

Responses to Reviewer 1:

We make extensive cases for why the trust-broker game is motivated to add to the existing literature and provide an example on page 3 specifically that showcases an application of the model in financial markets. Furthermore, we dedicate much of the second paragraph (page 2) to pointing toward an existing gap in the trust game literature that we are looking to contribute toward. In light of the Nash equilibrium prediction for the model (see point 1), we find the theoretical motivation on page 2 particularly important.

We agree with the reviewer that we do not have a control group (deterministic multiplier) with which to compare outcomes of the random multiplier. This limitation is acknowledged when discussing the results of the random multiplier on page 18. Further, in instances where it is implied that we are studying probabilistic returns (example research question 1), we will edit the entire manuscript to ensure that the writing does not imply that random multipliers are being compared with deterministic multipliers.

With regards to information availability and communication, there have been few studies of the trust game that have used it as a treatment variable. Mak & Zwick (2008) show that restricting information in an n-trustee game leads to a larger amount of transfers on average, but no clear impact on positive transfers relative to when information is available. Buchan et al. (2006) test cross-cultural effects on trust and reciprocity, but also find that personal communication between players increases trust and reciprocity in all countries. However, this communication differed from information about transfers or components of the game. Thus, our manipulation of information availability is an important contribution to current understanding of trust and reciprocity in varied frameworks.

Response to major comments:

1. We agree that there is no clear section that discusses the equilibrium outcomes of the game. However, on page 9, following equations 1-3, we discuss the strategy set available to all players and rational predictions. We propose to revise this section to include the following:

“The unique Nash equilibrium of the game can be found in a simplified version of the game presented in Figure 1. A’s move to transfer no amount strictly dominates any non-

zero transfer. Upon receiving the zero transfer, B's move to transfer a positive amount to the trust-broker, C strictly dominates a non-zero transfer given the probabilistic nature of the multiplier as well as the reciprocity rule imposed on C to return at least what was transferred to him. C has a mixed strategy and is indifferent between choosing to transfer at least what was transferred to him and transferring a higher amount (in this example, 1 unit more than the least). Following this, B's action of zero transfer to A strictly dominates any non-zero transfer."

2. We thank the reviewer for pointing out the existence of a strand of literature that appeals to our model and design. We currently cite and discuss two papers that use the three-player trust game to show presence of indirect reciprocity. On page 5, we talk about indirect trust explored in Sheremeta and Zhang (2013); while on page 6 we discuss the results of Charness, Du, and Yang (2011), where pass-through investment games can be seen in light of indirect reciprocity.

The model of (upstream) indirect reciprocity is indeed something that can be incorporated into our paper. We propose including a discussion on Novak & Sigmund (1998), Wedekind & Milinski (2000), and Stanca (2009), on page 5 to reflect this:

"In modelling a three-player trust game, we also make a contribution to the literature on indirect reciprocity (Nowak and Sigmund, 1998; 2005), which has been previously studied in the standard two-player trust game by Dufwenberg et al. (2001). Going by definitions laid out in Stanca (2009), the trust-broker game allows for both generalized indirect reciprocity since player A first trusts player B, who then trusts player C, as well as social indirect reciprocity (if A helps B then C helps A). Furthermore, the availability of information about transfers between players A and B may determine the level of reciprocity that player C displays toward B. Thus, the motivation for player B transferring non-zero amounts to player C may be to induce reciprocation from C indirectly toward player A. Finally, indirect reciprocity may become a stronger motivation for trusting behaviour when play is repeated over time (Wedekind and Milinski, 2000). However, in our case, since players' roles were not reassigned across rounds, it is less likely that information on the history of transfers would induce indirect reciprocity."

3. On page 7, we report research questions that are directly being tested in the analysis. While an earlier version of the manuscript included specific hypotheses being tested for each research question, it hampered readability. We can reintroduce the hypotheses (on page 7) being tested as below:

“We test the following hypotheses in line with the research questions:

1. Transfers by all three players in the no-information condition will be lower than transfers when information is available
2. Player C will transfer a higher amount to B (and B to A) when information is disclosed regarding transfers
3. Player C will transfer a lower amount to B (and B to A) when the multiplier is lower and information is not available relative to a high multiplier-full information scenario.”

Hypothesis 1 is tested by summary statistics reported in Table 1 and correlations reported in Table 2. Hypothesis 2 is tested in Tables 1 and 2, looking specifically at the proportions of transfer of Player C to B. Hypothesis 3 is tested via interacting the information availability and multiplied amounts in the regression reported in Table 3.

References:

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