Background

• Opportunity to give punishment and/or reward can help achieve a higher level of cooperation (Sefton, Shupp et al. 2007; Gächter and Fehr 2000)
• Punishment seems to work better: Use the stick rather than the carrot (Balliet, Mulder et al. 2011)
• Large class of situations where groups are not isolated, but in some form of competition

Purpose

• Compare reward and punishment mechanisms in team contests
• Which mechanism leads to more effort and what are the efficiency implications?

Results

• Contributions to the team contest are higher in the contest environment

Reward & Punishment

• Rewarding more extensively used than punishing
• More rewarding in the contest environment, More total response in the contest environment

Discussion

Who receives reward / punishment?

• The opportunity to reciprocate teammates’ actions utilised to fan the flames of the conflict.

Dynamics

Newey-West

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>Contribute</th>
<th>0.469***</th>
<th>(0.04)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution to group account in previous period</td>
<td>0.252**</td>
<td>(0.03)</td>
<td></td>
</tr>
<tr>
<td>Contribution exceeding group mean previous period</td>
<td>-0.201***</td>
<td>(0.06)</td>
<td></td>
</tr>
<tr>
<td>Contribution below group mean previous period</td>
<td>-0.080</td>
<td>(0.05)</td>
<td></td>
</tr>
<tr>
<td>Reward received previous period</td>
<td>0.130*</td>
<td>(0.06)</td>
<td></td>
</tr>
<tr>
<td>Punishment received previous period</td>
<td>0.049</td>
<td>(0.04)</td>
<td></td>
</tr>
</tbody>
</table>

* p<0.05, ** p<0.01, *** p<0.001

Standard errors in parentheses. Period effect, NLB, treatment, environment, group and study major dummies not reported.

• Players contributing relatively more reduce their spending, while the opposite does not happen
• Receiving reward induces an increase in contribution, while receiving punishment leaves it unchanged

Take Home Message

• The opportunity to reciprocate teammates’ actions utilised to fan the flames of the conflict.