Draft response

Good morning all,

We have had time to go over the reviewers’ comments and identified some of the major concerns. Given that these points may require substantial changes to the manuscript, we would particularly value feedback on the following four issues so that we can plan our response and potential changes. Of course, we welcome feedback on any of the other points as well. For your convenience I am attaching the original reviews (doc 1.) and a working draft of our response document (doc 2. ). In the latter, I have color coded items with Green as relatively simple to resolve, Yellow that would take a bit more time, and Red as those issue that require the most careful consideration on our end. It is those Red issue I focus on below.

Ami adds: as you will see, point #2 (effect of block, learning) and #3 (comparing human vs computer conditions) are particularly tricky to respond to. If possible, I would have suggested to discard both of them from the manuscript, but I don’t think this would go well with the Reviewers and Editor. Out of the two, I think #3 is the one that introduces the greatest challenge. To solve it, we probably need to recode the computer-based auction and re run the experiments, so I feel we need to give it up and discard this section from the analysis and ms. If you agree it would not look well to also discard the analysis of block-effects, we may need to pull our weight and add some discussion on theories of learning and how they might apply

1. We have been asked to provide a more extensive treatment of the iterative prospect theory model, particularly in regard to the implications of multiple players in auctions. Marc has already provided a few articles for us to review to help place prospect theory within the Dutch auction literature, but we would appreciate any additional comments from Mark and Scott regarding your thoughts on the group level contributions of the model.

1. The manuscript currently reports the mean bid across the 5 blocks to assess learning effects. The feedback has been that, although the explanation and general discussion was useful, it was difficult to determine the utility of the analysis given that there is no development or testing of any learning theory.

Experienced bidders have been shown to bid differently to inexperienced bidders. We found that participant groups did not significantly change their bids across the experiment. We include this result to discuss other findings against this foundation. However, given the reviewers concerns, we consider removing the section since learning was not a key focus point, and we did not attempt to capture it in the (prospect theory) modelling exercise.

1. A further concern regarded the comparison between the human vs human condition and the human vs computer condition. The computer condition is flawed as an equivalent comparator in two ways as (i) participants completed this condition with both a greater warehouse capacity and funds, and (ii) participants competed against one computer competitor compared with two competitors in the human vs human condition.

The two issues are intrinsically related – we increased participant funds and warehouse capacity to account for the reduced number of competitors. This is a significant methodological fault that we could not technically resolve when coding the experiment.

This is a sticky point. Although we can use the computer condition to show that participants bid differently in group conditions, we agree with the Reviewers that this is not a fair comparison. In addition, the computer model is overly simplistic (sampling bidding values from a uniform distribution and not well informed so we believe that the human vs computer analysis be removed from the manuscript.

1. Finally, we present our adaptation of prospect theory with parameters chosen to produce outcomes that reflect the experimental data. We present this comparison as a sufficiency proof to show that the iterative model can provide an account for the data. The reviewer concern is that this is inadequate and does not provide meaningful behavioural insight.

Our current impression is that this issue will be somewhat alleviated by addressing the other minor points, and the first point raised here (i.e., further development of the model implications), however we welcome any feedback or recommendations on how to address this concern.

We appreciate your input and please let me know if you would like further clarification on our position on these points or any of the other points raised by the reviewers.

Regards,

Murray Bennett