

Robust decision-making under risk and ambiguity*

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April 19, 2021

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.

JEL Codes D81, C44, D25

Keywords decision-making under uncertainty, robust Markov decision process

*Corresponding author: Philipp Eisenhauer, peisenha@uni-bonn.de. Philipp Eisenhauer is funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) under Germany's Excellence Strategy - EXC 2126/1- 390838866, the TRA Modelling (University of Bonn) as part of the Excellence Strategy of the federal and state governments, and a postdoctoral fellowship by the AXA Research Fund. We thank Anton Bovier, Annica Gehlen, Lena Janys, Ken Judd, John Kennan, Gregor Reich, John Rust, Jörg Stoye, and Rafael Suchy for numerous helpful discussions. We thank Annica Gehlen for her outstanding research assistance. We are grateful to the Social Sciences Computing Service (SSCS) at the University of Chicago for the permission to use their computational resources. We gratefully acknowledge support by the AXA Research Fund.