

Appendix B

Experimental Instructions

WELCOME TO THE EXPERIMENT!

- This is an experiment to study how people make decisions. We are only interested in what people do on average.
- Please, do not think we expect a particular behavior from you. On the other hand, keep in mind that your behavior will affect the amount of money you can win.
- In what follows you will find the instructions explaining how this experiment runs and how to use the computer during the experiment.
- Please do not bother the other participants during the experiment. If you need help, raise your hand and wait in silence. We will help you as soon as possible.

THE EXPERIMENT

- In this experiment, you will play for 72 subsequent rounds. These 72 rounds are divided in 3 PHASES, and every PHASE has 24 rounds.

PHASE 1

- In each of the 24 rounds of PHASE 1, you will play with ANOTHER PLAYER in this room.
- The identity of this person will change one round after the other. You will never know if you interacted with the OTHER PLAYER in the past, nor the OTHER PLAYER will ever know if he has interacted with you. This means your choices will always remain **anonymous**.
- In each round of PHASE 1, first the computer will randomly choose 4 different OPTIONS, that is, four monetary payoff pairs, one for you and one for the OTHER PLAYER. Every OPTION will always appear on the left of the screen.
- Then, you and the OTHER PLAYER have to choose, simultaneously, your favorite OPTION.
- Once you and the OTHER PLAYER have made your decision, the computer will randomly determine who (either you or the OTHER PLAYER) will decide the OPTION for the pair.
- We will call this player the CHOOSER of the game.
- The identity of the CHOOSER will be randomly determined in each round.
- **On average half of the times you will be the CHOOSER and half of the time the OTHER PLAYER will be the CHOOSER.**
- Thus, in each round, the monetary payoffs that both players receive will be determined by the choice of the CHOOSER.

PHASE 2

- In the following 24 rounds of PHASE 2, you will participate to a game similar to the previous one, with some modifications.
- In PHASE 2, each pair will face a payoffs matrix that appears on the left of the screen.

BID	NO	YES
NO	40,40	$40+b1/4, 30+b2/4$
YES	$30+b1/4, 40+b2/4$	$30+b1, 30+b2$

What does this matrix mean?

- In each round, you and the OTHER PLAYER, will receive an **initial endowment** of 40 pesetas.
- In each round, you and the OTHER PLAYER have to choose, simultaneously, whether to BID or NOT TO BID .
- BIDting costs 10 pesetas, not BIDting does not cost anything.
- You choose the ROW, the OTHER PLAYER chooses the COLUMN.
- Every cell of the matrix (which depends on the monetary payoffs $b1$ and $b2$ and your decisions on whether or not TO BID) contains two numbers.
- The first number (on the left) is what you win in this round. The second (on the right) is what the OTHER PLAYER wins in this round. There are four possibilities:
 1. If both players BID, both sum to the initial endowment their ENTIRE MONETARY PAYOFF $b1$ or $b2$ (to which it will be subtracted the cost of BIDting of 10 pesetas).
 2. If you BID, and the OTHER PLAYER does not, **both** sum to both sum to their endowment ONE FOURTH of the monetary payoff $b1$ or $b2$ (and the cost of BIDting will be subtracted to you only);
 3. If the OTHER PLAYER BIDS, and you don't, **both** sum to their endowment ONE FOURTH of their monetary payoff $b1$ or $b2$ (and the cost of BIDting will be subtracted to the OTHER PLAYER only);
 4. If nobody BIDS, you and the OTHER PLAYER will only gain the endowment of 40 pesetas.

PHASE 2 is compound of 2 STAGES:

- In STAGE 1, you and the OTHER PLAYER have to choose your favorite OPTION, that is, the game that you would like to play in STAGE 2.
- After that you and the OTHER PLAYER have made your decision, the computer will randomly determine who (either you or the OTHER PLAYER) will be the CHOOSER of the game.
- Like in PHASE 1, the identity of the CHOOSER, will be randomly determined in each round.
- **On average, half of times you will be the CHOOSER and half of times the OTHER PLAYER will be the CHOOSER.**
- Once the CHOOSER has determined the option that will be played in this round, you and the other player have to choose whether TO BID or NOT TO BID and the monetary consequences of your decisions are exactly those we just explained.

SUMMING UP

- In each of the 24 rounds of PHASE 2, you will play with ANOTHER PLAYER of this room.
- In STAGE 1, you and the other player, like in STAGE 1, have to choose simultaneously your favorite OPTION.

- After that you and the OTHER PLAYER have made your decisions, the CHOOSER will determine the game that you will play in STAGE 2.
- In STAGE 2 you and the OTHER PLAYER have to simultaneously DECIDE whether to BID or NOT TO BID. The payoffs of each round depend on your initial endowment of 40 pesetas, on both your choices (TO BID or NOT TO BID), on the OPTION chosen by the CHOOSER and on the cost of bidding of 10 pesetas.
- The PAYOFF MATRIX (that it will always appear on the left of your screen) sums up, in a compact form, the monetary consequences of your choices.

PHASE 3

- In the last 24 rounds of PHASE 3, you will play in a game similar to the PHASE 2 but with some differences.
- Within the 24 persons in this room, the computer will randomly choose two groups of 12.
- In each group of 12 people, the computer will randomly determine, 8 **PLAYERS** and 4 **REFEREES**.
- The identity of PLAYERS and REFEREES is randomly determined at the beginning of PHASE 2 and it will remain the same throughout.

PHASE 3 has 3 STAGES.

- Like in the previous PHASES, in STAGE 1 the computer randomly selects 4 OPTIONS, (that is, 4 pairs of monetary payoffs (b1,b2) for the players.
- In addition, in STAGE 1, each REFEREE randomly picks an OPTION within the 4 available for that round (that could be the same or different among them).
- Thus, the 4 OPTIONS selected by the four REFEREES will be proposed to the 8 PLAYERS of their group.
- In STAGE 2, the 8 players will be randomly paired. Like before, couple will change at every round.
- Then, just like in STAGE 2, each player has to select one among the 4 OPTIONS proposed by the 4 REFEREES.
- Just like in PHASE 2, the (randomly selected) CHOOSER will determine the game to be played by the pair.
- Just like in PHASE 2, in the game, both PLAYERS have to choose simultaneously, whether TO BID or NOT TO BID.
- The monetary consequences for the players of their decision are exactly the same as in STAGE 2.

REFEREES' PAYOFF

The REFEREES' payoffs depend on

1. the OPTION they offer,
2. how many REFEREES in their group offer the same OPTION
3. how many CHOOSERS choose the same OPTION
4. Players' actions in the game.

We shall make this clearer with some examples.

CASE 1

- First, suppose that the REFEREE offered an OPTION with payoffs (b1, b2) and that only one CHOOSER has chosen this option.

- The payoff of each REFEREE depends on the positive VALUE randomly generated by the computer and that each REFEREE (and only her) knows, and, in addition, on the sum of the payoffs $b_1 + b_2$ in the following way:
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- if both players BID, the REFEREE win the difference between his VALUE and the sum of the payoffs; that is, $V - (b_1 + b_2)$;
- if one player BETS and the other does not, the REFEREE win ONE FOURTH of the difference between his VALUE and the sum of the payoffs; that is, $\frac{V - (b_1 + b_2)}{4}$
- if nobody bets, the REFEREE does not win anything.

In this case, the PAYOFF MATRIX of the REFEREE, will be as follows:

BID	NO	YES
NO	0	$(V - (b_1 + b_2))/4$
YES	$(V - (b_1 + b_2))/4$	$V - (b_1 + b_2)$

CASE 2

- Suppose now that more than one CHOOSER chose the option that the REFEREE offered. Moreover, suppose moreover that this REFEREE is the only one that picked this OPTION.
- In this case the REFEREE gets the sum of the payoffs obtained with each couple that chose her OPTION.
- The payoff with each couple will be determined as in CASE 1, taking into account if they bid, if only one bids or nobody bids.

CASE 3

- Suppose now that one or more CHOOSERS chose an option that the REFEREE offered. Moreover, suppose that more than one REFEREE picked the same OPTION. In this case, every single REFEREE that chose the same OPTION gets a payoff with the same structure as in CASE 2, but now, sharing this payoff with the REFEREES that picked the same option.

CASE 4

- Suppose now that no couple chose the option that the REFEREE offered. In this case, her payoff for this round will be 0.