

# Heterogeneity in Health Insurance Choice Behavior: An Experiment

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## Abstract:

Choosing a health insurance contract is a complex task under risk. Using a controlled laboratory experiment, we analyze heterogeneous behavior in complex health insurance choice decisions and investigate its relationship with individual risk preferences. First, subjects make subsequent insurance choice decisions varying in the number of contracts offered. Second, we elicit individual Cumulative Prospect Theory (CPT) parameters by standard lotteries. Applying a latent class model to insurance choices, reveals five classes with considerable heterogeneity in preferences for contract attributes. Based on this heterogeneity, we identify distinct behavioral strategies. Only a minority of subjects are rational expected payoff maximizers, while the majority acts on CPT-like minimax heuristics. Strategies are robust to the number of contracts offered. Although individual CPT risk preferences explain choices to a substantial degree, they are not robust towards the number of contracts. Investigating into the relationship between behavioral strategies and CPT risk preferences, we find that when accounting for the systematic errors due to behavioral strategies, the systematic error decreases. Thus, the identified strategies help consumers to approximate their CPT risk preferences.

*Keywords:* health insurance, risk preferences, heterogeneity, heuristics, laboratory experiment, cumulative prospect theory

*JEL Classifications:* C91, I13, D81