

**The Value Disparity for Mean Preserving Spreads:
An Experimental Test**

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Abstract

We report the results of an induced-value laboratory experiment that tests the impact of changes in risk on willingness to accept (WTA), willingness to pay (WTP) and the WTA-WTP disparity. Using the (Becker, DeGroot, & Marschak, 1964) elicitation mechanism, we obtain subjects' WTA and WTP for a series of binary, even-odds lotteries. In our within-subject design, we endow subjects with two different cash amounts, a low cash endowment and a high cash endowment. This allows us to investigate whether WTA, WTP, and the difference between the two are functions of initial income. All lotteries in our experiment have the same mean and systematically differ in the spread between low and high payout. That is, all lotteries in our experiment are mean-preserving spreads (contractions) of each other. Expected utility theory predicts that the WTA-WTP disparity should converge toward zero as the spread increases and the lottery becomes less and less favorable. At the aggregate, we find that while subjects display risk neutrality in the selling tasks (WTA), subjects display risk aversion in the buying tasks (WTP). This finding contradicts the predictions of expected utility and is more in line with what a simple model of loss aversion predicts: increases in the spread drive a wedge between WTA and WTP, regardless of the decision maker's initial income level. We also find that WTP is on average higher in the high cash endowment tasks compared to the low cash endowment tasks. WTA, on the other hand, does not differ on average between the low and high cash endowment tasks. Further, we do not find support for the hypothesis that the WTA-WTP disparity converges toward zero as the lotteries become less and less favorable.