

*Does Everyone Use Probabilities? Intuitive and Rational Decisions about Stockholding*

Abstract:

In this paper we explore to what degree people use probabilities to make decisions under uncertainty. We focus on the decision to invest in stocks. Our hypothesis is that individuals with substantial cognitive skills use probabilities akin to the expected utility model. In contrast, individuals that are less cognitively skilled do not make use of probabilities. We derive this prediction from a model based on the dual-systems framework in psychology (Kahneman, 2003).

Using

data from the U.S. Health and Retirement Study (HRS), we examine how the relationship between stockholding and subjective probabilities about future stock returns varies according to cognitive ability. We find that an increase in subjective probabilities has a significantly stronger effect for individuals with high cognitive abilities than for those with low cognitive abilities. Our empirical analysis is based on pooled OLS models, fixed-effects models and instrumental variables estimation. We use past realized returns as instrumental variables for subjective return probabilities. In addition, we also show that individuals with low cognitive abilities are less likely to give meaningful answers to subjective probability questions. Our findings are consistent with rationality, in a broader sense, if we acknowledge that there are costs of scrutinizing probabilistic thinking.