Chapter 2 - Handbook of Experimental Econ. (Kagel & Roth)
Main Points

- Can markets provide optimal allocations of PG such as air pollution or public health?
- PGs raise issues about the very nature of humans: Are people cooperative or selfish?
- Do they behave differently when confronting PG decisions than when making private good decisions?
- Are altruism or fairness concepts that a social scientist must come to terms with before solving the organizational problems?
What does a PG experiment look like?

Endowment of $5. Students (4 males) are told that each can choose to invest some or all of their $5 in a group project.

Simultaneously put an amount in an envelop

The experimenter collects the contributions, total them up and double the amount

Divide the money among the group

What should one expect to happen in this experiment?
The economic/game theoretic prediction is that no one will ever contribute "free-rider"

It is a dominant strategy $0$, because each $1$ contributed yields only $0.5$ to its contributor (no matters what the others do)

Social problem dilemma.

The group would be best off in some sense if all contributed $5$ (taking home $10$)

Individual self-interest is at odds with group interest.
Sociologic-psychologic prediction is that each individual will contribute something.

Altruism, social norms or group identification will lead each to contribute $5, the group optimal outcome.

What does happen in a PGs experiment?
Examination of the data reveals that neither theory is right.

We can observe $0, $5 and some choose a middle course and contribute less than $5.

Generally, total contributions can be expected to lie between $8 and $12 or 40% to 60% of the group optimum.

They seem to claim that a full range of behavior exists from fully selfish to fully altruistic.

Why should we care? The experimental evidence suggests that voluntary contribution will not produce that desired outcome.

Change the institutions by which groups choices are made.

Discover the behavior not only in the context of VC but also in the presence of institutional design.