Optimal Ambiguity Perception*

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Abstract

This paper provides axiomatic foundations for a model in which the perception of ambiguity is optimally chosen at a cognitive cost. The model generalizes the Choquet expected utility model and can accommodate the preference patterns presented in Machina [13], which are known to pose a difficult challenge for ambiguity models. Our model is characterized by a novel axiom that disciplines the preference for hedging. Specifically, it implies that whenever there is no benefit to gain from it, it should be avoided.

Keywords: ambiguity attitude, cognitive optimization, comonotonicity, Choquet expected utility, Machina's paradox

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