

Event Valence and Subjective Probability

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Abstract :

This paper introduces the signed subjective expected utility (SSEU) model in which an individual's willingness-to-bet (WTB) on an event reflects not only the event's subjective likelihood but also its "valence" - a measure of intrinsic attractiveness or aversiveness of the event. As a result, an event's WTB may be greater than 1 or less than 0 . Our model directly extends the subjective expected utility (SEU) model by weakening the Monotonicity axiom. We show that SSEU accounts for behavioral phenomena such as hedging aversion, coexistence of insurance and gambling, the choice of dominated actions in strategy-proof mechanisms, and some conjunction fallacies. We go on to show how to extend SSEU to allow for a stake-dependent (and non-additive) WTB, which also relaxes our earlier constraints on how valence can behave.