

Ben Greiner & M. Vittoria Levati:

Indirect reciprocity in cyclical networks: An experimental study

Instructions and questionnaire

Sample instructions (originally in German)

We report the instructions that we used for 3-person groups. The instructions for the partners in 6-person groups were adapted accordingly.

Instructions in the I-protocol

Welcome and thank you for participating in this experiment. Please read the following instructions carefully. From now on any communication with the other participants is forbidden. If you have any questions, please raise your hand, and one of the experimenters will come to help you.

During the experiment you will be able to earn money. How much you will earn depends on your decisions and the decisions of the other participants. Your experimental income will be calculated in ECU (Experimental Currency Unit), where 25 ECU = €1. At the end of the experiment, the ECU you have earned will be converted to euros, and the obtained amount will be immediately paid to you in cash.

The experiment consists of several phases, each lasting for 10 rounds. In each round, the participants are divided in groups of three. The group composition will be randomly determined at the beginning of each phase and then kept constant over the entire phase, that is, you will be interacting with the same two persons in all 10 rounds of a phase. [*In the strangers session, the last two paragraphs were replaced by:* The group composition will be randomly determined after each round, that is, your group members will be different from one round to the next.]

The three group members will be identified by numbers from 1 to 3. At the beginning of each round, each group member receives 5 ECU. Your task is to decide how many ECU you want to give

- to the group member with the number following yours, if you are member 1 or 2;
- to member 1, if you are member 3.

Therefore, if you are member 1, you have to decide how many ECU you want to give to member 2. If you are member 2, you have to decide how many ECU you want to give to

member 3. If you are member 3, you have to decide how many ECU you want to give to member 1. You can give your group member 0, 1, 2, 3, 4, or 5 ECU.

For any amount you decide to give, your group member will receive the triple. For instance, if you give 1 ECU, your group member will receive 3 ECU; if you give 3 ECU, (s)he will receive 9 ECU; if you give 5 ECU, (s)he will receive 15 ECU.

Likewise, you will receive triple the amount that your group member gives you. Your round income consists, therefore, of two parts:

1. the amount you keep for yourself (i.e., 5 ECU – ECU you give);
2. triple the amount that your group member gives you.

$$\begin{aligned} & \text{Your round income} = \\ & \text{ECU you keep for yourself} \\ & + 3 \times (\text{ECU you receive from your group member}) \end{aligned}$$

In each round, all three group members choose *at the same time* how many ECU they want to give. At the end of each round, you will be informed about the amount that you will receive from your group member, and about your round income.

Instructions in the S-protocol

The only change with respect to the previous phases is that now the three group members must make their round decision in an ordered sequence with member 1 deciding first and member 3 deciding last. Specifically, in each round the sequence will be as follows:

- First, member 1 decides how much (s)he wants to give to member 2, where the amount to be given can be 0, 1, 2, 3, 4, or 5 ECU.
- Then, member 2, after being informed about the amount (s)he receives from member 1, decides how much (s)he wants to give to member 3. Also, member 2 can only give 0, 1, 2, 3, 4, or 5 ECU.
- Finally, member 3, after being informed about the amount (s)he receives from member 2, decides how much (s)he wants to give to member 1. Also, member 3 can only give 0, 1, 2, 3, 4, or 5 ECU.

This ends a round. All group members will be informed about their round income, and a new round will start. Besides this modification, the following will remain as before:

1. You will be interacting in groups of three individuals.
2. The composition of your group will remain constant throughout the 10 rounds of each phase, whereas it will randomly change after each phase. [*In the strangers session, this paragraph was replaced by: The composition of your group will randomly change after each round.*]

3. At the beginning of each round, you will receive 5 ECU.

4. Your round income will be:

$$\begin{aligned} & \text{Your round income} = \\ & \text{ECU you keep for yourself} \\ & + 3 \times (\text{ECU you receive from your group member}) \end{aligned}$$

Questionnaire (originally in German)

The following questionnaire was handed out at the end of the experiment:

- ◆ Number of cabin:
- ◆ Please describe briefly and in your own words the procedures of the experiment.
- ◆ Please explain briefly how you made your decisions.