



SMART-LERECO SEMINAR

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“Identifying Consumption Smoothing and Precautionary Saving from Experimental Variation”

Abstract:

We examine the small-sample properties of the NLLS estimator of the consumption-saving model under Selden/Kreps-Porteus (SKP) preferences, which separate risk aversion and intertemporal substitution. We allow flexibility in the curvature of these two quantities by introducing expo-power functions into each domain. We then simulate the sampling distributions of the deep SKP parameters in with experimentally-generated variation in incentives. Even though the experimental variation obviates endogeneity bias, sampling and specification errors make the recovery of deep parameters very fragile. We identify three main concerns. First, pre-existing “field” incentives can interact with experimental incentives to generate boundary choices in the experiment, and the presence of a large fraction of such choices in a sample inhibits precision. Second, even when boundary choices are not numerous, the sample size needed to achieve precision is quite high even for low-magnitude sampling error. Small-sample bias quickly attenuates all estimates towards 0, affecting in particular any statistical tests for curvature. Third, estimates are highly sensitive to the field income level. Even in the absence of sampling error, moderate errors in specifying field income generate large errors in inference. We discuss how these errors in inference can affect the SKP coefficient of “prudence,” which distinguishes the precautionary motivation to save from the consumption-smoothing one.