Title: **Health Insurance Demand among Formal Sector Employees in Addis Ababa, Ethiopia**

Abstract

Background: The Ethiopian health care system had been undergoing reforms, on the basis of a health care financing strategy. The strategy aims to improve quality, accessibility, and affordability of health care services. Among the components of the strategy is the introduction of various types of health insurance. Health insurance had been almost non-existent in the country with only 1% of the population covered by any type of pre-payment schemes in 2010/2011. This research aims to explore and predict demand and preferences for health insurance.

Methods: Both qualitative and quantitative methods were used for the investigation. The research was conducted in two phases. In the first phase, a quantitative survey of the features of available employment based health insurance (EBHI) schemes was undertaken. Moreover, key informant interviews and focus group discussions were conducted to explore the knowledge, determinants, and perceptions of health insurance and related concepts. The second phase of the investigation sought to get a deeper understanding of preferences using a discrete choice experiment (DCE). From the first phase of the research, eight attributes – premium; type of enrolment; exclusions; providers; and coverage of outpatient, inpatient, tests, and drugs – were indentified to be the most important attributes in health insurance preferences. These attributes were used to generate the experimental design for the DCE using SAS. Eighteen choice sets were presented to 250 sampled respondents. A random effects logit model was estimated using STATA.

Results: The first phase studies showed a difference in health insurance benefits among employees of public enterprises and other organizations (NGOs and private) with $\chi^2(1) = 31.68, p < 0.001$. The odds of full health insurance benefits was 1.602 ($p < 0.005$) times higher in NGOs and private organizations than public organizations. Overall, EBHI was found to be inequitable within and between organizations. Besides, benefits packages were not well communicated and beneficiaries did not correctly know their entitlements. The FGDs also showed a general lack of knowledge regarding health insurance concepts and policies. Most respondents indicated that health care services were too poor to pay for. From random effects logit estimation, the three most important marginal values were found to be health insurance package with 'no exclusion', 'public and private providers, low rate of premium, and full coverage of drugs. Other things being equal, respondents were willing to pay 1.58% of their monthly salary for comprehensive coverage of benefit packages. However, they were also willing to give up their preferences to comprehensive benefit package for lower monthly premium, full coverage of drugs, or providers of both public and private. Uptake of health insurance was predicted to be higher for health insurance packages with both public and private providers, with 100% drug coverage and 3% contribution (48.8%).