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EXPECTED UTILITY
HYPOTHESES AND THE
ALLAIS PARADOX

*Contemporary Discussions of Decisions under
Uncertainty with Allais' Rejoinder*

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A SHORT CONFIRMATION OF MY STANDPOINT

Because of the delay in receiving the invitation, I feel obliged to confine in a few lines my answer to the question without examining new literature. Moreover, I think I have nothing to add to the remarks already made on this old issue.

No doubt seems to me possible about the validity of the von Neumann-Morgenstern rule of preference under uncertainty, consisting in maximizing the expected utility. Utility is, in fact, precisely so defined as to suit such requirement: that is, to be linear in mixtures where the weights are probabilities. It is, usually, a convex function of the monetary value, since aversion to risk usually exists (and is admitted as the "normal" assumption in economic theory), so that a sure amount is preferred to an uncertain one with the same expectation.

The thesis is even better clarified starting from Wald's notion of *admissibility* and Savage's reference to such idea for a general foundation of a theory including the necessary axioms both for subjective probability and utility. Essentially, it is the same view as that roughly suggested by Daniel Bernoulli and Blaise Pascal in the 18th century.

The objection by Allais, if it is the same of 20 years ago, consists in asserting that the same correction should be repeated about the utility. This seems tantamount to asserting that, when the deflection of a bridge owing to a given load is computed, the deflection from the deflected position should be computed again because the load acts also on the deflected line (missing to note that, by definition, the deflected line is just that one for which elasticity exactly reacts so that the weight of the load is balanced).

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