Application of Temptation Theory to Precautionary Saving Analysis: Empirical Approach in Northwestern Tanzania.

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Abstract

This study provides the application of temptation theory into the empirical analysis of precautionary saving. In developing country, because most of poor households are forced to save their grain stock in their own house, they have to resist temptation to spend their stock constantly and control themselves in order not to avert from their optimal saving plan. Considering such a situation, in this study, I expand Dynan's (Dynan, 1993) framework to evaluate the degree of prudence parameter based on Kimball(1990) by assuming that households also have tempted utility functions in addition to commitment utility functions assumed in previous studies. To capture the prudence parameter correctly, I define the expenditure of tempted goods under severe situation as the proxy variable of households' self-control costs and estimate the consumption Euler equation by using semi-parametric model. As a result, this paper shows that the previous model based on Dynan's specification suffer from downward omitted variable bias and the estimated prudence under temptation model is significantly higher than under the previous model both with and without liquidity constraints. Moreover, it is proved that the existence of self-control variable can be one of the reasons explaining Dynan's small prudence puzzle, and applying temptation model to analyze precautionary saving motivation are effective to resolve the small prudence puzzle when a large portion of the population has no saving accounts.