

Institutional Choice – Spring 2016 Data
Collected in Amherst

Linear Public Good Experiment. Groups of 5. Homogenous Endowment each had 20 EDs, Heterogeneous Endowment 2 had 30, 1 had 20, and 2 had 10 EDs. 18 periods broken into phases of 3 each. First was always VCM. The next two rotated for order effects between imposing peer to peer (1:4) and central authority ($p = 1$, $s = 1.2$).

Treatments

1 = Homo VCM IS FS Choice –

Session 1 (April 29 1130 am, $n = 20$), 2 (April 29 215 pm, $n = 20$), and 3 (Oct 28 4 pm, $n = 15$) – (11 groups)

2 = Homo VCM FS IS Choice –

Session 4 (April 8 1130 am, $n = 20$), 5 (April 29 400 pm, $n = 20$), and 6 (Oct 21 400 pm, $n = 20$) – (12 groups)

3 = Hetero VCM IS FS Choice –

Session 7 (April 8 445 pm, $n = 20$), 8 (April 22 1215 pm, $n = 15$), and 9 (Oct 28 230 pm, $n = 20$) – (11 groups)

4 = Hetero VCM FS IS Choice –

Session 10 (April 22 200 pm, $n = 15$), 11 (April 8 300 pm, $n = 25$), and 12 (Oct 28 100 pm, $n = 20$) – (12 groups)

5 = Hetero VCM IS FS Choice with Endowment –

Session 13 (Sept 30 1230 pm, $n = 20$), 14 (Sept 30 4 pm, $n = 20$), and 15 (Oct 21 145 pm, $n = 20$) – (12 Groups)

6 = Hetero VCM FS IS Choice with Endowment –

Session 16 (Sept 30 11 am, $n = 10$), 17 (Sept 30 215 pm, $n = 20$), 18 (Sept 30 545 pm, $n = 15$), and 19 (Oct 21 1230 pm, $n = 20$) – (13 Groups)

5 = Homo VCM FS IS ExoIS – Session 5 ($n = 25$) and 12 ($n = 10$) – (7 groups) – not in Spring 2016 Excel

Excel Variables

Session – unique for each session

Period – 1 – 18, 6 phases in groups of 3

Subject – unique within session but not across

Age – in years

Gender

Semesters – number of semesters including the current completed

Major

Economics – number of economics courses taken

Group – which group was the subject in – not unique across sessions

Profit – how many EDs earned in given period

Endowment – how many EDs subject begins each period with

MPCR = 0.4

n = 5

Sanction – how many EDs reduced if receive 1 reduction point (1:4)

MonitoringFee = 6 - the fixed cost of the central authority

IndNum – unique within group, used within ztree to identify each subject within group

AvailableSanctions = 10 – how many reduction points subjects can impose on their group

Rate = 1.2 – is the amount of what one keeps that is taken away in central authority ($1.2 \cdot (e-x)$)

Phase1Begin = 1

Phase2Begin = 4

Phase3Begin = 7

Phase4Begin = 10

Phase5Begin = 13

Phase6Begin = 16

Phase1End = 3

Phase2End = 6

Phase3End = 9

Phase4End = 12

Phase5End = 15

Phase6End = 18

OthersContribution_X[Y] – this is how I present the other contributions randomly. It tells IndNum x how much the other player of rank y contributed on a given period. Rank is determined randomly each period.

IndNumXSanction[Y] – this is how many reduction IndNum x assigns to IndNum y. They cannot assign to themselves.

SanctionX_[Y] – this is the input variable for how many reduction points that IndNum X assigns to the subject of rank Y on a given period. So Y is 1 – 4 here.

OthersSanction[X] – counts how many other members choose to sanction IndNum X

MonitoringCost[X] – this is the total number of reduction points that IndNum placed – how much they pay in administration costs when informal is in effect

Sanctioned[X] – is 1 if at least one other group member chose to sanction IndNum X

RankX – is rank 1-4 of other players for a given period (rank of player is 0). This determines the order of presentation for the other contributions labeled A B C D

Phase[1-6] – equals 1 if the period is in a given phase

Vote – only when there is a institution choice. Vote (radio button) for informal = 0, vote for formal = 1.

SumVote = the sum of votes within group

InstitutionChoice[4-6] – is 1 if SumVote < 3 and 2 if SumVote >= 3

Institution – the institution in effect on a given period: 0 equals VCM, 1 = Informal, 2 = Formal

Contribute – amount contributed

Time_Contribribute – how long in seconds it took to make contribution

SumC – sum of contributions within group

GoodProfit – how much each subject makes from group account

Stage1Profit – period earnings

Time_Pun – how long in seconds it took to make peer punishment choice

SanctionCost – if Informal in effect then this is $\text{Sanction} * \text{OthersSanction}$ so $4 * \text{how many received}$. If formal in effect this is $\text{Rate}(E-x)$ so $1.2 * \text{how much kept}$

AdminCosts – if informal this is MonitoringCost so how many they decided to impose and if formal this is monitoringFee so 6 EDs

Time_Pun_Results – is amount of time looking at peer to peer results

Time_Stage1_Results

Time_Central_Results