

“HEALTH IS WEALTH”: THE IMPACT OF HEALTH INSURANCE ON POVERTY INCIDENCE AMONG RURAL HOUSEHOLDS IN ETHIOPIA

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Executive Summary

Both public and private health care systems in Sub-Saharan Africa tend to levy out-of-pocket fees for health care services and medicines. These fees can prevent rural residents from obtaining needed health care and impose financial hardships on those who do seek care. This policy brief is based on a study of how rural households' uptake of health insurance affects the poverty in rural Ethiopia. It finds that participation in health insurance significantly reduces poverty incidence by protecting households' consumption and production against health-related financial shocks. Specifically, the welfare gains from health insurance are channeled through households' investments in productive assets and yield-enhancing agricultural technologies (mainly mineral fertilizers). As a result of these investments, they are able to increase their agricultural productivity. The study points to the need to improve households' access to health insurance, especially in rural Ethiopia. As such, the study sheds light on the importance of health insurance for the realisation of the strategic pillars of Ethiopia's ten years perspective development plan (2021-2030), which maps the country's pathways to prosperity.

Introduction

People's health depends in part on their ability to use an adequate quantity and quality of health care services. User out-of-pocket fees—such as charges for consultations, diagnoses, hospitalization, and pharmaceuticals—have been identified as important determinants of households' ability and willingness to use health care services. Recently, there have been promising efforts to improve health coverage in Sub-Saharan Africa through innovative health insurance schemes, such as community-based health insurance. Researchers and practitioners have focused on identifying the drivers of households' uptake decisions (Mebratie et al. 2015, Nsiah-boateng & Aikins 2018, Minyihun et al. 2019), as well as the effects of health insurance on health care use and out-of-pocket payments (Gustafsson-wright et al. 2018, Mebratie et al. 2019), and on health outcomes (Fink et al. 2013).

It is equally important to examine the impacts of health insurance on households' welfare and incidence of poverty in order to predict the economic consequences of political actions intended to ensure universal health coverage. However, empirical evidence on the impacts of health insurance on poverty alleviation and development in Sub-Saharan Africa is nonexistent. Furthermore, the mechanisms linking health insurance and poverty reduction have not been empirically uncovered. To fill this research gap, an empirical study was conducted to evaluate the impact of health insurance on poverty incidence in rural Ethiopia, using data from the Ethiopia Socioeconomic Survey (ESS) collected in 2018/19. In addition, to identify the mechanisms by which health insurance up-

take influences poverty incidence, the study examined how uptake affected variations in the use of agricultural technologies and the ownership of agricultural productive assets. This research thereby aimed to shed light on the impacts of health insurance uptake on agricultural productivity.

The Effects of Health Shocks on Welfare

Untreated ill health reduces households' labor force participation (Nwosu & Woolard 2017) and ultimately their income-generating capacity. Public health systems in Sub-Saharan Africa rely heavily on user fees for the health services and prescribed medicines, discouraging health care use (Ali 2014, Masiye et al. 2016). High fees at private clinics and hospitals for diagnostic tests and medicines that are not available in public health facilities further inhibit households from accessing health services during illness. Besides the indirect costs resulting from the loss of employment and income, those households that seek fee-based medical treatment risk experiencing health-related financial shocks that may force them to go into serious debt, sell productive assets, or divert spending away from other basic goods and services (Quintussi et al. 2015, Ahmad & Aggarwal 2017).

In this light, rural households' inability to adequately respond to health shocks may have serious consequences for their welfare, possibly by reducing their ability to adequately perform agricultural activities, purchase yield-enhancing agricultural inputs, and maintain their agricultural productive assets. Health insurance schemes may enhance rural households' capacity to use health care services without incurring production- and consumption-destabilizing health expenditures that may put them in poverty traps. Poor and vulnerable rural households that rely on traditional, physically demanding plough agriculture with limited capacity to afford health care may benefit the most from the welfare-improving and poverty-reducing impacts of health insurance schemes.

Key Findings

As reported in Table 1, this study's findings reveal that health insurance uptake significantly decreases the incidence of poverty among agricultural households in rural Ethiopia. These welfare benefits apparently occur because health insurance helps protect household consumption and production. The statistically significant impacts of health insurance uptake on household consumption and asset holdings (all types of assets in general and productive assets in particular) suggest that consumption smoothing and asset smoothing are the mechanisms in operation. Furthermore, health insurance uptake promotes adoption of yield-enhancing agricultural technologies (mainly mineral fertilizers).

In turn, health insurance uptake results in a significant increase in rural households' agricultural productivity as measured by total value of harvest per hectare. Given these results, it appears that health insurance can play a substantial role in the fight against poverty in Ethiopia, where the majority of the population resides in rural areas.

Table 1: Average treatment effect estimates - Impact of health insurance

Poverty incidence	Average treatment effect (ATE)
consumption-based measure	-0.0715*** (0.0014)
asset-based measure	-0.0701*** (0.0009)
Mechanisms/Impact pathways	
productive asset index	0.1864*** (0.0141)
adoption of mineral fertilisers	0.1853*** (0.0020)
agri. productivity	0.0980*** (0.0092)

*** $p < 0.01$

Standard errors in parentheses

Note: The ATE estimates show what would have been the change in the outcome variables of interest if all rural households had health insurance compared to the counterfactual scenario of if none of them had been insured. For instance, the ATE estimates on poverty incidence using consumption- and asset-based measures are around -0.07. This means poverty incidence in rural Ethiopia would have decreased by 7 percentage points if all rural households had been insured. The same interpretation holds for the remaining outcome variables to explain the impact pathways.

Recommendations

Out of the six strategic pillars that support the Ethiopia's ten years perspective development plan (2021-2030), this research aligns with two of them, namely: (i) ensuring quality economic growth (that should ensure improved standard of living of every citizen and reduced poverty) and (ii) increasing/raising production and productivity including through improving and protecting human capital development. The results show that health insurance is an important policy instrument for significantly reducing rural poverty through protecting household consumption and productive assets, and promoting agricultural technology adoption and agricultural productivity. Therefore, this study recommends the design and implementation of national policies towards universal health coverage via health insurance schemes, particularly in rural Ethiopia. Furthermore, the study also calls for the design and

implementation of agricultural policies that enhance rural households' access to agricultural technologies and innovations to complement the role of health insurance schemes in improving agricultural productivity in Ethiopia.

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