

**Authors**

Marcel Fafchamps  
Stanford University

David McKenzie  
World Bank

Simon Quinn  
University of Oxford

Christopher Woodruff  
University of Oxford

NBER WORKING PAPER SERIES

WHEN IS CAPITAL ENOUGH TO GET FEMALE MICROENTERPRISES GROWING?  
EVIDENCE FROM A RANDOMIZED EXPERIMENT IN GHANA

Marcel Fafchamps  
David McKenzie  
Simon R. Quinn  
Christopher Woodruff

Working Paper 17207  
<http://www.nber.org/papers/w17207>

NATIONAL BUREAU OF ECONOMIC RESEARCH  
1050 Massachusetts Avenue  
Cambridge, MA 02138  
July 2011

We are grateful to Markus Mobius and conference and seminar participants at Auvergne, Bristol, the IPA Microfinance conference, Madrid, Michigan, Oxford, Paris, Stern (NYU), Tilburg, Leuven, the World Bank, and Microsoft Research, Cambridge for useful comments. The authors thank Caroline Koussotianan for outstanding work as project coordinator, and Innovations for Poverty Action for their support on the ground. Financial support from the World Bank's Gender Action Plan and Research Budget is gratefully acknowledged. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

NBER working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review by the NBER Board of Directors that accompanies official NBER publications.

© 2011 by Marcel Fafchamps, David McKenzie, Simon R. Quinn, and Christopher Woodruff. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

# When is capital enough to get female microenterprises growing? Evidence from a randomized experiment in Ghana

Standard models of investment predict that credit-constrained firms should grow rapidly when given additional capital, and that how this capital is provided should not affect decisions to invest in the business or consume the capital. We randomly gave cash and in kind grants to male- and female-owned microenterprises in urban Ghana. Our findings cast

doubt on the ability of capital alone to stimulate the growth of female microenterprises. First, while the average treatment effects of the in-kind grants are large and positive for both males and females, the gain in profits is almost zero for women with initial profits below the median, suggesting that capital alone is not enough to grow subsistence enterprises owned by women. Second, for women we strongly reject equality of the cash and in-kind grants; only in-kind grants lead to growth in business profits. The results for men also suggest a lower impact of cash, but differences between cash and in-kind grants are less robust. The difference in the effects of cash and in-kind grants is associated more with a lack of self-control than with external pressure. As a result, the manner in which funding is provided affects microenterprise growth.

July 01, 2011