

Appendix: Instructions

For the experiments in:
Kocher, M.G., Cherry, T., Kroll, S., Netzer, R.J.,
Sutter, M. (2008). Conditional cooperation on three
continents. **Economics Letters**, *forthcoming*.

You are about to participate in an experiment on decision-making. If you follow these instructions carefully and make good decisions you can earn a considerable amount of money, which will be paid to you at the end of this experiment in cash.

During the entire experiment, communication of any kind is strictly prohibited. Communication between participants will lead to your exclusion from the experiment and the forfeit of all monetary earnings. Please raise your hand if you have any questions; a member of the research team will come to you and answer your question privately.

Your earnings in this experiment will be in “tokens.” At the end of the experiment, tokens will be converted into US Dollars at the exchange rate of:

$$1 \text{ token} = \$ 0.235$$

The Basic Decision

You will now learn how the experiment is conducted. First we introduce the basic decision situation. Afterwards we ask you to answer control questions that will help you gain an understanding of the decision situation.

You are a member of a group of three. Nobody except for the experimenters will know who is in which group. Each member of your group has an “endowment” of 20 tokens and has to decide how to divide this endowment. You can put your tokens into a private account, or you can deposit them completely or partially in a group account. Each token you do not deposit in the group account will automatically be transferred to your private account.

Your income from the private account:

For each token you put into your private account you will earn exactly one token. For example, if you put all 20 tokens into your private account (and therefore zero tokens in the group account) then you will earn exactly 20 tokens from the private account. If instead you put 6 tokens into your private account then you receive an income of 6 tokens from the private account. Nobody except you earns tokens from your private account.

Your income from the group account:

Everybody receives the same income from the token amount you put into the group account. You will also earn an income from the tokens the other group members put into the group account. For each group member the income from the group account will be determined as follows:

$$\text{Income from the group account} = \text{sum of all contributions to the group account} \times 0.6$$

For example, if the sum of all contributions to the group account is 40 tokens, then you and the two other group members will get an income of $40 \times 0.6 = 24$ tokens from the group account. If the three group members deposit a total of 10 tokens in the group account, then you and the two others will receive an income of $10 \times 0.6 = 6$ tokens from the group account.

Your total income:

Your total income is the sum of the income from your private account and the income from your group account:

$$\begin{array}{r} \text{Income from your private account } (= 20 - \text{your contribution to the group account}) \\ + \text{Income from the group account } (= 0.6 \times \text{sum of all contributions to the group account}) \\ \hline \hline \text{Total income} \end{array}$$

Before we finish reading the instructions we ask you now to answer the following control questions.

Control Questions:

Please answer the following control questions. Their purpose is to make you familiar with the calculation of incomes that arise from different decisions on how to allocate the endowments. *Please answer all questions and write down all calculations.*

1. Each group member has an endowment of 20 tokens. Assume all group members (including yourself) put nothing into the group account.

What is your total income: ____

What are the incomes of the two other group members: ____ and ____

2. Each group member has an endowment of 20 tokens. Assume all group members (including yourself) put their entire endowments into the group account.

What is your total income: ____

What are the incomes of the two other group members: ____ and ____

3. Each group member has an endowment of 20 tokens. Assume that the other two group members put combined 30 tokens into the group account.

- a) What is your total income, if you, in addition to the 30 tokens of the other two group members, put 0 tokens into the group account?

Your total income: ____

- b) What is your total income, if you, in addition to the 30 tokens of the other two group members, put 8 tokens into the group account?

Your total income: ____

- c) What is your total income, if you, in addition to the 30 tokens of the other two group members, put 15 tokens into the group account?

Your total income: ____

4. Each group member has an endowment of 20 tokens. You put 9 tokens into the group account.

- a) What is your total income, if the other group members, in addition to your 9 tokens, put combined another 7 tokens into the group account?

Your total income: ____

- b) What is your total income, if the other group members, in addition to your 9 tokens, put combined another 12 tokens into the group account?

Your total income: _____

- c) What is your total income, if the other group members, in addition to your 9 tokens, put combined another 22 tokens into the group account?

Your total income: _____

If you finish these questions before the others, we advise you to think about additional examples to familiarize yourself further with the decision situation.

The Experiment

At the end of the experiment you get paid according to the decisions you make in the experiment. It will be conducted only once.

As you know you have an endowment with 20 tokens. You can put these tokens into a private or into a group account.

Each of the three group members has to make two types of decisions. We will refer to these two decision types as “**unconditional contribution**” and the “**contribution table.**”

- With the **unconditional contribution** to the group account you will decide how many of the tokens in your endowment you put into the group account. Write this amount behind “Your unconditional contribution to the group account” on the first page of your decision sheet. You must write down an integer number that cannot be smaller than zero and larger than 20. The difference between 20 and the amount you put into the group account is automatically the amount you put into your private account.
- Your second task is to fill out a **contribution table** on page 2 of the decision sheet. In the contribution table you have to indicate how many tokens you want to put into the group account for each possible average contribution of the other group members (rounded up to the next integer). Your contribution decision will therefore depend on what other group members contribute. This will become clear to you when you see the contribution table:

(Rounded) Average contribution of the other group members to the group account	Your contribution to the group account is
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

16	
17	
18	
19	
20	

The numbers in the left column are the possible (rounded) average contributions of the **other** group members.

You simply have to write down in the fields of the right column how many tokens you want to contribute to the group account, given the average contribution amount of the others in the left column. You must make an entry in each field of the right column. For example, you must write down how many tokens you want to contribute to the group account if the others contribute on average 0 tokens to the group account; how many you contribute if the others contribute 1 or 2 or 3 tokens, etc. In each field, you must write down an integer number not smaller than zero and not larger than 20.

After all participants of the experiment have made their unconditional contribution decisions and have filled out their conditional contribution table, one member of each group will be selected randomly. For the randomly determined group member only the contribution table will be income-relevant. For the other two group members that are not selected by the random mechanism the unconditional contribution decision will be the income-relevant decision. When you make your unconditional contribution and when you fill out the contribution table you do not know whether you will be selected randomly. Therefore you will have to think carefully about both types of decisions because both can become relevant for you. The following two examples should illustrate this:

Example 1: Assume that you have been selected by the random mechanism. This implies your income-decision will be the contribution table. For the other two group members the unconditional contribution is the relevant decision. Assume they have made unconditional contributions of 0 and 3 tokens. The rounded average contribution is therefore 2 ($3/2 = 1.5$).

If you have indicated in your contribution table that you will put one token into the group account if the others contribute 2 tokens on average, then the total contribution to the group account is $0+3+1=4$. Thus all group members earn an income of $0.6 \times 4 = 2.4$ from the group account plus their respective incomes from the private accounts.

If you have indicated instead that you contribute 19 to the group account if the others contribute 2 on average then the total contribution to the group account is $0+3+19=22$. All group members earn an income of $0.6 \times 22 = 13.2$ tokens from the group account plus their respective incomes from the private accounts.

Example 2: Now assume that you have not been selected by the random mechanism, which means that for you and for one other group member the unconditional contribution is the income-relevant decision. Assume further that your unconditional contribution to the group account is 16, and the one of the other group member is 20. The average

unconditional contribution of you and the other group member is therefore 18 $(=(16+20)/2)$.

If the randomly selected group member indicates in the contribution table that he or she contributes one token to the group account when the other two group members contribute 18 on average, then the total contribution of the group to the group account is $16+20+1=37$ tokens. All group members will therefore earn $0.6 \times 37 = 22.2$ tokens from the group account in addition to their respective incomes from their private accounts.

If the randomly selected group member instead indicated in the contribution table that he or she contributes 19 tokens to the group account when the other two group members contribute 18 on average, then the total contribution of the group to the group account is $16+20+19=55$ tokens. All group members will therefore earn $0.6 \times 55 = 33$ tokens from the group account in addition to their respective incomes from their private accounts.

The random selection of the participants will be implemented as follows. Each group member is assigned the name of a play card (Queen, King or Ace), which you can see on your decision sheet. A randomly selected experiment participant will draw one of three cards, **after** all participants have made their unconditional contribution and have filled out their contribution table. If the card is drawn that matches the card on your decision sheet then the contribution table on page 2 is relevant for you. Otherwise, your unconditional contribution is the relevant decision.

The following figure is presented to visualize the situation from example 1. You are the person to the right, whose card is an Ace (A). An Ace was drawn and therefore page 2 of the decision sheet is the relevant page for you, while page 1 is the relevant page for everybody else. While all group members had to fill out both pages completely (indicated by the letter “x”) only the decisions in bold are payoff relevant.

