where, as in Equation (1), λ is taken as a factor separate from v:

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under prospect theory (weights 0.29 versus 0.13 or 0.16), which deviates considerably from the equal weighting assumed by LL. While these calculations are based on the specific parameter assumptions suggested by Tversky and Kahneman (1992), LL's experimental results are also qualitatively consistent with the extremity-orientedness predicted by prospect theory. In each of LL's three head-to-head competitions, the majority chose the gamble that had both the best maximal outcome and the best minimal outcome, as would be done if only the extreme outcomes mattered.

In conclusion, the data of LL support the predictions of Tversky and Kahneman's (1992) prospect theory. The incorrect claims of LL are mostly due to their overlooking the crucial role of probability weighting in prospect theory. While the data could also be consistent with other theories, it is extremely misleading to interpret this as evidence against prospect theory or to suggest that prospect theory is "much ado about nothing." In particular, the results of LL do not provide new insights into the shape of the value/utility function. Their hypothesis of convex utility for gains is contrary to the diminishing marginal utility assumed in classical analyses, the diminishing sensitivity assumed in prospect theory, and virtually all empirical findings of the vast literature on this topic.

Acknowledgments

The author thanks John Payne, Thierry Post, Pim van Vliet, George Wu, and three anonymous referees for helpful comments, and the department editor for numerous thoughtful and constructive suggestions.

Appendix: Prospect Theory

Prospect theory assumes, besides the utility or value function and the loss-aversion parameter, a *probability weighting function* w^+: $[0, 1] \to [0, 1]$ for gains, and a *probability weighting function* w^-: $[0, 1] \to [0, 1]$ for losses. The decision weights π in Equation (1) are defined as follows. If $k \geq 1$ then $\pi_1 = w^-(p_1)$, and $\pi_i = w^-(p_1 + \cdots + p_i) - w^-(p_1 + \cdots + p_{i-1})$ for $2 \leq i \leq k$. If $k < n$ then $\pi_n = w^+(p_n)$ and $\pi_j = w^+(p_n + \cdots + p_j) - w^+(p_n + \cdots + p_{j+1})$ for $n-1 \geq j > k$.

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Tversky and Kahneman (1992) estimated the following parametric form: $v(x) = x^{0.88}$ for $x \geq 0$, $v(x) = -(-x)^{0.88}$ for $x < 0$, $\lambda = 2.25$, $w^-(p) = p^{0.61}(p^{0.61} + (1-p)^{0.61})^{1/0.61})$, $w^-(p) = p^{0.69}(p^{0.69} + (1-p)^{0.69})^{1/0.69})$. For prospect F in Table 1b, the decision weights are $\pi_1 = w^-(0.25) = 0.29$ for outcome $x_1 = -1{,}600$, $\pi_2 = w^-(0.50) - w^-(0.25) = 0.16$ for outcome $x_2 = -200$, $\pi_3 = w^+(0.50) - w^+(0.25) = 0.13$ for outcome $x_3 = 1{,}200$, and $\pi_4 = w^+(0.25) = 0.29$ for outcome $x_4 = 1{,}600$. The value of F is $\pi_1 \lambda v(-1{,}600) + \pi_2 \lambda v(-200) + \pi_3 v(1{,}200) + \pi_4 v(1{,}600) = -215.70$. The other prospects are evaluated similarly. A program to calculate prospect-theory values, written by Veronika Köbberling, is available at http://www1.fee.uva.nl/creed/wakker/miscella/calculate.cpt.kobb/index.htm.

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