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Imputing Risk Tolerance From Survey Responses

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Abstract

Economic theory assigns a central role to risk preferences. This article develops a measure of relative risk tolerance using responses to hypothetical income gambles in the Health and Retirement Study. In contrast to most survey measures that produce an ordinal metric, this article shows how to construct a cardinal proxy for the risk tolerance of each survey respondent. The article also shows how to account for measurement error in estimating this proxy and how to obtain consistent regression estimates despite the measurement error. The risk tolerance proxy is shown to explain differences in asset allocation across households.

KEY WORDS :

Interval regression

Measurement error

Ordered probit with known bounds

Proxy variable

Response error

Risk aversion

Risk tolerance

Surveys

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