

Robust decision-making under risk and ambiguity*

Maximilian Blesch¹ and Philipp Eisenhauer²

¹Berlin School of Economics

²University of Bonn

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Economists often estimate a subset of their model parameters outside the model and let the decision-makers inside the model treat these point estimates as-if they are correct. This practice ignores model ambiguity and opens the door for model misspecification and post-decision disappointment. We develop a framework to explore and evaluate decision rules that explicitly account for the uncertainty in the first step estimation and assess their performance in a decision-theoretic setting. We show how to operationalize our analysis by studying a stochastic dynamic investment model where the decision-maker takes ambiguity about the model's transition dynamics directly into account.

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