# "Prevent or Cure"? Trading in the face of left-skewed binary lotteries

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## Abstract

This paper focuses on the individual's trade-off between a reduction in the probability of occurrence of a negative event and a reduction in its magnitude for a risk averse decision-maker. For that purpose, we propose a theoretical model based on left-skewed binary lotteries with lottery A associated to a lower damage and a higher probability of occurrence than lottery B. We show that the main determinant of the individual's choice is the expectations of the lotteries. When the expectations of A is higher or equal to the one of B, then any risk averse decision-maker will prefer A to B due to second-order stochastic dominance. However, when the lottery B is associated to a higher expectation than A, then additional assumptions on individual's prudence and temperance are required. We also test experimentally our theoretical predictions. Finally, we provide three possible applications, and draw related policy recommendations.

**Keywords:** Left, skewed risk, binary lotteries, prudence, temperance

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