Are trustors willing to share information about their interaction partners in repeated investment games? How do direct and indirect information sharing costs (due to rivalry) affect the outcome of the games?

1. Motivation

- Informational asymmetries and moral hazard may negatively affect trust and efficiency in sequential exchange situations, e.g. shipping of goods on Ebay [1] or credit markets [2]
- Reputation mechanisms, i.e. public exchange of information, as effective mean to limit opportunistic behavior [3]
- In previous research: reputation mechanisms were exogenously imposed on players, i.e. information was passed automatically. Strong focus on effects on trustees (=second movers)
- Yet, even if socially beneficial, in many situations, sharing of information may not occur, e.g. if...
  - there are **direct costs** to info sharing
  - there are indirect costs, due to **competition/rivalry** among players

2. Contribution

- We study endogenous info sharing between trustors in a repeated laboratory investment game [4]
- We consider the effects of **direct and indirect costs** of transfers on the willingness to share info
- Focus not only on trustors’ behavior, but also on trustees’ reactions to institutional changes
- Effects on trust, trustworthiness, and overall market efficiency

3. Experimental Setting

**Investment game and market structure**

- **Trustor** P
  - Trustor chooses to send an amount P with 0 ≤ P ≤ 10 to Trustee
- **Trustee** Q
  - Trustee decides to resend amount Q with 0 ≤ Q ≤ 3P

**3 Treatments**

- **3 Trustors**
  - 6 Trustees

**Procedures**

- Random matching, 3 trustees not assigned to trustors. Game repeated for at least 24 rounds
- Experiments conducted at the Vienna Center for Experimental Economics from June 2015 – February 2016, z-Tree used for programming [5]. In total 7 sessions, 20 group, 180 participants

4. Treatments and Predictions

1. **Info sharing**: In each period trustors can send info about interaction, i.e. P and Q to other trustors. Info displayed in history table

2. **Competition/Rivalry** (indirect costs): Tournament mechanism, i.e. trustor’s payoffs depends on performance of other trustors. Additional payoff of 10€ and 5€ every 8th round for 1st and 2nd ranked trustor

3. **Info sharing & competition**: Combination of both treatments

4. Within treatment: **Direct costs** of info sharing were randomly varied each round from 0-1

**Predictions**

- The possibility to share info positively affects trust and trustworthiness
- Costs reduce info sharing and negatively affect the game outcome

4. Within treatment:

1. **Motivation**
2. **Contribution**
3. **Experimental Setting**
4. **Treatments and Predictions**
5. **Results**

**Descriptives**

- High willingness to trust (P = 7.76)
- Focal point for resending: Q = 1.5 x P
- Information was shared in about 30% of all cases

**Willingness to share info by treatment**

<table>
<thead>
<tr>
<th>Computation</th>
<th>Logit Information Sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct costs</td>
<td>-0.330** [0.114]</td>
</tr>
<tr>
<td>Log direct costs</td>
<td>-0.061*** [0.009]</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.442, 0.486, 0.505</td>
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</tbody>
</table>

**The role of direct costs of info sharing**

- Non-linear effects of direct costs
- Logarithmic function shows best fit
- Already a small direct cost strongly reduces info sharing

**Trust and trustworthiness by treatment**

- Info sharing significantly increases trust and trustworthiness
- Competition makes trustors send higher amounts, no effect on trustees
- Direct and indirect costs reduce trust and trustworthiness through reduced info sharing activities

6. Conclusion

- With no costs, trustors willing to share info leading to a significant reduction in opportunistic behavior (→ reputation building)
- Direct and indirect costs strongly influence willingness to share info and the overall outcome of the game
- Strong **anticipation by trustees**: Costs influence beliefs
- (Positive and negative) **Reciprocity** in trustor-trustor and trustor-trustee relationships is found to be a key motivator for info sharing

**References**