

Instructions

Welcome to this experiment! Please read these instructions carefully. From now on, do not talk to your neighbors. Please switch your mobile phone off and keep it switched off until the end of the experiment. If you have any questions, raise your hand and we will come to your seat.

In this experiment, each participant will be assigned one of two roles: "A" or "B".

Three "A" and one "B" will be matched with each other. No participant will ever learn the identity of the other participants.

In the experiment, *Thaler* will be used as the experimental currency unit. At the end of the experiment, all paper Thaler will be exchanged into Euro at a rate of 1 Thaler = 1€. Each participant will be paid privately and in cash. Your payout is determined by your decisions during the experiment and by the decisions of the participants you are matched with.

Details of the experiment

Stage 1: Questionnaire

Please complete the distributed questionnaire. In return, you will earn 8 Thaler.

Stage 2: Graph paper

Each participant "A" is handed one sheet of graph paper and a pen. The task is to fill that sheet with alternating "+" and "-" signs, as shown in the first lines. Each "A" will have 25 minutes to complete this task.

If the sheet is completely filled, "A" receives 10 Thaler. These Thaler will be handed out by the experimenters. If the sheet is not completely filled, "A" earns 0 Thaler, and does not take part in stage 3 to 7.

Stage 3: Decision of "B"

Now, the experimenters place in front of "B" the 10 Thaler of each of the three matched "A".

B decides on an allocation of the Thaler received by the "A" in stage 2 between himself and the "A". There are two possible allocations. If an allocation is chosen, it is implemented for all "A". It is not possible for "B" to choose different allocations for different "A".

Allocation (2,8): 2 Thaler for "A" and 8 Thaler for "B"

Allocation (10,0): 10 Thaler for "A" and 0 Thaler for "B"

If "B" chooses allocation (2,8), he places 8 Thaler in each envelope and leaves 2 Thaler outside of the envelope. In this case, each "A" receives those 2 Thaler. The 8 Thaler in the envelope are designated for "B".

If "B" chooses allocation (10,0), he places 0 Thaler in each envelope and leaves 10 Thaler outside of the envelope. In this case, each "A" receives those 10 Thaler. No Thaler are designated for "B".

Stage 4: Transfer

Now, the envelope and the Thaler outside the envelope are placed in front of each "A" – as per the allocation chosen by "B".

- Each "A" can take the Thaler outside the envelope and combine them with the 8 Thaler he earned in stage 1.
- The envelope must not be opened. The envelope contains those Thaler, which "B" designated for himself.

Stage 5: Decision of "A"s

Each "A" decides on the following question:

"Should one of the envelopes of stage 3 be destroyed?"

If "B" chose the allocation (2,8) in stage 3 and if at least one "A" answers with yes, then "B"s payout will be reduced by 8 Thaler.

If all "A" answer the question with no, then stage 6 (auctions) does not take place, and the payout of "B" is not reduced.

Stage 6: Auctions

The experimenters distribute a new envelope to each "A". This envelope contains the same number of Thaler as are in the envelope of stage 3. Neither "A", nor "B" will ever receive any Thaler out of the new envelope.

There are two auctions, auction1 and auction2. Auction1 relates to the envelope of stage 3, auction2 relates to the new envelope.

Each "A" has to make a bid for both auctions. Only one auction of the two will be implemented. The decision of which auction will be determined by the toss of a coin, which will be made after bids have been collected.

This is how both of the auctions work:

Each “A” states the number of Thaler he is willing to bid (you can also bid in Cent). The lowest possible bid is 0 Thaler, the highest possible bid is 10 Thaler.

The “A” who entered the *highest bid wins* the auction. However, the winner only has *to pay the second highest bid* in this auction. This cost will be deducted during the payout at the end of the experiment.

If there are several, equally high, highest bids, the winner will be randomly determined. This means that there is always a winner in the auction.

Note: In this type of auction, it is optimal to bid just the amount that is equivalent to your valuation of the good (here: the right to destroy the according envelope) that is auctioned off.

In each of the two auctions, the winner earns the right to destroy one envelope:

In auction1, each “A” bids for the right to destroy the envelope in front of them from stage 3. Only the winner of the auction may destroy the envelope. “B” does not receive any Thaler out of the destroyed envelope of the winner.

In auction2, each “A” bids for the right to destroy the newly distributed envelope. Only the winner of the auction may destroy the envelope. Newly distributed envelopes which are not destroyed are collected again by the experimenters. Nobody does ever receive any Thaler out of the destroyed or not destroyed newly distributed envelopes.

Stage 7: Result of the auction

In this stage, a coin toss determines whether auction1 or auction2 will be resolved. The winner of the chosen auction may destroy his envelope and the Thaler in that envelope.

If the coin toss chooses auction1, the two envelopes of stage 3 which are not destroyed are handed to “B”. “B” may open the envelopes and take the Thaler within them. All newly distributed envelopes are collected by the experimenters.

If the coin toss chooses auction2, two of the envelopes of stage 3 are handed to “B”. “B” may open the envelopes and take the Thaler within them. One randomly chosen envelope of stage 3 is retained by the experimenters and not handed to “B”. All newly distributed envelopes which are not destroyed are collected by the experimenters.

Stage 8: Questionnaire

Finally, please complete the second distributed questionnaire.

Payment

Now, all Thaler are exchanged into Euro.

Payout "A": All "A" own the Thaler placed in front of them. That is, the 8 Thaler received in stage 1 as well as the Thaler received in stage 4. The winner of the auction that was chosen by the coin toss has to pay the second highest bid in this auction.

Payout "B": "B" owns the 8 Thaler received in stage 1 and all Thaler out of the envelopes of stage 3, with exception of any destroyed envelope or any envelope retained by the experimenters.

Nobody receives Thaler out of the newly distributed envelopes from stage 6.