Relevance and Symmetry*

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Abstract

We define a behavioral concept of relevance in the context of decision making under uncertainty. We argue that this concept provides a sensible answer to the question "What probabilistic environments do an individual’s preferences reveal as mattering to her decisions?" under a symmetry assumption. This question has important implications for economic modeling. It is often the case that a modeler desires to restrict the probabilistic environments a decision maker considers. Without a concept of relevant beliefs, it is impossible to check from preferences whether a model is reflecting what the modeler intended. This checking is essential to isolating the effect of changing information while holding tastes fixed. We show that a single concept of relevance delivers this for a wide range of models, including models that allow for ambiguity attitude. We also use symmetry and relevance to provide insight into the foundations of the ω-MEU and smooth ambiguity models of decision-making under uncertainty.

Keywords: Symmetry, beliefs, ambiguity, comparative statics of information

JEL codes: D01, D80, D81, D83

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