The intra-household allocation of community-based health insurance

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Abstract

Illnesses and injuries can have severe economic consequences for households without formal health insurance (Gertler and Gruber, 2002). To reduce vulnerability to health risk, governments and NGOs in the developing world are introducing micro- or community-based health insurance at an increasing rate. Despite the potential benefits, take-up remains low even when premiums are largely subsidized - especially among the poorest populations. Households who cannot afford insurance for their entire family may decide to selectively enroll a few household members. Who do they enroll in that case? I am addressing this question from three different perspectives.

First, within households, there may be gender or age disparities in the allocation of health insurance. Households may focus on insuring vulnerable groups such as the elderly. Alternatively, to smooth consumption, they may decide to enroll the breadwinner. Finally, given an individual’s productivity and health risk, households may discriminate against groups with low bargaining power. This could lead to inefficiencies and limit the envisaged improvements on for instance female or child health. To analyze the optimal health insurance allocation and empirically estimate its determinants, I will develop a theory of productivity, health risk and insurance linkages, contributing to the body of literature on gender disparities in schooling and nutrition (Pitt et al., 1990; Strauss et al., 2000).

Second, within age and gender groups, I study whether an individual’s health risk influences the insurance decision. In other words, do households use private information about own health risk beyond observable characteristics such as their age and gender? Although households likely know that young children, childbearing women and the elderly are more vulnerable than adolescent men, they may not have additional private information about an individual’s health status. Such limited information may prevent enrollment of high-risk individuals who would benefit from insurance most. This perspective extends the literature on the role of information in health behavior (for a review, see Dupas, 2011).

Finally, selection on observed characteristics enhances the financial sustainability of the scheme, as it enables insurers to adjust prices and match increased costs for high-risk populations. Conversely, if adverse selection is due to asymmetric information, this price mechanism does not work. Rather than relying on voluntary health insurance, it would be worthwhile considering alternative mechanisms of health financing such as mandatory or group insurance. Hence, a final question is whether micro health insurance is subject to adverse selection, and whether selection is on observed versus unobserved characteristics.

I examine insurance behavior from the three perspectives introduced above, using a rich panel that uniquely combines economic and medical data as well as individual enrollment for all household members. To my knowledge, other micro health insurance schemes either enroll at the household level or do not have individual-level data. This work in progress is hence the first to study intra-household allocations of insurance in low-income countries.