

**Taking Wason to the market:  
Studies of the Wason selection task in competitive markets**

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**Abstract**

A vast literature shows that individuals frequently violate normative principles in reasoning. In this paper, we report results of a line of studies designed to determine if information dissemination in competitive auctions can reduce, or even eliminate, logical errors in the Wason selection task at the group and individual level. In general, we find that payoff feedback and exposure to the information flow in the market drive the aggregate (and, under certain conditions, the individual) behavior toward the normative solution.

We link our findings to the literature on cooperative groups, which shows that for intellectual tasks – with demonstrably correct solutions - groups perform better than individuals. These studies assume that group members share common goals. We extend this research by replacing standard face-to-face group interactions with competitive auctions, allowing for conflicting individual incentives. We demonstrate that competitive combinatorial auctions induce equally impressive learning effects as standard group interactions, and uncover specific and general knowledge transfers from these institutions to new reasoning problems. However markets have a clear advantage in circumstances where the conflicts between the members of the group are made salient. Finally, we combine the advantages of groups *and* markets and show that teams of traders learn faster and with less feedback. We explain these results within the theoretical framework of collective induction.

References

Budescu, D.V., & Maciejovsky, B. (2005). The effect of monetary feedback and information spillover on cognitive errors: Evidence from competitive markets. Management Science, 51, 1829-1843.

Maciejovsky, B. & Budescu, D.V. (2007). Collective induction without cooperation: Learning and knowledge transfer in cooperative groups and competitive auctions. Journal of Personality and Social Psychology, 92, 854-870.

Maciejovsky, B., Sutter, M., Budescu, D.V., & Bernau, P. (2011). Teams make you smarter: Learning and knowledge transfer in auctions and markets by teams and individuals. Under Review.

Maciejovsky, B., Budescu, D.V. (2011). When many cooks don't spoil the broth: Applying auctions in knowledge-sharing dilemmas. Under Review.