

**Two-person Bargaining Mechanisms:
A Laboratory Experiment**

Supplementary material

- 1. Experimental instructions**
- 2. Quiz questions**

1. Experimental instructions

Thank you for agreeing to participate in this experiment. It should last around one hour. From now until the end of the experiment, you cannot talk to any other participant. If you have a question, please raise your hand and I will answer your questions privately.

The experiment consists of 40 rounds. At the beginning, you will be randomly matched with another participant. You will play with this participant for 5 rounds. After 5 rounds, you will be randomly re-matched with another participant, and so forth until the end of the experiment.

In each round, you will be able to gain some money depending on your decision and the decision of the participants with whom you are matched. At the end of the experiment, the computer will randomly select 10 out of 40 rounds. The money you have gained at these precise rounds will be averaged and given to you privately at the end of the experiment. You will also receive a fixed sum of 5€ for taking part in the experiment.

This is an experiment in interactive decision-making. You will play with another participant to select together an option from a list of five (A, B, C, D, and E). Each option corresponds to a certain sum of money for you and the other participant with whom you are matched. Sometimes, it is the same value for both, sometimes it is a different value. Here is an example:

	Your gain	Other participant's gain
If (A) is selected	20€	0€
If (B) is selected	15€	5€
If (C) is selected	10€	10€
If (D) is selected	5€	15€
If (E) is selected	0€	20€

This table will appear on your screen and the screen of the other participant with whom you are matched at all time. Be careful, the values will change every 10 rounds. Yet, there will always be one option associated to 20€, another to 15€, 10€, 5€, and 0€.

The way you and the other participant select one of the five options is the following:

[SIMULTANEOUS]

1. The computer randomly matches you with one participant.
2. You choose 3 options out of the 5 available, and the other participant does the same. You do it simultaneously so that you do not know what the other is doing.
3. The option that you and the other participant have in common is the option selected for payment.
4. In case you have several options in common, the computer randomly selects one of the common options for payment.

To illustrate these rules, here is an example:

1. Suppose that you choose the options (A, C, and D).

2. And that the other participant chooses the options (B, D, and E).
3. The option (D) is the option selected for payment because it is the only one that you and the other participant have in common.
4. Based on the table above, you receive 5€, and the other participant receives 15€.
5. Now imagine that the other participant chooses the options (C, D, and E). Now you have two options in common: (C and D). So, the computer randomly selects one of the two options in common (maybe C, maybe D) for payment.

After 5 rounds, you will be re-matched with another participant, and the process starts again. After 10 rounds, the payments table will change.

Before starting, you will need to answer a few quiz questions to about the rules of the games. There is no point associated to these questions.

[SHORTLISTING]

1. The computer randomly matches you with one participant.
2. The computer randomly decides whether you or the other participant is Player 1. Player 1 (maybe you, maybe the other participant) plays first, and chooses 3 options out of the 5 available.
3. Player 2 sees the 3 options that Player 1 has chosen in the previous stage and choose one among them. The option chosen by Player 2 is the one used for payment, for both Players 1 and 2.

To illustrate these rules, here is an example:

1. Suppose that you have been selected to be Player 1, and that you choose the options (A, C, and D).
2. The other participant (who is Player 2 in this example) sees the options that you have chosen and choose (D) among them.
3. The option (D) is the option selected for payment.
4. Based on the table above, you receive 5€, and the other participant receives 15€.

After 5 rounds, you will be re-matched with another participant, the computer will then randomly decide whether you are Player 1 or Player 2, and the process starts again. After 10 rounds, the payments table will change.

Before starting, you will need to answer a few quiz questions to about the rules of the games. There is no point associated to these questions.

[GRADUAL VETOES]

1. The computer randomly matches you with one participant.
2. You cross out one option out of the 5 available and the other participant does the same. You do it simultaneously so that you do not know what the other is doing.
3. You see the remaining options that neither you nor the other participants have crossed out in the previous stage. Then, you cross out one extra option, and the other participant does the same. Once again, you do it simultaneously so that you do not know what the other is doing.
4. The process is repeated until there is only one option left. This option is selected for payment.
5. In case there is no option left because you and the other participant cross out the two last options at the same time, the computer goes back to the previous stage, and randomly selects one of the two options left at this stage for payment.

To illustrate these rules, here is an example:

1. Suppose that you first cross out the option (E), and the other participant crosses out the option (A).
2. You see that the options (B, C, and D) are left. You then cross out the option (C), and the other participant crosses out the option (B).
3. Only the option (D) is left. The option is selected for payment.
4. Based on the table above, you receive 5€, and the other participant receives 15€.
5. Now imagine that in the second stage you cross out the option (B), while the other participant also crosses out the option (B).
6. The options (C and D) are left. There is thus a third stage, in which you cross out (C), and the other participant crosses out (D).
7. Since there is no option left, the computer goes back to the previous stage, and randomly selects one of the two options left at that stage (maybe C, maybe D) for payment.

Before starting, you will need to answer a few quiz questions to about the rules of the games. There is no point associated to these questions.

2. Quiz questions

Question 1

Is the following statement true or false: “The option selected for payment can only be one of those that you have chosen”?

- True
- False

Solution:

True. The option used for payment is always an option that you have chosen.

Question 2

[SIMULTANEOUS] Imagine that you have chosen the options (C, D, and E), and that the other participant has chosen the options (A, B, and E).

[SHIORTLISTING]: Imagine that you are Player 1, and that you have chosen the options (C, D, and E). The other participant, Player 2, has seen your choice, and has chosen the option (E).

[GRADUAL VETOES]: Imagine that, in the first stage, you have crossed out the option (A), and the other participant has crossed out the option (D). In the second stage, after seeing the options left, you have crossed out the option (B), and the other participant has crossed out the option (C).

Which option is selected for payment?

- (A)
- (B)
- (C)
- (D)
- (E)

Solution:

[SIMULTANEOUS]: The option selected for payment is (E) because this is the option that you and the other player have in common.

[SHORTLISTING]: The option selected for payment is (E) because this is the option that the other participant (Player 2) has chosen among the 3 you have chosen.

[GRADUAL VETOES]: The option selected for payment is (E) because that is the only one that has not been crossed by either you or the other participant.

Question 3

Imagine that option (C) is selected for payment, and that the payment table is the following:

	Your gain	Other participant's gain
If (A) is selected	20€	10€
If (B) is selected	15€	15€
If (C) is selected	10€	20€

If (D) is selected	5€	5€
If (E) is selected	0€	0€

What is your gain, and the gain of the other participant?

You gain 20€, the other participant gains 10€

You gain 10€, and the other participant gains 20€

You gain 10€, and the other participant gains 10€

Solution:

You need to look at the fourth row in the table to see what happens if the option (C) is selected. In the second column of the table, you find your gain (10€), and in the third column, you find the gain of the other participant (20€).