

学位論文の要旨 (論文の内容の要旨)
Summary of the Dissertation (Summary of Dissertation Contents)

論 文 題 目
Dissertation title

Research on Low Enrollment of Community-based Health Insurance Scheme: A Case Study of Rural Households in Savannakhet Province, Lao People's Democratic Republic

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In low-income countries, the poor are often more vulnerable than any other group to health risks and insufficient access to health care services. Numerous efforts have been made to resolve this vulnerability. Over the decades, the governments of developing countries have considered community-based health insurance (CBHI) as a powerful tool enabling the poor to equal access to affordable health services based on their needs. The commonly crucial characteristics of the CBHI scheme are its risk-pooling system at the community level and voluntary membership.

In practice, many developing countries have faced significant obstacles in implementing the CBHI scheme, including low enrollment rates, adverse selection, poor quality of health care, and high drop-out rates. Importantly, the problem of low enrollment rates especially links to the financial sustainability and low acceptance of the scheme. Although multidimensional factors are affecting the low enrollment rates, the present study focuses on the demand perspective of the targeted population for the CBHI scheme.

This study selects the CBHI scheme in Lao People's Democratic Republic (Lao PDR) whose enrollment rate is as low as 3.7% by 2014 as a case in point. Does the low enrollment of the CBHI scheme in the Lao PDR crucially imply low demand of potential enrollees for the CBHI scheme? In order to clarify the research argument above, this dissertation carries out analysis based on three research objectives as follows:

- (1) **To evaluate the impacts of the CBHI scheme on household welfare**, we employ the method of inverse probability of treatment weight (IPTW) to correct imbalances in pre-intervention covariates between treated and untreated samples.
- (2) **To observe the association of households' likelihood of purchasing the CBHI scheme with their own risk preferences**, an incentive compatible lottery choice field experiment is carried out to first assess their risk preferences. Each respondent confronts with a sheet of 35 decision rows, which decomposed into two series of gains and one series of losses. The respondent is asked to indicate a preference for either option A or option B in each row. Option A is a safe choice, and option B has a higher expected payoff and variance. Then, probit regressions are applied to examine the associations between their CBHI participation and their risk preferences by controlling their demographic and economic backgrounds.
- (3) **To measure willingness-to-pay (WTP) for the CBHI scheme improvement**, a randomized conjoint field experiment is conducted to elicit stated preference data. Each respondent ranks five randomly formed choice tasks. In each choice task, the respondent ranks three policy alternatives: two hypothetical CBHI scheme and the CBHI status quo scheme. The hypothetical CBHI scheme is defined by seven

attributes: *monthly premium; insurance coverage for medical consultations, hospitalizations, traffic accidents, pharmaceuticals, transportation; and one-year prepaid discount.*

This study collects data of 580 self-employed households from eight rural villages in Savannakhet Province, of the Lao PDR. The sample represents 46% of the eligible population in the selected villages, comprised of 210 (36%), 72 (13%), and 298 (51%) of active members, ex-members, and non-members, respectively. The survey is carried out from September 13-27, 2016. The household representatives are asked a series of questions on socio-economic indicators in the 12 months preceding the survey and two field experiments.

Empirical findings from this study suggest that:

- (1) The CBHI scheme has significant impacts on rice yield per capita and cow holdings among enrolled households. Such findings possibly reflect the fast recovery of illness and less reliance on coping responses resulting from the improved health status of enrolled households.
- (2) The findings show that the probability of a household's decision to enroll in the CBHI scheme is associated with the risk aversion towards probability prospects. This result provides some support that there seems to be the adverse selection in the current CBHI scheme.
- (3) The average WTP is estimated at least as large as 10.9% of the per capita income of those who live in rural areas. Notably, the presence of round-trip transportation insurance coverage significantly increases the WTP.

On the basis of the results of this research, it can be concluded that the CBHI scheme contributes to the agricultural production, policy practitioners should put great endeavors to scale up the enrollment rate. However, the problem of the CBHI scheme in the Lao PDR is not only low uptake, but there seems to be adverse selection. The adverse selection can somehow be mitigated by maximizing enrollment. Although the WTP analysis demonstrates that there is strong demand for the CBHI scheme, but the majority of self-employed households fail to enroll. It can be interpreted that the current scheme design might not well meet people's preferences though premium is affordable. People might lack sufficient knowledge about the CBHI scheme and its risk-pooling system. Possibly, they might lack trust on the scheme operation. As suggested by Carrin (2003), the trust can be, to some extent, increased as long as people recognize that their preferences are addressed in the scheme design. To increase the enrollment rate, first and foremost, local authorities and stakeholders should give priority to the CBHI scheme promotion campaign and improve the insurance coverage that meet their preferences, especially addressing transportation factor.

備考 論文の要旨はA4判用紙を使用し、4,000字以内とする。ただし、英文の場合は1,500語以内とする。

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