

Strategic Thinking and Subjective Expectations
in a Double Auction Experiment.

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ABSTRACT

This paper investigates the role of subjective beliefs in strategic decision-making within a double auction experiment. The experiment elicits agents' beliefs about the bidding decisions of other market participants using a quadratic scoring rule. I show that subjective beliefs cannot be modeled by equilibrium beliefs or by empirical/historical beliefs, and that elicited subjective beliefs help explaining observed choices. Observed choices often deviate from the predictions of the Bayesian Nash Equilibrium (BNE) model. Evidence suggests that the failure of the game to converge to equilibrium is due to subjective beliefs not converging to equilibrium beliefs. The results caution against the assumption that subjective beliefs coincide with equilibrium beliefs, especially when the goal is to explain why observed choices do not coincide with equilibrium predictions.