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The Impact of Ethiopia's Community-Based Health Insurance on Household Economic Welfare:A Policy Brief

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This infosheet is based on data collected for an impact evaluation of a Community-Based Health Insurance (CBHI) scheme that was introduced in Ethiopia in June 2011. The CBHI scheme is being implemented on a pilot basis in 13 districts/*woredas* in four regional states. The objective of the scheme is to remove financial barriers and increase health-service utilization; improve the quality of care by increasing resources for health facilities and mobilize additional resources for the health sector. The research project conducted household surveys in 2011, 2012 and 2013 (baseline and two follow-up surveys) and facility-level surveys in 2011 and 2014. Qualitative data were also collected using key informant interviews, focus-group discussions and event history analysis.

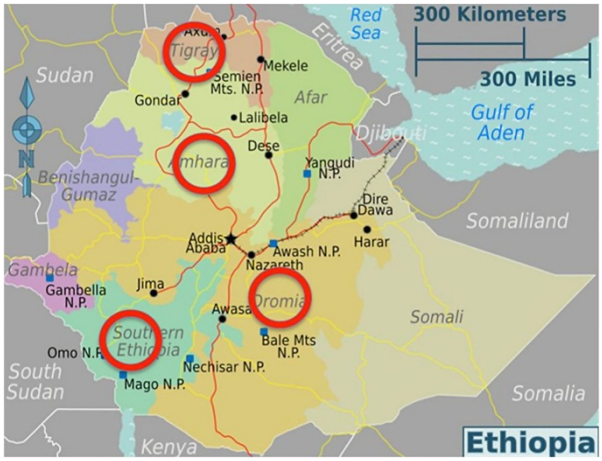
As a prelude to national coverage, the Ethiopian government introduced a pilot Community- Based Health Insurance scheme in thirteen *woredas* across the four main regional states in June 2011. The scheme's primary aims included the provision of financial protection against unexpected healthcare costs and the enhancement of access to modern healthcare. This policy brief assesses the impact of the scheme on household economic welfare: consumption, income, indebtedness and livestock.

Health insurance principally addresses out-of-pocket health expenditure, which is one of the two main sources of household financial stress related to illness. The second is reduced income due to a household member's declining capacity to work. While health insurance schemes are not designed to curb this source of vulnerability, they can protect the household's agricultural income by facilitating an early recovery and reducing pressure on it to reallocate resources meant for productive purposes, for example, by buying fertilizers and high-value seeds and covering medical expenses. By reducing reliance on potentially harmful coping responses, such as borrowing at high rates, health insurance schemes can protect a household's economic welfare in both the short and long term.

> My wife is sick with a modern illness, TB. She gets sick again and again and goes to health facilities quite often. I spent around Birr 5000 on her health. Her illness has affected our harvest. Because of health expenses, I couldn't buy inputs (high-yield seeds and fertilizer) on time and this has reduced my output. [Male respondent, Oumbulo Tenkaka Kebele of SNNPR. Interview: 11 February 2013]

My daughter had a stomach complaint for more than a week. I took her to a traditional healer but she didn't get better. Then I took her to a health centre. I spent Birr 300 on that. Due to her illness, I didn't work in my vegetable garden. As I used the money I put aside for seeds, I ran out of cash to buy seeds so I couldn't grow vegetables. Although, after some time, I worked off-farm (digging sand and selling it) and planted vegetables, I do not expect as much output as I planted late. [Male respondent, Jara Damuwa Kebele of SNNPR. Interview: 15 February 2013]

The four regions studied in the research programme in rural Ethiopia



Three rounds of a household panel dataset were collected in March/April 2011, 2012 and 2013. The first was collected a few months before the launch of the CBHI scheme and served as a baseline in this survey. It included sixteen districts located across Ethiopia's four main regions: Amhara, Oromiya, Tigray and SNNPR. The three districts in each region that implemented the CBHI pilot and one selected non-pilot district were included. The non-pilot districts were chosen based on criteria similar to those used to select the pilot districts. A two-stage sampling design was applied in the districts and villages and households were selected using random sampling. The total sample size in the first round was 1632 households (9455 individuals), of which 98% and 97% were successfully resurveyed in 2012 and 2013 respectively.

Photo 1 The CBHI scheme's ID and membership card

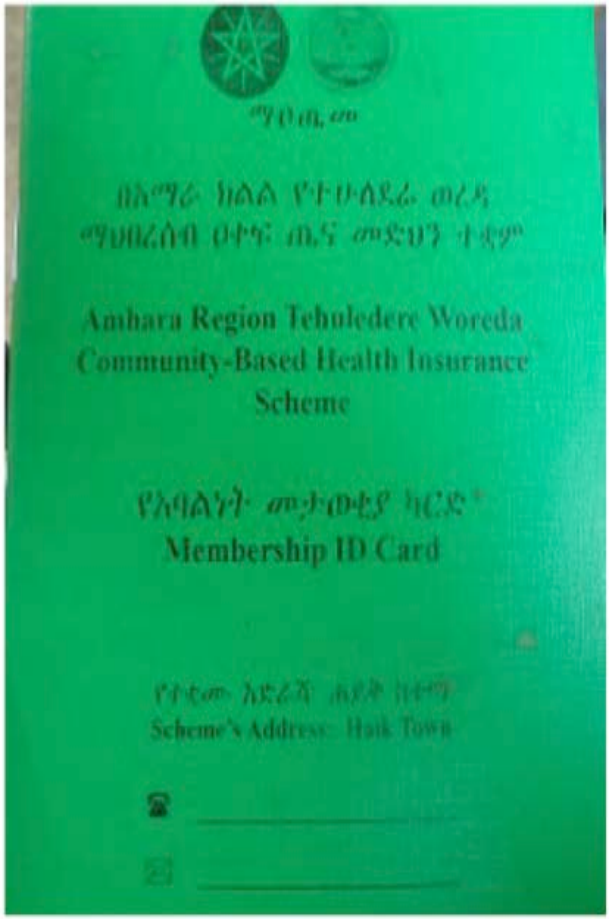


Photo: Zelalem Yilma

CBHI uptake was 41% in the sample in April 2012 and 48% in 2013, which is relatively high compared to what has been found in other African countries. Benefit packages, registration fees, premiums and premium payment methods are similar within regions but vary slightly between regions. On average, premiums for core household members (parents and underage children) amount to about 1-

1.4% of monthly non-medical household expenditures

The results of this survey suggest a non-random uptake, i.e. uptake in some groups is higher than in other groups. At the baseline, households that subsequently take up CBHI have higher crop output and income, are more likely to have borrowed, have larger outstanding loans and bigger livestock holdings than households that do not have insurance. But few differences in consumption were noted. A naive comparison of post-intervention outcomes would probably overestimate the impact of CBHI on income and livestock and underestimate the impact on indebtedness. We have, therefore, estimated a level model that controls for both observed and unobserved differences that do not change over time.

Photo 2 The pilot CBHI scheme provides financial protection against unexpected healthcare costs and aims to enhance access to modern healthcare, such as this health centre

Photo: Marleen Dekker

Figure 1 shows a comparison of the insured and uninsured households for a number of outcome variables related to borrowing and loans, production, income and consumption. With the exception of consumption, differences in these outcome variables were found at a descriptive level. When controlling for household and regional characteristics in regression analysis, some of the effects remain. CBHI appeared to have a negative impact on the probability of having outstanding loans. This effect ranged between 4% and 5% depending on the methods used and the control groups, which translates to about 13% of baseline values. The result suggests that CBHI members are less likely to resort to borrowing to finance any medical treatment their household members may require. There are also negative coefficients for the amount of outstanding loans although these are imprecise. Estimates for all types of livestock are not statistically significant. While there was evidence of some positive impact on income, the results provided no evidence that CBHI affected household consumption.

Figure 1 Selected outcome variables by insurance status by year

Overall, the main benefit of the scheme was found to be its effect on reducing the need to borrow. This may have longer-term benefits and reduce vulnerability to other forms of shocks. A related study found a marked impact on increasing healthcare utilization. These two sets of results, namely the lower probability of borrowing and increased healthcare utilization, provide support for the government's recent move to extend the CBHI pilot to 161 districts. However, a nationwide scale-up requires an examination of the scheme's financial sustainability.

The information presented here is based on a paper entitled 'Impact of Ethiopia's Community-Based Health Insurance on Household Economic Welfare' that was published in 2014 as ISS Working Paper No. 590.

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More information on the project can be found at:
http://www.ossrea.net/index.php?option=com_content&view=article&id=764&Itemid=177

Related Publications

Mebratie, A., R. Sparrow, G. Alemu & A.S. Bedi (2013) 'Community-Based Health Insurance Schemes: A Systematic Review'. ISS Working Paper No. 568.Mebratie, A.D., R. Sparrow, Z. Yilma, D. Abebaw, G. Alemu & A.S. Bedi (2013) 'Impact of Ethiopian Pilot Community-Based Health Insurance Scheme on Health Care Utilization: A Household Panel Data Analysis'. *The Lancet* 381: S92.

Mebratie, A., R. Sparrow, Z. Yilma, D. Abebaw, G. Alemu & A.S. Bedi (2014) 'The Impact of Ethiopia's Pilot Community Based Health Insurance Scheme on Healthcare Utilization and Cost of Care'. ISS Working Paper No. 593.

Mebratie, A., R. Sparrow, Z. Yilma, G. Alemu & A.S. Bedi (2014) 'Dropping Out of Ethiopia's Community-Based Health Insurance Scheme'. ISS Working Paper No. 591.

Mebratie, A., R. Sparrow, Z. Yilma, G. Alemu & A.S. Bedi (2013) 'Enrolment in Ethiopia's Community Based Health Insurance Scheme'. ISS Working Paper No. 578.

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Yilma, Z., A. Mebratie, R. Sparrow, M. Dekker, G. Alemu & A.S. Bedi (2014) 'Impact of Ethiopia's Community-Based Health Insurance on Household Economic Welfare'. ISS Working Paper No. 590.