

Between-group cooperation and conflict in contest games

There are many situations when two groups engage in conflict - spending money, time and other resources to win a prize. One example is sport competition. As another example, political candidates compete for votes. Or firms compete over market shares or patents. Often, competition leads to a substantial loss of welfare, where both groups would benefit from cooperation. Between-group competition has achieved much attention in social studies, yet between-group cooperation has been rarely studied. With my research, I would like to understand under which conditions groups are likely to choose between-group cooperation over competition. In addition, I will examine how different mechanisms of decision-making within groups affect behavior of in-group members towards outsiders.

To address these questions, I will conduct a laboratory experiment. My design will build on the contest game, where participants compete to win a contest and receive an exogenous prize. In each round, participants are asked to invest a part of their endowment in contest. The probability of winning a contest and receiving a prize depends on the total investments made by all group members divided by the total sum of all investments made by the competing groups. A winning group receives a prize, which is then shared equally among its group members. Members of the losing groups lose tokens invested in contest. It has been shown that expenditures made by groups and individuals are above the optimal level. Moreover, groups invest more in contest than individuals.

I will modify this standard game in a following way. I will introduce between-group cooperation over the exogenous prize. Instead of investing in conflict and competing for the prize, where “the winner takes it all”, group members will be asked to invest tokens in between-group cooperation. The prize will be shared between two groups in proportion to total investments made by them. In additional treatment, I will allow group members to choose whether to engage in competition or cooperation with another group. Finally, I will examine the influence of different mechanisms of decision-making within groups on behavior on in-group members. The proposed experiment will shed light on the conditions conducive to cooperation within and between groups.