Inattentive Valuation and Reference-Dependent Choice*

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Abstract

In rational choice theory, individuals are assumed always to choose the option that will provide them maximum utility. But actual choices must be based on subjective perceptions of the attributes of the available options, and the accuracy of these perceptions will always be limited by the information-processing capacity of one’s nervous system. I propose a theory of valuation errors under the hypothesis that perceptions are as accurate as possible on average, given the statistical properties of the environment to which they are adapted, subject to a limit on processing capacity. The theory is similar to the “rational inattention” hypothesis of Sims (2003, 2011), but modified for closer conformity with psychophysical and neurobiological evidence regarding visual perception. It can explain a variety of aspects of observed choice behavior, including the intrinsic stochasticity of choice; focusing effects; decoy effects in consumer choice; reference-dependent valuations; and the co-existence of apparent risk-aversion with respect to gains with apparent risk-seeking with respect to losses. The theory provides optimizing foundations for some aspects of the prospect theory of Kahneman and Tversky (1979).

PRELIMINARY

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