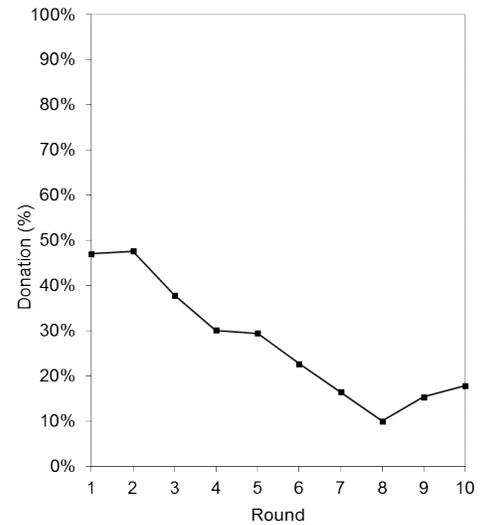


Solutions Notes

Part 1 – Free Riding Experiment

While a variety of behaviors have been demonstrated by different groups, a general trend of increased free riding over time consistently emerges. To make this point clear, the instructors may want to show an aggregate behavior graph in addition to the results of a specific group. A typical aggregate graph will start with public account contributions at 50% in the initial round and gradually decreasing to between 10-20% by the 10th round.

The experiment also illustrates the game theory concepts of a Nash Equilibrium and Socially Optimal behavior. In this case, the Nash Equilibrium prediction is that everyone will not donate to the Public Account (this would lead to everyone receiving \$1 per round). In contrast, the Socially Optimal outcome would be for everyone to donate their entire \$1 endowment to the group account (this would lead to everyone receiving \$1.50 per round).



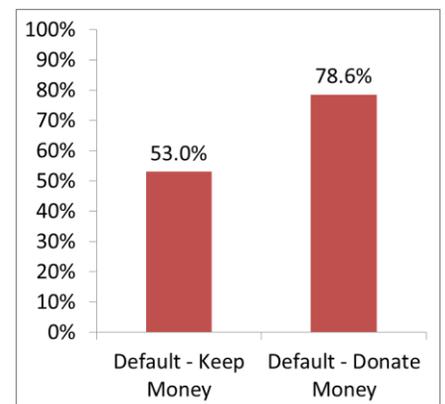
Part 2 – Group Writing Assignment about the Voluntary Contribution Game

Students – especially those in groups that experienced large amounts of free riding behavior – often have strong feelings of betrayal about their fellow students forgoing the socially optimal behavior in favor of self-interested benefit. Interestingly, students who did the free riding are often willing to talk openly about why this did this and why they were surprised that others did not. This difference in perspective and experience leads to fruitful group discussion.

Good papers should discuss both the socially optimal behavior to contribute to the public account and also the Nash equilibrium prediction that individuals will be motivated by self-interest and decide to not contribute and instead free-ride on the contributions of other members of their group. The papers should also identify how, over-time, that the free riding behavior tends to dominate and how it can lead to significant problems with the voluntary provision of public goods and how this can lead to significant societal problems, such as pollution, lack of vaccination of infants, and the underfunding of nonprofit organizations.

Part 3 – Economics Experiment on Nudges and Choice Architecture

In the class following the experiment, results are presented to the students. Generally, the “Refund” group will donate about 25% more money than the “Donation” group (see the example below from a recent class donation results to a local environmental non-profit organization below). Students are given an opportunity to discuss these results and share their experiences during the experiment. This should lead naturally into a discussion of nudges, status quo bias, choice architecture, and how this was different than the results observed in the voluntary contribution game.



Part 4 - Student Writing Assignment

See grading rubric in the section on Assessment Strategies below.