Innovations for Poverty Action

**Authors**
Joan Hamory Hicks
Center for Effective Global Action (CEGA)

Michael Kremer
The University of Chicago

Edward Miguel
University of California, Berkeley
Center for Effective Global Action (CEGA)

Worms at work: Long-run impacts of a child health investment

Sarah Baird,[1] Joan Hamory Hicks,[2] Michael Kremer,[3,4] Edward Miguel[5,4*]

[1] Department of Global Health, George Washington University
Washington, DC, USA
[2] Center for Effective Global Action, University of California, Berkeley
Berkeley, CA, USA
[3] Department of Economics, Harvard University
Cambridge, MA, USA
[4] National Bureau of Economic Research
Cambridge, MA, USA
[5] Department of Economics, University of California, Berkeley
Berkeley, CA, USA

To whom correspondence should be addressed; E-mail: emiguel@berkeley.edu

July 2015

**Abstract:** This study estimates long-run impacts of a child health investment, exploiting community-wide experimental variation in school-based deworming. The program increased education among women and labor supply among men, with accompanying shifts in labor market specialization. Ten years after deworming treatment, women who were eligible as girls are 25% more likely to have attended secondary school, halving the gender gap. They reallocate time from traditional agriculture into cash crops and entrepreneurship. Men who were eligible as boys stay enrolled for more years of primary school, work 17% more hours each week, spend more time in entrepreneurship, are more likely to hold manufacturing jobs, and miss one fewer meal per week. We estimate an annualized financial internal rate of return of at least 32.2%.

# Worms at Work: Public Finance Implications of a Child Health Investment

This study estimates long-run impacts of a child health investment, exploiting community-wide experimental variation in school-based deworming. The program increased education among women and labor supply among men, with accompanying shifts in labor market specialization. Ten years after deworming treatment, women who were eligible as girls are 25% more likely to have attended secondary school, halving the gender gap. They reallocate time from traditional agriculture into cash crops and entrepreneurship. Men who were eligible as boys stay enrolled for more years of primary school, work 17% more hours each week,

spend more time in entrepreneurship, are more likely to hold manufacturing jobs, and miss one fewer meal per week. We estimate an annualized financial internal rate of return of at least 32.2%.

June 01, 2013