Authors
Pascaline Dupas
Princeton University

American Economic Review: Papers & Proceedings 2009, 99:2, 224–230
http://www.aeaweb.org/articles.php?doi=10.1257/aer.99.2.224

What Matters (and What Does Not) in Households' Decision to Invest in Malaria Prevention?

By Pascaline Dupas*

This paper examines the take-up of a new malaria-control device by rural households in Kenya, and tests whether the demand curve for the device varies with the framing of marketing messages and with the gender of the person targeted by the marketing.

Previous research suggests that the demand for malaria prevention is highly price-sensitive (Jessica Cohen and Dupas 2008), even though the private returns to preventing malaria are very large (Christian Lengeler 2004). In the standard model of investment in human capital, individuals invest in a health product if the expected benefits from the product outweigh its costs (Michael Grossman 1972). In this framework, the low take-up observed at relatively moderate prices by Cohen and Dupas (2008) could be due to people underestimating the expected benefits of investing in prevention; or due to people being credit-constrained and unable to pay the cost up front. It is also possible that the standard model does not apply, because people have time-inconsistent preferences or because they are uncertain about their own preferences and rely on external cues to resolve their own uncertainty when they need to make a decision.

An extensive literature in psychology and marketing suggests that decision-making can be affected by frames or cues that do not add information about a product, but can be effective at persuading individuals to invest in it. For example, in a recent field experiment in South Africa, Marianne Bertrand et al. (2008) found that the demand for credit can be manipulated to some extent through unrelated advertising content, such as pictures. What's more, social psychology suggests that asking individuals whether they plan to take an action that appears desirable (e.g., invest in a health product) can make it more likely that they go through with it. Most people answer "yes," and in so doing acquire an image of themselves ("self-perception") that can then trigger them to go through with the action (Daryl Bem 1967). Based on this theory of self-perception, marketing specialists have designed what's called the "foot-in-the-door" marketing technique. This consists in getting people to first agree to do something "easy" in relation to a product (for example, answer a few questions about what they think about it), before asking them if they want to buy it (Mark Snyder and Michael Cunningham 1975). Men and women might respond differently to these framing and marketing techniques, particularly when it comes to health products: existing research suggests that women spend a higher share of their income to improve child health, nutrition, and development (Duncan Thomas 1990), and they might be particularly responsive to marketing for preventive health products.

This paper tests the effects on the take-up of a preventative health product of two interventions based on behavioral models derived from psychology: varying the framing of the perceived benefits; and having people verbally commit to purchase the product. I find that none of these interventions had a significant effect (whether economically or statistically) on take-up, and that the gender of the household member targeted was also irrelevant. In contrast, I find that take-up is sensitive to price, as in Cohen and Dupas (2008), and is correlated with indicators of household's wealth.

I. Experimental Design

The health product studied in this paper is the long-lasting insecticide-treated bednet

*Department of Economics, University of California, Los Angeles, 8283 Bunche Hall, Los Angeles, CA 90095, and NBER (e-mail: pdupas@econ.ucla.edu). I am grateful to Esther Duflo, Aprajit Mahajan, and Jonathan Robinson for helpful comments. I thank the households and shopkeepers that participated in the study, CFWshops™ for their cooperation, Katharine Conn for her outstanding research assistance, and Moses Baraza and his field team for the data collection. The study was funded by the Acumen Fund, the Adessium Foundation, and the Exxon Mobil Foundation. The Olyset® nets used in the study were donated by the manufacturer Sumitomo Chemical.

What Matters (and What Does Not) in Households' Decision to Invest in Malaria Prevention

This paper tests the effects on the take-up of a preventative health product of two interventions based on behavioral models derived from psychology: varying the framing of the perceived benefits; and having people verbally commit to purchase the product. I find that none of these interventions had a significant effect (whether economically or statistically) on take-up, and that the gender of the household member targeted was also irrelevant. In contrast, I find that take-up is sensitive to price, as in Cohen and Dupas (2008), and is correlated with indicators of household's wealth.

January 01, 2009