls' time on chores increases rather than their time on agricultural work. Chores might pose weaker competition for time relative to education than agricultural work does (thus the lack of impact on subsequent schooling). And girls might not benefit from accumulated experience in agricultural work that could result in labor market impacts once an adult.

Kathleen Beegle, Rajeev Dehejia, Roberta Gatti, and Sofya Krutikova. 2008. "The Consequences of Child Labor: Evidence from Longitudinal Data in Rural Tanzania." Policy Research Working Paper 4677, World Bank, Washington, DC.