# Supplementary Materials

## 1. Supplementary Data Analysis

The model presented in in the main text, in Equation (3) and the corresponding regression results in Table 2, has gender-specific parameters. An equivalent model expresses this instead as the deviation of female choices from male choices (e.g., a constant term and a female dummy), see Equation (4) below. The results of the model in Equation (4) are presented in Table S1.

$$Y_i = \alpha + \beta_R D_R + \beta_P D_P + \beta_{R*P} D_{R*P} + \beta_F D_F + \beta_{F*R} D_{F*R} + \beta_{FxP} D_{FxP}$$
$$+ \beta_{R*P*F} D_{R*P*F} + (\beta_C D_C) + \varepsilon \tag{4}$$

**Table S1.** Regression results for outcome "Share of endowment contributed to public good". Clustering on the individual. Robust standard errors in parentheses.

| VARIABLES | (1) Contribution | (2) Contribution | (3) Contribution | (4) Contribution |
|---|---|---|---|---|
| Representative | 2.180 | 1.945 | 6.091 | 9.290 |
| | (5.230) | (5.050) | (4.848) | (7.456) |
| Public | 15.24 * | 15.24 * | 6.104 | 6.649 |
| | (8.208) | (8.234) | (9.773) | (11.68) |
| Representative × Public | | | | −5.671 |
| | | | | (9.794) |
| Female | −8.364 | −8.617 | −9.177 | −12.61 |
| | (9.069) | (9.244) | (8.759) | (10.03) |
| Representative × Female | 15.12 * | 15.62 * | 16.74 ** | 23.61 ** |
| | (7.925) | (7.886) | (8.002) | (11.60) |
| Public × Female | −7.641 | −7.644 | −7.377 | 2.274 |
| | (10.95) | (10.99) | (10.46) | (14.65) |
| Representative × Public × Female | | | | −19.13 |
| | | | | (15.63) |
| Controls for period within sessions | | YES | YES | YES |
| Controls for sessions | | | YES | YES |
| Constant | 53.49 *** | 54.16 *** | 63.60 *** | 63.24 *** |
| | (7.171) | (7.653) | (7.979) | (8.731) |
| Observations | 324 | 324 | 324 | 324 |
| *R*-squared | 0.060 | 0.074 | 0.120 | 0.132 |

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

While the two model formulations are equivalent, the models in Table 2 (in the main text) do not tell us directly whether various differences between the genders are statistically significant. The models in Table S1 do this: Since female responses are predicted as the male response plus additional coefficients, Table S1 makes it easier to examine whether the differences between genders were statistically different from zero. Since the interaction term between "female" and "representative" is statistically different from zero, for instance, this means that there is a statistically significant difference between the responses of men and women to being representatives in our data.

## 2. Robustness Checks

### 2.1. Floor/Ceiling Effects

Since contributions were constrained to lie within 0 and 100, there might be floor or ceiling effects. Of the 324 decisions made, 49 (15%) were zero and 119 (37%) were 100. Also, since male contributions in the inter-individual public good are higher than female, this could leave men with less room to increase their contributions as representatives in the inter-group public good, thus exaggerating the coefficient for female representatives.

To examine this possibility we ran a Tobit regression with two-sided censoring (Table S2). The results indicate that censoring has dampened the difference rather than exaggerated it: the female representative response is estimated to be equal to 63% of the endowment, nearly double that of the analogous estimate from Model 4 in Table 2 in the main text that did not take censoring into account. While the point estimate for male representatives is also larger than before, it remains statistically insignificant under the null hypothesis of no effect.

**Table S2.** Two-sided tobit regression. 49 left-censored observations (contribution = 0% of endowment), 156 uncensored observations, 119 right-censored observations (contributions = 100% of endowment). Robust standard errors in parentheses.

| VARIABLES | (1) Model |
|---|---|
| Female representative | 62.64 *** |
| | (15.15) |
| Male representative | 22.76 |
| | (14.46) |
| Female × Public | 12.81 |
| | (21.01) |
| Male × Public | 14.61 |
| | (23.52) |
| Female × Public × Representative | −46.97 ** |
| | (22.07) |
| Male × Public × Representative | −18.38 |
| | (20.39) |
| Female intercept | 56.10 *** |
| | (12.79) |
| Male intercept | 77.25 *** |
| | (17.34) |
| Controls for period within session | YES |
| Controls for session | YES |
| Observations | 324 |

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

## 2.2. Confounding from Age or Field of Study

The female share varied across study fields, as illustrated in Table S3. If a student's field influences both contributions and how the subject acts as a representative in the inter-group public good, then this would bias the results.

Similarly, we might want to control for differences in age. While the average reported age was similar, there was a larger spread in ages for men: average (SD) age was 22 (3.6) for men, against an average of 21 (1.8) for women.

**Table S3.** Female share of subjects by field.

|  | Number of Students | Average Age | Female Share |
|---|---|---|---|
| Math and sciences | 61 | 21.4 | 38% |
| Social science | 16 | 20.7 | 63% |
| Humanities | 12 | 21.6 | 58% |
| Education | 6 | 24.3 | 33% |
| Law | 4 | 19.5 | 100% |
| Medicine | 1 | 22 | 100% |
| Theology | 1 | 20 | 100% |
| Other | 7 | 21.1 | 29% |

To examine this, we ran three further regressions (Table S4). Model 1 includes a dummy set containing faculty background, each of which was also interacted with a dummy variable for being a representative for the subgroup. Model 2 also added a dummy set capturing participant age, and interacted this with the dummy for being representative. Finally, Model 3 retains these dummy sets while running the full model that allows for interactions between gender and both treatment dimensions, but using the subsample of students from the three most gender-equal faculties (Math and sciences, humanities and social science). While the magnitude and statistical significance of the female representatives changes with the specification, it remains above the male in all variants of the model.

**Table S4.** Regressions controlling for age and faculty interactions with leadership responsibility. Robust standard errors in parentheses.

|  | (1) | (2) | (3) |
|---|---|---|---|
| **VARIABLES** | **Percent** | **Percent** | **Percent** |
| Female representative | 17.52 | 26.79 | 39.53 ** |
|  | (17.70) | (17.12) | (17.70) |
| Male representative | 2.717 | 5.923 | 13.33 |
|  | (16.09) | (16.40) | (17.02) |
| Female × Public | −14.12 | −16.80 * | −7.580 |
|  | (9.187) | (9.364) | (10.93) |
| Male × Public | 3.746 | −0.611 | 1.098 |
|  | (10.63) | (11.34) | (13.47) |
| Male × Public × Representative |  |  | −6.860 |
|  |  |  | (10.15) |

**Table S4.** *Cont.*

| VARIABLES | (1) Percent | (2) Percent | (3) Percent |
|---|---|---|---|
| Female × Public × Representative | | | −21.89 ** |
| | | | (10.73) |
| Controls for period within sessions | YES | YES | YES |
| Controls for session | YES | YES | YES |
| Representative × Academic Department | YES | YES | YES |
| Representative × Age | | YES | YES |
| Female intercept | 88.74 *** | 83.04 *** | 77.92 *** |
| | (17.12) | (18.43) | (18.63) |
| Male intercept | 88.62 *** | 87.00 *** | 84.50 *** |
| | (17.07) | (17.75) | (18.15) |
| Observations | 324 | 324 | 324 |
| *R*-squared | 0.786 | 0.800 | 0.802 |

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

## 3. Experimental Instructions

### 3.1. General Instructions Given to All Participants

Welcome to this experiment within economics. The results from this experiment will be used in a research project. Each participant will make decisions on an assigned computer.

(**In anonymous treatments**: *All answers are anonymous—neither the other participants nor us conducting the experiment will know who took which decisions. When analyzing the data from the experiment, all data will be anonymous.*)

(**In public treatments**: *In today's experiment, some randomly drawn participants will be asked to go forth and write their decision on the blackboard. In these cases all participants will be able to see the decisions made by these individuals. In all other cases the decisions will be anonymous. When analyzing the data from the experiment, all data will be anonymous.*)

If you have any questions during the experiment, you can raise your hand and one of us will come over to you and answer your question in private. With this exception, it is not allowed to communicate with others during the experiment.

It is important for us that you trust the information we give in the experiment. Therefore we would like to emphasize that all information you receive is true. It is also important that you understand what happens in the experiment. We therefore ask you to read the instructions carefully.

All participants in the experiment will be paid NOK 80 for attending the experiment. In addition, you can earn more money depending on the choices you make during the experiment. After the experiment is finished, we will transfer the money you have earned, plus NOK 80 for attending, to your bank account. Therefore you must fill out the payment sheet on the desk in front of you. Please hand in the payment sheet before you leave the room. Important: You receive your ID-number at the end of the experiment; please wait until you have received your ID-number before filling this in.

The Experiment you will Participate in

The experiment consists of three parts, or stages. The parts are independent, in the sense that what you do in one part will not influence what will happen or how much you earn in another part. You will receive information about the different parts of the experiment as the experiment proceeds. Each time everybody has finished one part, we will hand out information about the next part.

You and the other participants are randomly divided into groups of three. Your group number will be displayed on your screen when the experiment starts. You will be in a group with the same participants throughout the experiment.

The experiment involves something that can be called a "doubling bucket". Three and three individuals will share a bucket, and all three will choose how much money they want to put in the bucket. All money put in the "doubling bucket" will be doubled in value, and shared equally between those that shared the bucket. All have to decide how much they would like to put in the bucket without knowing how much the two others will put into it. First when all have made a decision, the money will be doubled and shared out.

Here are three examples. Three people can use the same bucket, and all receive 60 NOK each:

- If no one puts money in the bucket, each are left with the 60 NOK they started with.
- (This example is also explained in Table S5 below) If one of the three puts all his money in the bucket, while number two puts half, and number three puts nothing in the bucket, there is totally 90 NOK in the bucket. This is doubled to 180 and divided equally between the three people that could use it, that is 60 NOK to each. Each of the three then are left with the amount they kept for themselves, plus the 60 NOK they receive from the bucket—which is 60 to the first, 90 to the second and 120 to the third.
- If all three put all their money into the bucket, there is 180 NOK in the bucket, which is doubled to 360, and all get 120 NOK back each.

**Table S5.** Illustrative table used in experimental instructions.

| Bucket User | Keeps | Puts in Bucket | Totally in Bucket | Totally out of Bucket | To Each from Bucket | To Each (Keeps + Bucket) |
|---|---|---|---|---|---|---|
| A | 0 | 60 | | | 60 | 60 |
| B | 30 | 30 | 90 | 180 | 60 | 90 |
| C | 60 | 0 | | | 60 | 120 |

To make it easier to understand how this works, you now will get a training period on the screen before we start the experiment. In this period you decide the choices of three fantasy players, and the computer will show you what the three players will earn when putting different amounts in the bucket. You can test the results of five different choices. When all are finished the testing, part 1 of the experiment will start.

*3.2. Instructions Given to Participants for Decisions as Individuals*

(**Additional information during Part 3**: *This part is identical to part 1, except that you will share the bucket with different people.*)

Each person now will receive 60 NOK. You and two other participants can put money in the same bucket. All three sharing a bucket come from different groups. You will be told which groups the others are members of, but not who they are.

Your task is to decide how big share of the money you received in this part of the experiment you want to put in the doubling bucket. Remember that the entire contents of the bucket will be doubled and then shared equally between the three people.

At the very end of the experiment you will be told how much you got back from the bucket and therefore also how much was put in the bucket in total. You will not be told how much each of the two other people sharing the bucket put into the bucket.

(**Additional information during Public decisions:** *In addition three randomly chosen people will be asked to come forth to the blackboard and write their group number and how a large share of their money they put in the bucket. In other words, there is one ninth probability that you will be asked to come forth to the blackboard. You will not be told which group those who are not called forth to the blackboard were part of, or how much they put in the bucket.*)

Remember that the money is real money, and that the choices you and the others participants take during the experiment decide how much you will be paid after the experiment.

*3.3. Instructions Given to Participants for Decisions as Group Representatives*

(**Additional information given during Part 3:** *This part is identical to part 1, except that your group will share a bucket with different groups.*)

Each person now will receive 60 NOK. Your group and two other groups can put money in the same bucket. You will be told which groups the other two groups are, but not who are in them.

Since there are three people in each group, each group has 180 NOK at their disposal. Your task is to answer the following question: How much of your group's money do you want to put in the bucket on behalf of yourself and the two others in your group? (The decision of one of the three in your group will be randomly drawn and be the decision of your group).

Remember that the entire contents of the bucket will be doubled and then shared equally between the three groups. Then the money your group receives will be divided equally between you and the two other members of your group.

At the very end of the experiment you will be told how much you got back from the bucket and therefore also how much was put in the bucket in total. You also will be told whether it was your decisions that decided how much you and the other two in your group put into the bucket. You will not be told how much each of the two other groups put into the bucket.

(**Additional information given during Public decisions**: *In addition three of the people who actually made decisions on behalf of themselves and their group members will randomly be chosen and will be asked to come forth to the blackboard. Here they will be asked to write their group number and how large a share of their groups' money they put in the bucket on behalf of themselves and the two other group members. In other words, there is one ninth probability that you will be asked to come forth to the blackboard. You will not be told which group those who are not called forth to the blackboard were part of, or how much they put in the bucket.*)

Remember that the money is real money, and that the choices you and the others participants take during the experiment decide how much you will be paid after the experiment.

## 4. Screen shots from the Experiment

### 4.1. Training Periods

| Periode | |
|---|---|
| 1 av 5 | Gjenværende tid (i sek.) 25 |

**TRENING**

Nå starter treningsrundene. Det du foretar deg i disse rundene er kun trening og påvirker ikke hva du får utbetalt for å delta i eksperimentet.

**Start treningen**

| Periode | |
|---|---|
| 1 av 5 | Gjenværende tid (i sek.) 29 |

Treningsrunde

Velg hvor mange kroner hver av de hypotetiske personene legger i bøtta. Trykk "Test resultat" for å se hva dette hypotetisk sett ville gitt i utbetalinger

Person 1
Person 2
Person 3

**Test resultat**

Hjelp
Press "Neste treningsrunde" for å fortsette

| Person | Beholder | Gir til bøtta | Totalt lagt i bøtta | Totalt ut av bøtta | Til hver fra bøtta | Betaling |
|--------|----------|---------------|---------------------|--------------------|--------------------|----------|
| Person 1 | 59 | 1 | | | 11 | 70 |
| Person 2 | 55 | 5 | 16 | 32 | 11 | 66 |
| Person 3 | 50 | 10 | | | 11 | 61 |

**Neste**

## 4.2. Start of Experiment

Gjenværende tid (i sek.) 24

**EKSPERIMENT**

Nå starter selve eksperimentet. Valgene du tar i resten av eksperimentet påvirker hvor mye du faktisk får utbetalt i etterkant.

**Jeg er klar!**

## 4.3. Anonymous Group Representative Decision

Gjenværende tid (i sek.)  26

DEL          1

Du tilhører gruppe 2. Din gruppe deler nå bøtte med gruppe 4 og gruppe 6.

Du og de andre deltakerne har mottatt 60 kroner hver. Din gruppe har til sammen mottatt 180 kroner.
Alt dere legger i bøtten blir doblet og delt likt mellom de tre gruppene.
Deretter blir pengene din gruppe får delt likt mellom deg og de to andre gruppemedlemmene.

Hvor mye av din gruppes penger ønsker du å legge i doblingsbøtten på vegne av deg selv og de to andre i gruppen?
(Beslutningen til en av tre i din gruppe vil bli tilfeldig trukket og bli gjeldende)

- ○ 100%
- ○ 90%
- ○ 80%
- ○ 70%
- ○ 60%
- ○ 50%
- ○ 40%
- ○ 30%
- ○ 20%
- ○ 10%
- ○ 0%

**Fortsett**

Hjelp
Trykk "Fortsett" når du har tastet inn ditt valg.

## 4.4. Anonymous Individual Decision

Gjenværende tid (i sek.)  24

DEL          2

Du tilhører gruppe 9, og deler nå en bøtte med en deltager fra gruppe 4 og en deltager fra gruppe 8.

Du og de andre deltakerne har nå mottatt 60 kroner hver. Alt som legges i bøtten blir doblet og delt likt mellom dere tre.

Hvor stor andel av dine penger ønsker du å legge i bøtten?

- ○ 100%
- ○ 90%
- ○ 80%
- ○ 70%
- ○ 60%
- ○ 50%
- ○ 40%
- ○ 30%
- ○ 20%
- ○ 10%
- ○ 0%

**Fortsett**

Hjelp
Trykk "Fortsett" når du har tastet inn ditt valg.

## 4.5. Public Group Representative Decision

Gjenværende tid (i sek.)  15

DEL        3

Du tilhører gruppe 3. Din gruppe deler nå bøtte med gruppe 4 og gruppe 5.

Du og de andre deltakerne har mottatt 60 kroner hver. Din gruppe har til sammen mottatt 180 kroner.
Alt dere legger i bøtten blir doblet og delt likt mellom de tre gruppene.
Deretter blir pengene din gruppe får delt likt mellom deg og de to andre gruppemedlemmene.

Hvor mye av din gruppes penger ønsker du å legge i doblingsbøtten på vegne av deg selv og de to andre i gruppen?
(Beslutningen til en av de tre i din gruppe vil bli tilfeldig trukket og bli gjeldende)

- ○ 100%
- ○ 90%
- ○ 80%
- ○ 70%
- ○ 60%
- ○ 50%
- ○ 40%
- ○ 30%
- ○ 20%
- ○ 10%
- ○ 0%

**Fortsett**

Hjelp
Trykk "Fortsett" når du har tastet inn ditt valg.

Gjenværende tid (i sek.)  73

Du tilhører gruppe        9
DEL 1
I del 1 av eksperimentet delte du bøtte med gruppe 5 og gruppe 7.
Din beslutning ble ikke gjeldende for din gruppe;.
Han/hun valgte å legge 40 % av pengene til gruppa i bøtta.
Totalt fra denne delen av eksperimentet tjente du 68 kroner.
Du er ikke valgt ut til å gå fram og skrive beslutningen din på tavla.
DEL 2
I del 2 av eksperimentet delte du bøtte med en fra gruppe 4 og fra gruppe 8.
Du valgte å legge 40% av pengene dine i bøtten.
Totalt fra denne delen av eksperimentet tjente du 76 kroner.
DEL 3
I del 3 av eksperimentet delte du bøtte med gruppe 1 og 2.
Din beslutning ble gjeldende for din gruppe;.
Han/hun valgte å legge 0 % av pengene til gruppa i bøtta.
Totalt fra denne delen av eksperimentet tjente du 60 kroner.
Du er valgt ut til å gå fram og skrive beslutningen din på tavla.
Din totale fortjeneste        284.0

**Fortsett**

Hjelp
Trykk "Fortsett" når du har lest teksten på skjermen og er klar til å fortsette.

*4.6. Questionnaire*

| Kjønn | ○ Kvinne |
| | ○ Mann |

Alder [ ]

Jeg studerer ved
- ○ Det humanistiske fakultet
- ○ Det juridiske fakutlet
- ○ Det matematisk-naturvitenskapelige fakultet
- ○ Det medisinske fakultet
- ○ Det odontologiske fakultet
- ○ Det samfunnsvitenskapelige fakultet
- ○ Det teologiske fakultet
- ○ Det utdanningsvitenskapelige fakultet
- ○ Annet

[ Ferdig! ]

Tusen takk for din deltagelse!